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“Mindset of Generativity”: An Exploration of Generativity among College Students Who Mentor

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The current study explored the development of generativity, care for the next generation, among college students who mentor K-12 youth. Interviews and degree-of-change graphs were conducted with 10 mentors using a phenomenological design. The findings revealed that mentoring positively influenced generativity. Additionally, antecedents and outcomes of generativity development emerged. The results argue for the role of being a mentor in psychosocial development, specifically generativity, which has implications for social responsibility, a goal of higher education.

Generativity, defined as care and concern for mentoring the next generation, has long been a focus of developmental theory (Erikson, 1963; Kotre, 1984; McAdams, 2001). Generativity has been linked to personal outcomes such as flourishing and life satisfaction (Snow, 2015) and

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societal outcomes such as social responsibility (Rossi, 2001). While Erikson (1963) theorized generativity as occurring at midlife, further research has pointed to generativity occurring at younger ages. Generativity has received renewed attention as the fifth of six stages in the leadership identity development (LID) model of college students (Komives et al., 2006, 2005), the stage in which upper-class college students seek to mentor younger students. Further, recent research among college students who mentor has revealed that generativity is predictive of socially responsible leadership (Hastings & Sunderman, 2019), a key outcome of higher education (Council for the Advancement of Standards in Higher Education, 2015).

Previous research among college students connected generativity to leadership identity (Komives et al., 2006, 2005) and socially responsible leadership (Hastings & Sunderman, 2019), highlighting the importance of exploring generativity among college students. The current study seeks to build and expand upon previous research by understanding *how* generativity develops among college students. Specifically, the current study sought to explore and discuss the influence of being a mentor on generativity among college students who mentor K-12 youth identified by teachers and principals for positively influencing their peers. College students who mentor were purposively selected because college students who mentor youth have demonstrated higher levels of generativity than college students who do not mentor (Hastings et al., 2015) and have shown an increase in generative behavior (Sunderman, 2020). Further, mentoring is a behavior connected to generativity among college students in stage five of the LID model (Komives et al., 2006, 2005).

An increased understanding of generativity development among college students who mentor will advance leadership research in student development, particularly regarding generativity. The scholarship of generativity has implications for social responsibility, a goal of higher education (Council for the Advancement of Standards in Higher Education, 2015). Additionally, results from the current study will inform antecedents of generativity (McAdams, 2001), the use of mentoring as an effective developmental intervention, and degree-of-change methodology in student development research and practice (Rosch & Schwartz, 2009).

Literature Review

The literature review begins with an overview of generativity and shares the societal benefits of generativity. Then, we connect generativity to mentoring, highlighting scholarship specifically focused on college students who mentor.

Generativity

Erikson originated generativity as the seventh of eight stages of psychosocial development (Kotre, 1984), in which a midlife adult seeks to create and leave a legacy, labeled generativity, or reverts to increased self-centeredness, labeled stagnation (Erikson, 1963). Generative behavior includes attempting immortality by engaging in tasks to create beneficial things for others and leave a legacy (Huta & Zuroff, 2007). When individuals obtain generativity, it benefits both the recipient and the giver. Snow (2015) theorized that generativity is “necessary, but not sufficient” (p. 263) for flourishing, which is living well and engaging in virtuous activities. Snow (2015) claimed that while an individual can be generative and not flourish, an individual cannot fully flourish without being generative.

Generativity is typically portrayed and studied as a midlife construct. However, theoretical critiques of an age-ordered, phase-based process have brought that assumption into question (Cohler et al., 1998). For example, generativity was found to be an aspect of moral concern in emerging adulthood (Lawford et al., 2005), to be the fifth stage in the leadership identity development (LID) model of college students (Komives et al., 2006, 2005), and to significantly correlate with personal identity narratives among college students (Singer et al., 2002). Such findings demonstrate the applicability of generativity to populations younger than midlife, specifically college students.

Generativity and Society. Societies benefit when individuals achieve generativity. Without the generative actions of individuals through parenting, teaching, mentoring, identity formation, and leadership, “our communities would grind to a halt” (Huta & Zuroff, 2007, p. 47). Rossi (2001) found generativity to be the highest predictor of social

responsibility in family, community, and work domains compared to variables such as education level, attendance at religious services, and marital status.

