MEASURING GENERATIVITY AMONG EMERGING ADULTS: ADVANCEMENTS AND APPLICATIONS

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Despite being seen as a midlife construct, generativity (i.e., care and concern for the next generation) has significant utilization among emerging adults. However, the measures developed and recommended by seminal scholars to research generativity have had challenges when applied to the emerging adult population. Therefore, the current article outlines the history of generativity measurement, generativity measurement among emerging adults, recommendations for utilizing generativity measures in practice, and future research directions for generativity measurement among emerging adults.

Generativity, defined as "primarily the concern in establishing and guiding the next generation" (Erikson, 1950/1963, p. 267), has been discussed in developmental theory for decades (Kotre, 1984; McAdams & Logan, 2004). Originally theorized by Erikson as the seventh of eight stages of psychosocial development,

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generativity is described as seeking to leave a legacy through the creation of ideas and objects that benefit others. While generativity is portrayed and studied as a midlife construct, scholars have explored generativity among younger populations; however, previous research remains disproportionately focused on midlife (Lawford & Ramey, 2015).

Stewart and Vandewater (1998) noted that individuals' capacity for generativity "gathers force" (p. 76) during emerging adulthood. Notably, generativity was found to be an aspect of moral concern in emerging adulthood (Lawford et al., 2005), and the fifth of six stages in the leadership identity development (LID) theory and model of college students (Komives et al., 2005, 2006), demonstrating the applicability of generativity among emerging adults. Hastings et al. (2015) compared generativity among college student leaders who mentor to generativity among college student leaders who do not mentor and general college students, the results of which revealed that college student leaders who mentor had significantly higher levels of generativity than their peers. Hastings and Sunderman (2019) found that generativity predicted 27% of college students' variability in socially responsible leadership, further supporting the continued examination and development of generativity among populations other than midlife, as well as its connection to leadership. In sum, despite being construed as a midlife construct, generativity has been extended to emerging adults, underscoring the importance of sound measurement.

History of Generativity Measurement

As developed, utilized, and recommended by seminal authors (McAdams et al., 1993; McAdams & de St. Aubin, 1992), generativity is assessed using three measures: the Loyola Generativity Scale, Generativity Behavior Checklist, and Personal Strivings, which demonstrated appropriate test–retest reliability, internal consistency, and correlations. First, the Loyola Generativity Scale (LGS; McAdams & de St. Aubin, 1992) measures differences in generative concern, defined as "an overall orientation or attitude regarding generativity in one's own life and social world" (McAdams et al., 1993, p. 20). The LGS is a 20-item self-report scale that has four-point Likert-type response options that load into five subscales: (a) passing knowledge to the next generation, (b) caring for others, (c) taking actions that will leave a legacy, (d) contributing to improving one's community, and (e) exhibiting creativity and production.

Second, the Generativity Behavior Checklist (GBC; McAdams & de St. Aubin, 1992) measures generative behavior, which includes developing people and engaging in creative endeavors. The GBC is a 50-item self-report survey. Participants rate each item on a scale of 0 to 2 based on frequency of engagement in the activity during the past 2 months (0 = performed never; 1 = performed once; 2 = performed more than once). Third, Personal Strivings measures generative commitment (PS; Emmons, 1986), defined as an individual's ability to sustain efforts in guiding the next generation. The open-ended measure asks participants to complete the phrase "I typically try to…" 10 times. Each sentence indicates a personal striving, which are goals and activities an individual seeks to do in everyday life (McAdams et al., 1993). Responses are analyzed by coding for three categories: (a) connection with the next generation; (b) care for others; and (c) innovatively contributing to society. The LGS, GBC, and PS were constructed utilizing a combination of descriptive statistics, correlations, and Cronbach's alpha coefficients (Emmons, 1986; McAdams et al., 1993; McAdams & de St. Aubin, 1992). However, the psychometric properties of the three generativity assessments have not been validated using recent advancements in statistical theory and methods.

Generativity Measurement among Emerging Adults

Recent research has raised questions about the accuracy of measuring generativity using the LGS, GBC, and PS among emerging adults (Hastings & Sunderman, 2019; Sellon, 2022; Sunderman & Hastings, 2019, 2023). Hastings and Sunderman (2019), in studying the predictive relationship between generativity and socially responsible leadership, found that generative concern (LGS) emerged as the only significant predictor of socially responsible leadership and that PS had an

inflated error level, indicating potential measurement issues. Therefore, Sunderman and Hastings (2019) examined the psychometrics of the three quantitative assessments utilized to measure generativity (McAdams et al., 1993). Using confirmatory factor analysis within structural equation modeling, the results called for the removal of two items from the LGS (i.e., items two ["I do not feel that other people need me"] and nine ["I believe that society cannot be responsible for providing food and shelter for all homeless people"]), proposing that this modified version of the measures had significant utility among college students.

Sunderman and Hastings (2023) studied generativity development longitudinally among college students who mentor in two studies. Study 1 ($N = 91$) employed MANCOVA analyses to cross-sectionally examine the influence of years spent mentoring on generativity. The results of Study 1 were nonsignificant. Study 2 ($N = 44$) employed growth curve analyses in multilevel modeling to longitudinally analyze generativity over three timepoints. The results of Study 2 revealed a significant and positive increase in generative behavior (e.g., teaching a skill; McAdams & de St. Aubin, 1992) when gender was included as a variable in the model, which revealed that it was essential for gender to be considered as a person-level construct to accurately depict participants' generativity development. The significant increase in generative behavior indicates, for example, that participants may have changed from performing a generative behavior never during the past 2 months to performing it more than once. Sunderman and Hastings' (2023) findings, as with Hastings and Sunderman (2019), illustrated inconsistency when using PS as a measure of generative commitment among college students because participants' scores were waxing and waning over time with no systematic increase or decrease. Therefore, Sunderman and Hastings (2023) recommended the development of a generativity measure for emerging adults to ensure that responses were indicative of generativity level versus life stage (e.g., the LGS and GBC have questions about parenting).