Additionally, in Hastings and Sunderman's (2019) explanatory sequential mixed-methods study, generativity predicted 27% of socially responsible leadership variability among college students who mentor. The qualitative results provided confirming evidence for the role of generativity in fostering socially responsible leadership, articulating that mentoring spurred generative action, which fueled socially responsible leadership. As one participant shared, "The more . . . on fire somebody is for guiding the next generation, the higher the positive social change is going to be" (p. 11). Taken together, the work of Rossi (2001) and Hastings and Sunderman (2019) demonstrates a connection between generativity and social responsibility, indicating that the more generativity individuals possess, the more likely they are to spend time and money building strong families, workplaces, and communities.

Generativity and Mentoring

Notably, generativity development has been repeatedly connected to mentoring (Doerwald et al., 2021; Hastings et al., 2015). Murray and Owen (1991) defined mentoring as a more skilled or experienced individual developing the skills of a less skilled or experienced individual. Mentees, defined as a person trained or guided by a mentor, have been shown to benefit from mentoring relationships with an enhanced sense of belonging and increased psychological health (Austin, 2002). Mentors also benefit from mentoring relationships. For example, mentors have enhanced life satisfaction and job performance (Ramaswami & Dreher, 2007). Doerwald et al. (2021) recently found in a meta-analysis that mentoring relationship quality was associated with generativity in a work context.

Generativity and Mentoring among College Students. While scholarship on mentoring among college students has often focused on outcomes associated with being a mentee instead of a mentor (Hastings et al., 2015), there are some notable exceptions. Connecting generativity and mentorship in a collegiate population, Komives et al. (2005,

Table 1 Six stages of the LID model (Komives et al., 2005)

<i>Stage</i>	<i>Description</i>
(1) Awareness	An external identification of the existence of leaders
(2) Exploration/Engagement	Students began to engage in a plethora of groups and took on responsibilities but lacked focus in involvement
(3) Leader Identified	Students identified group leaders as the leadership (positional leadership) and began to be intentional about their roles in groups
(4) Leadership Differentiated	Participants saw the interdependence of group members and believed that all individuals in a group could demonstrate leadership
(5) Generativity	Students believed in the purposes of a group and began to develop younger group members in hopes that it would sustain the organization
(6) Integration/Synthesis	Students engaged daily in leadership and sought integrity

2006) identified generativity as the fifth stage in the LID model. **Table 1** discusses the six stages of the LID model. During the fifth stage, generativity, college students mentored future leaders (Komives et al., 2006). The LID model posits that being a mentor drove the transition to stage six, integration/synthesis, a critical juncture in developing leadership identity.

Building upon the work of Komives et al. (2005, 2006), Hastings et al. (2015) utilized an explanatory sequential mixed methods design to compare generativity levels among college student leaders who mentor to generativity among college students who do not mentor. The results for the study, after controlling for gender, GPA range, and college major, revealed that college student leaders who mentor had significantly higher levels of generativity than their peers. The qualitative results of Hastings et al. (2015) emphasized the perceived development of generativity through being a mentor, noting that, because of the mentoring experience, generativity becomes “what they do and who they are” (p. 662). The findings of Hastings et al. (2015) show the relationship between mentoring and generativity while also posing the need for further exploration of generativity within this age group. Sunderman (2020) examined the development of generativity longitudinally among college students and found significant growth in generative behavior over three years of being a youth mentor. Taken

together, the studies of Hastings et al. (2015) and Sunderman (2020) establish a framework showcasing the link between generativity and college students who mentor.

While previous research has connected generativity and mentoring among college students (Hastings et al., 2015; Komives et al., 2006, 2005; Sunderman, 2020), *how* generativity develops among college students who mentor remains largely unexplored. In response to the call of Hastings et al. (2015) for research assessing the developmental trajectory of generativity, we sought to explore generativity development among college students who mentor using a qualitative, phenomenological design and answering the following research question: *What meaning do college students give to being a mentor regarding their generativity development?*

Methods

Sample Selection

Participants for our study were senior students attending a four-year, Midwestern, land-grant university who participated in a leadership mentoring program (LMP). College students are recommended for the LMP by peers, faculty, and staff for demonstrating behaviors that positively influence others. Teachers and principals also identify mentees for positively influencing their peers. After being selected through a structured interview process, mentors are paired in a mentoring relationship with a K-12th-grade student, and the mentoring pair meets weekly for three years.

Regarding sample selection for the current study, all senior students in the LMP who participated in a previous study were asked to participate. We purposively selected the sample for two reasons: (a) the participants had been mentoring for two and a half years, and (b) students in the LMP were the sample in previous research studying generativity among college students who mentor (Hastings et al., 2015; Sunderman, 2020), the results of which the current study sought to build upon and enhance. We contacted a total of 18 students via e-mail. Ultimately, 10 students consented to participate. The demographic data of participants follows. Eight were women, two were

men, and all ten were white, reflective of the 18 contacted students. The participants varied in hometown and college major. Regarding the mentee's age, three mentees were in high school throughout the mentoring relationship, four transitioned from middle school to high school during the mentoring relationship, one was in middle school, and two were in elementary school. The participants demonstrated a cross-section of students within the LMP.

Data Collection and Analysis

Data collection and analysis followed the transcendental approach outlined by Moustakas (1994) and illustrated by Moerer-Urdahl and Creswell (2004). We collected data using semi-structured interviews (Moustakas, 1994) and line graph drawings. We asked participants questions that followed the phenomenological approach of Moustakas (1994). The questions were open-ended and designed to elicit a variety of responses, such as "Please describe your generativity level at the start of college. How, if at all, has your [LMP] experience impacted your generativity?" While most of the participants were exposed to the concept of generativity through their engagement in the LMP, all participants were provided a definition of generativity during their interview. In addition to the interview, line graph drawings utilized degree-of-change methodology to illustrate the perceived connection between generativity and years spent mentoring (see, Figures 1-3; Rosch & Schwartz, 2009).

Following data collection, we utilized open coding to identify significant statements within the transcribed interviews and then grouped them into meaning units. We clustered meaning units into themes (Moustakas, 1994), and themes were synthesized into a textural description (i.e., what participants experienced related to generativity development as college students who mentor) and a structural description (i.e., how participants experienced generativity development as college students who mentor; Moerer-Urdahl & Creswell, 2004). Finally, we merged the textural and structural descriptions and participants' graphs to illustrate the shared experiences among participants, known as the experience's essence.

Validation Strategies

In line with the transcendental approach to phenomenology, we utilized methods to promote trustworthiness in the current study, including member checking, triangulation, and bracketing (Creswell & Poth, 2018). Member checking involves obtaining participant feedback. In the current study, each participant reviewed the transcript of their interview and completed an interview validation form. Triangulation is a data authentication technique that includes using multiple forms of data to validate the results of qualitative research.

Participants completed an open-ended interview and drew a graph of the connection they perceived between generativity and years of mentoring to comprehensively represent their experience with the phenomenon. The interview data were compared and cross-checked with the line graph data for consistency. Then, we combined the interview and line graph data to triangulate the findings. The final data validation strategy utilized throughout the current study was bracketing. Bracketing involves the researcher identifying their previous beliefs about the phenomenon to minimize bias (Moustakas, 1994).

Researcher Positionality. As the researchers, we acknowledge our personal experiences with generativity development among college students who mentor. The first member of our three-person research team was a graduate student working with the LMP when the current data was collected and analyzed. This researcher is now a faculty member whose scholarship centers on leadership development and intervention assessment. The second member of our research team is a tenured faculty member whose research agenda focuses on advancing scholar and practitioner knowledge in leadership mentoring via generativity and social responsibility. At the time of the current study, the second researcher was the Director of the LMP. The third member of our research team was an undergraduate research assistant during this study and is now a graduate student in Leadership Education. All three research team members were formerly mentors within the LMP and remain engaged with mentoring programs.

Combined with our past experiences, our desire to examine the connection between generativity and mentoring indicates an assumptive belief in a potential relationship, predisposing us to bias.

We attempted to minimize undue influence by following a semi-structured approach to interviewing and a structured approach to data analysis (Moustakas, 1994). Further, we engaged in member checking with participants and data triangulation (Creswell & Poth, 2018). Recognizing the power differential between undergraduate students and faculty members, the Director of the LMP did not contact students to request participation, conduct interviews, or engage with identifiable data.