Recognizing that previous research demonstrated the presence and impact of generativity among young adults, Sellon (2022) sought to explore generativity's unique manifestation in young adults, ultimately developing a theory and conceptual model. Sellon (2022) found components of overlap with the original conceptual model developed by McAdams and de St. Aubin (1992), suggesting that certain components of generativity's manifestation remain critical regardless of one's life stage (e.g., inner desire and motivation to be generative, general opportunities to be generative, and having intentional generative relationships). Even with elements of overlap, some notable differences appeared to separate generativity within emerging adults versus midlife adults, specifically, components unique to young adults include generative awareness, generative growth, and the impact of being a part of a community with which to reflect and be generative. There were also two constructs present in the McAdams and de St. Aubin (1992) model that did not appear as independent themes within the generativity development of emerging adults: developmental expectations and a notion of "belief" in the next generation. While Sellon's (2022) study provides an initial framework and refined model of generativity's manifestation specific to young adults, the phenomenon requires continued exploration, which may allow emerging adults to harness their generativity earlier.

Utilizing Generativity Measures

As scholars and practitioners consider generativity in their work and research, particularly with emerging adults, there are both practical and theoretical applications of utilizing generativity measures.

PRACTICAL APPLICATIONS

As practitioners employ measures of generativity among emerging adults, it is still recommended to employ the measures recommended by McAdams and de St. Aubin (1992) and McAdams et al. (1993); the GBC, PS, and a modified version of the LGS (i.e., removing questions two and nine; Sunderman & Hastings, 2023). In the absence of measures developed specifically for emerging adults, the GBC, PS, and modified LGS have demonstrated utility. Notably, the LGS, GBC, and PS have been utilized within a variety of practices: teaching (McAdams & Logan, 2004), active engagement in

one's community (Lawford et al., 2005), social responsibility (Rossi, 2001), socially responsible leadership (Hastings & Sunderman, 2019), mentoring (Doerwald et al., 2021; Hastings et al., 2015; Musselman & Becker, 2023; Sunderman & Hastings, 2023), and leadership identity development (Komives et al., 2005, 2006). For example, the GBC, PS, and modified LGS may be utilized by practitioners to examine a group's generativity to understand opportunities for growth (e.g., college student leaders in Greek organizations or student government).

To aid emerging adults in generativity development, practitioners are encouraged to engage in the following practices (Lee et al., 2020; Sunderman et al., 2023): (a) curricular training on the construct of generativity, particularly if students are able to learn about generativity while also being generative; (b) engaging in peer mentoring—both being mentored by peers and, reciprocally, being able to mentor peers (e.g., Undergraduate Teaching Assistants); and (c) reflecting on their generativity development. The connection between generativity and narratives has been well-established. Sunderman et al. (2022) utilized narrative storytelling and degree-of-changing graphing to explore perceptions of generativity development throughout being a mentoring. McLean and Pratt (2006) examined meaning making and turning point stories, finding a significant relationship between personal narrative and generativity. Lawford and Ramey (2015) found that generativity predicted meaning making beyond activity engagement (i.e., activities outside of school) among emerging adults, further connecting meaning making, personal narratives, and generativity.

Further, within emerging adulthood, it is specifically recommended that practitioners employ opportunities to mentor and to be mentored as catalysts for generativity. Being a mentor is a well-established antecedent of generativity development among college students (Hastings et al., 2015; Sunderman & Hastings, 2023) and in the workplace (Doerwald et al., 2021; Musselman & Becker, 2023). Recognizing the connection, practitioners are encouraged to create programs and experiences that allow individuals to serve as mentors to peers and younger individuals over numerous years to maximize generativity development (Sunderman & Hastings, 2023).

THEORETICAL APPLICATIONS

Theoretically, generativity has a unique manifestation in emerging adults (Sellon, 2022). Considering previous research illustrating the challenges of applying current generativity measures to populations younger than midlife (Hastings & Sunderman, 2019; Sunderman & Hastings, 2019, 2023), it is recommended that future research to adapt and expand on generativity measures to account for the distinctiveness in how young adults experience generativity. Researchers should seek to incorporate experiences that are more applicable to the emerging adult population, which would allow for a more accurate measure of generativity.

Notably, psychometric challenges are not limited to generativity measurement; rather, the broader field of leadership has been urged to investigate and validate the psychometric properties of measures used in leadership research for decades (Antonakis, 2017; Schriesheim et al., 1993; Wong et al., 2008). Although the psychometrics of some leadership measures have been investigated, many require additional examination (Scherbaum et al., 2006). As scholars continue to advance the measurement of generativity, researchers are urged to advance the measurement of other constructs, recognizing that reliable and valid measurements are critical to reliable and valid quantitative research.

Overarchingly, expanding and applying generativity beyond the traditional midlife frame will allow for the measurement and understanding generativity among emerging adults. As we engage in an accurate and thorough understanding of emerging adult generativity, including a measure of generativity for emerging adults, we may enable emerging adults to sooner experience the positive outcomes associated with being generative and enhance their overall leadership abilities. Given the connection between generativity and socially responsible leadership (Hastings & Sunderman, 2019) and leadership identity development (Komives, 2011; Komives et al., 2005, 2006), generativity is an undeniable asset to emerging adults. To best invest in young leaders and their generative abilities, we must better

understand and measure generativity among emerging adults.

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