Findings

The current study focused on the experiences of 10 participants related to the question, *What meaning do college students give to being a mentor regarding their generativity development?* Thematic results of the interviews and graphs provided insight into participants' experiences; a process referred to as horizontalization (Moerer-Urdahl & Creswell, 2004; Moustakas, 1994). We identified 177 significant statements and grouped them into meaning units based on similarities. We clustered 12 meaning units into four themes on how participants experienced generativity development as college students who mentor. The four themes were: (a) generativity level before mentoring (see **Table 2**), (b) developmental antecedents to generativity development (see **Table 2**), (c) generativity development through mentoring (see **Table 3**), and (d) outcomes of generativity development through mentoring (see **Table 4**). To encourage participants to demonstrate and reflect upon their experiences with the phenomenon visually, we asked them to draw a line representing their generativity development during the years they spent mentoring (see **Figures 1–3**).

Generativity Before Mentoring

When describing generativity before engaging as a mentor, 6 of the 10 participants articulated their generativity level as low. Participant names are pseudonyms. Demi said the following about their generativity at the start of college: “I would say I was pretty low honestly. I’d never been in a position where I’d mentored someone before . . . I just didn’t realize the value in [generativity].” In contrast, 4 of the

Table 2 Meaning units and evidence for generativity before mentoring and developmental antecedents

<i>Theme</i>	<i>Meaning Unit</i>	<i>Evidence</i>
Generativity Before Mentoring	“I was pretty low”	“I came into college pretty selfish.” “Those skills were just so raw and I really wasn’t using them.”
	“I was pretty decent”	“I was pretty good at it from beforehand. I used to be in Boy Scouts . . . a lot of it’s about leadership.”
Developmental Antecedents	“LEAD 111”	“[LEAD 111 made me a lot better at all the different things we do in LMP, be it communicating or understanding others.”
	“Knowing what to call [generativity]”	“I didn’t know what generativity was, so I wasn’t as purposeful in my actions.” “I had never heard of generativity . . . It’s hard to get better at something if you don’t know what to call it.”

Table 3 Meaning units and evidence for generativity development through mentoring

<i>Theme</i>	<i>Meaning Unit</i>	<i>Evidence</i>
Generativity Development Through Mentoring	“I definitely grew in generativity”	“I ended up in an even higher position because [LMP] gave me a means of development of those generativity skills.” “[Generativity’s] definitely improved. . . it’s shown me the practical ways to apply it.”
	Developmental trajectory of generativity	“When I was assigned a mentorship relationship . . . [that’s] when it actually hits this point of starting to go upwards in more than just a natural way.” “Me and [my Mentee] start meshing . . . in our second year . . . that helped me improve [in generativity] a little bit.
	“[Mentoring] exercises those generativity muscles”	“[LMP] really furthers development with these people that are highly generative and equips them with the tools.” “Through [LMP] I had an outlet to exercise those generativity muscles and to use it on my mentee and then I was able to . . . use it on other people around me too.”
	Being an Upperclassman	“The first year it was more I was reaching out to those people, and the next two years of having an actual leadership position, I was the one being reached out to.” “Once younger people arrived in college . . . it truly becomes like I remember being a freshman [and] feeling really lost or like needing someone to like guide you.”
	Generativity Development Through Other Experiences	“[LEAD 466] . . . that class really pushed me to think about investing in people.” “. . . a new class of freshmen coming in every year because every year you’re the older guys that are kind of responsible for them . . . being that friend but also mentor.”

Table 4 Meaning units and evidence for outcomes of generativity development through mentoring

<i>Theme</i>	<i>Meaning Unit</i>	<i>Evidence</i>
Outcomes of Generativity Development Through Mentoring	“Self-awareness”	“My LMP experience, I would say, it’s developed a lot of self-awareness in me, which has spilled into so many other aspects.” “. . . being conscious of what I’m doing and how my actions are affecting others.”
	“Intentionally working with [people]”	“The greatest change has been I am a lot more aware of other people’s views and their values.” “[LMP] just challenges me to think of how I approach and interact with all individuals of really dignifying them.”
	“Ripple effect”	“I have two cousins . . . after working with [Mentee] . . . I’ve started incorporating values and stuff into playing with my cousins.” “Now [Mentee]’s going to be able to go on and impact these people.”

10 participants believed their generativity was decent coming into college. Tyler explained, “I was pretty decent . . . I used to be in Boy Scouts, and . . . a lot of it is about leadership and helping others.” Tyler saw the Boy Scout program as reinvesting in a group that had previously invested in them.

Developmental Antecedents

While two participants pointed to youth experiences as benefiting their generativity before mentoring, other participants discussed developmental antecedents in college that contributed to their generativity development through being a mentor. A leadership class, “LEAD 111,” an *in vivo* code and pseudonym, emerged as a common thread within the developmental antecedents theme. In the LMP, students can take a leadership development class during their first-year mentoring with the program’s director. Four participants discussed the leadership class’s profound influence on their generativity development. Chelsea stated: “LEAD 111 was a huge help . . . having the information lectured upon and then at the same time being able to apply.”

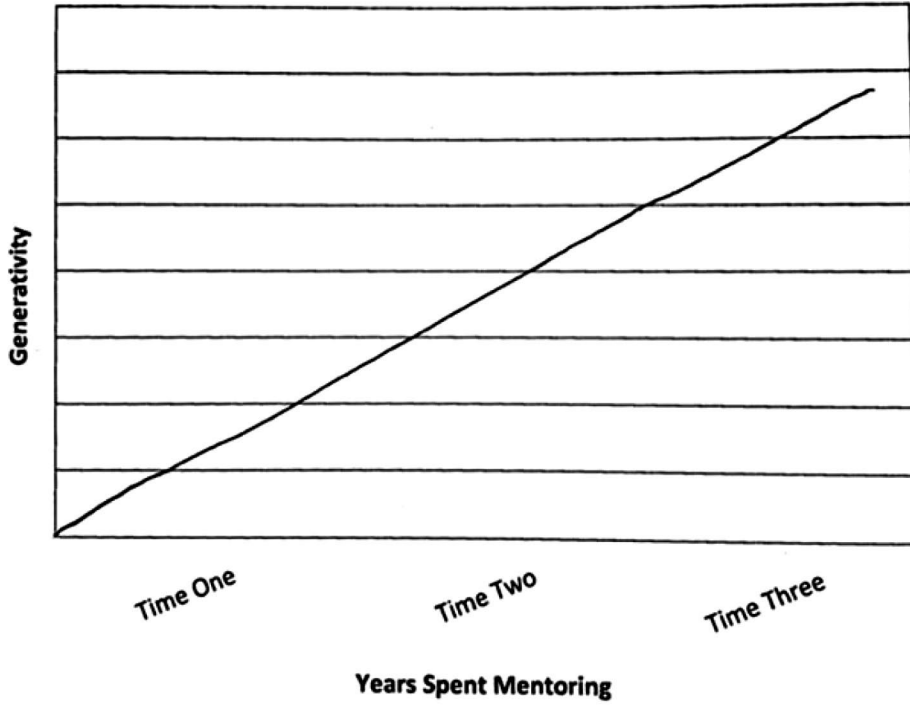


Figure 1. Linear growth exemplar – Demi.

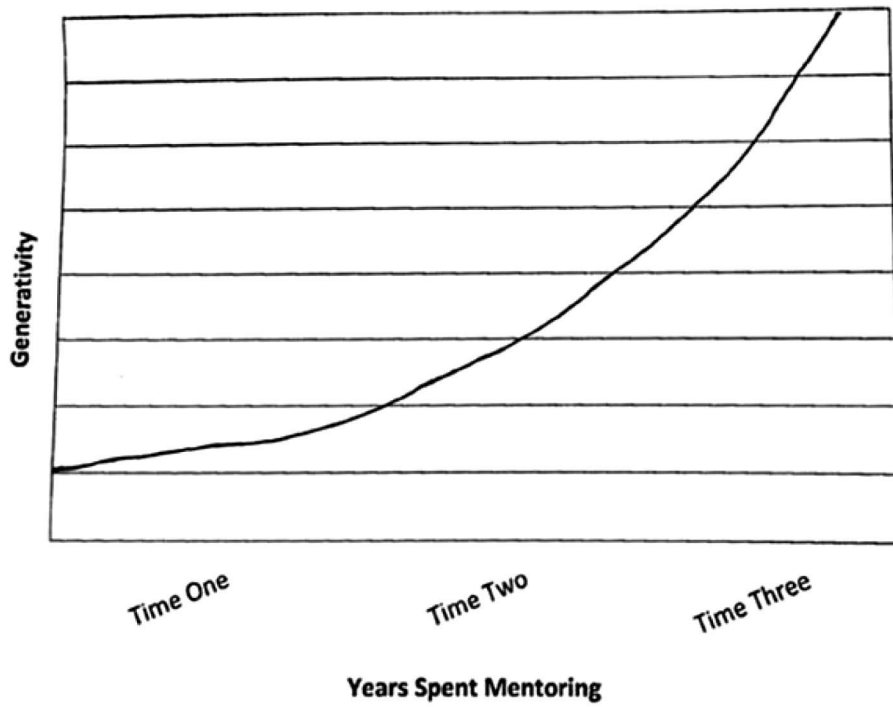


Figure 2. Growth curve exemplar – Darcy.

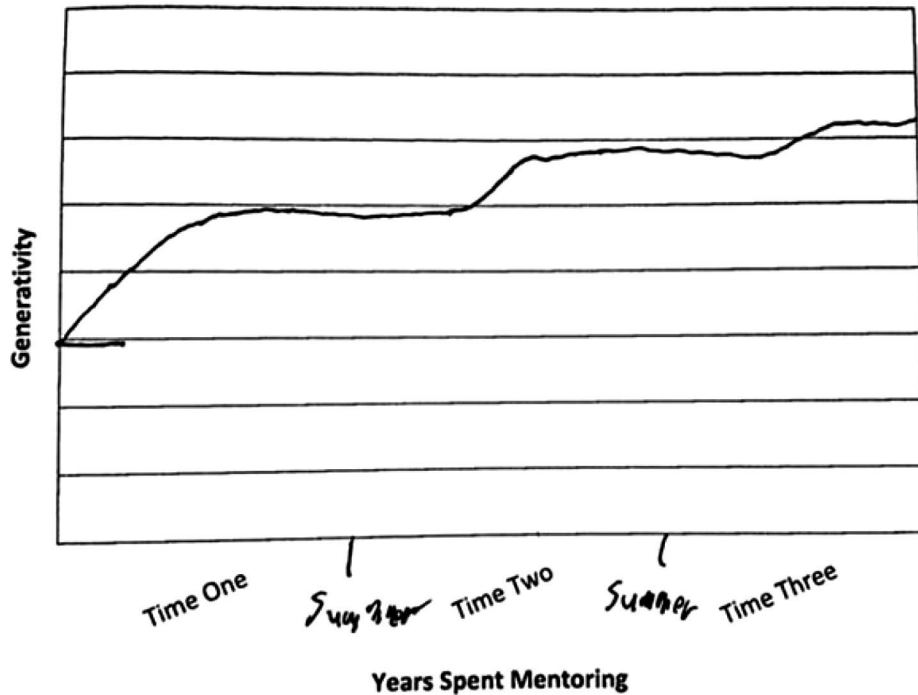


Figure 3. Non-linear growth exemplar – Tyler.

In addition to participating in the leadership course, five participants pointed toward “knowing what to call [generativity]” as a developmental antecedent. Learning the word “generativity” and gaining an awareness of its conceptualization was viewed as a critical component of growth. For example, Demi articulated the impact of learning about generativity in their approach to the next generation: “The idea of generativity is really awesome because it puts into words what it means to care for those younger than you . . . having that awareness grew my desire to want to pour into that.” Tyler, echoing Demi, stated, “I had never heard of generativity . . . Kind of like it’s hard to have a relationship with someone without knowing their name, it’s hard to get better at something if you don’t know what to call it.” These comments illustrate the power of language and knowledge. Specifically, Demi and Tyler shared that learning the concept of generativity positively impacted their desire to reinvest in the next generation.

Generativity Development Through Mentoring

When explicitly asked about the effect of mentoring on generativity, all 10 participants articulated a belief that their generativity had grown through mentoring. Additionally, all 10 participants drew a general upward trend on their graph correlating generativity and years spent mentoring (see Figures 1–3; see Table 2). Summarizing the other participants' sentiments, Paige said, "My generativity has gone up [in college], and it's through mentoring."

While each participant expressed perceived growth in generativity over their three-year mentoring experience, the exact path of perceived generativity development varied. Four participants drew a positive, linear direction of generativity development over their experience mentoring (see Figure 1), two illustrated a growth curve (see Figure 2), and the remaining four drew a non-linear pattern of growth (see Figure 3). Among the four participants who saw their growth in generativity as consistently positive, Emily explained, "When I was assigned a mentorship relationship . . . I became more focused on their potential, and . . . [generativity] hits this point of starting to go upwards in more than just a natural way." Emily's comment suggests that generativity development occurs naturally but is boosted by specific experiences, such as a purposeful mentoring relationship. Two participants drew and described a growth curve with generativity development starting slower and then increasing. One of the participants, Darcy, articulated that "Within my first year of [the LMP] it was primarily just building that relationship . . . later on, you're really challenging them more and guiding them."

Four participants drew a non-linear growth pattern. Among those four participants, two observed plateaus in their developmental trajectory of generativity. Jana explained that they "hit a little plateau" between their second and third year as a mentor: "I have the lull in year two because I had a new mentee since my first one graduated." While Tyler also observed a plateau, they placed it between their first- and second-year mentoring, explaining the following, "Me and [mentee] start meshing a lot more . . . sometime in November our second year . . . that helped me improve a little bit." Tyler further detailed that this relational development occurred within the context of an activity dubbed the "blindfold maze." During this activity, Tyler and their

mentee demonstrated trust for each other, and Tyler's mentee's optimism challenged them to try new things.

When asked about how mentoring developed generativity, four participants made comments that aligned with the meaning unit of "exercise those generativity muscles," an *in vivo* code. Darcy explained mentoring as a workout for generativity, allowing them to grow stronger: "Through LMP I had an outlet to exercise those generativity muscles, to use it on my Mentee and then because of that I was, through the practice, able to use it on other people around me too." Similarly, Carl credited being a leadership mentor as having helped them to "develop those [generativity] skills and has definitely helped me frame my context . . . and what's around me and what I want to change."

Beyond their role as a mentor, four participants highlighted being an upper-class student (i.e., a junior or senior) in the LMP positively influencing their generativity development. During their interviews, all four of these participants served as student staff members for the LMP. The role of a student staff member is to shepherd the health and well-being of a small group of mentoring relationships, essentially serving as mentors to mentors. When asked to explain their perception of the connection between generativity and years spent mentoring, Jana commented, "The first year it was more I was reaching out to [older members], and the next two years of having an actual leadership position, I was the one being reached out to." Emily noted the time they invested toward young students during their final year in the LMP: "[I've been] spending much time [being a staff advisor] in hopes of a better future for [the LMP]." Danielle discussed how leadership roles within the mentoring organization encouraged their growth: "[The LMP] has just, each year, given me opportunities to grow in . . . my generativity."

In addition to being a mentor, participants highlighted other experiences during college that positively influenced their generativity. Three participants discussed curricular experiences as being related to their generativity development. Demi, specifically, highlighted a diversity and leadership class: "That class really pushed me to think about investing in people who I don't share a lot of similarities with . . . I want to invest in these people even though I'm not similar to them." Lia talked about their experience changing their major. They explained, "Switching my major . . . it's been such a difference for professors and just teachers pouring into me."

Beyond curricular experiences, eight other participants noted that co-curricular experiences fostered generativity. Darcy described two on-campus leadership positions as an upper-class student that furthered their generativity. Darcy recalled, “being a sophomore, and feeling really lost or like needing someone to guide you through certain experiences.” In response to an enhanced awareness of future generations, Darcy drew meaning from “Strengths Coaching” and being the “Director of Programming” at their sorority, a position in which they “motivated” and “validated” under-class students while they were an upper-class student. Other participants highlighted co-curricular experiences such as being a student advisory board member, participating in a fraternity, teaching dance lessons, and serving as an orientation leader that enhanced their generativity.

Outcomes of Generativity Development through Mentoring

After explaining how they experienced generativity development through mentoring and other collegiate experiences, participants detailed personal development due to their mentoring experience and generativity growth. Specifically, four participants perceived increased “self-awareness.” Chelsea linked their increase in self-awareness to their generativity, stating, “The awareness comes in being conscious of what I’m doing and how my actions are affecting others, or either hindering or building up the next generation.” Similarly, Demi observed that enhanced self-awareness from being a mentor flowed beyond their relationship with their mentee:

My LMP experience, I would say, it’s developed a lot of self-awareness in me, which has obviously spilled into so many other aspects of my life, with understanding what it looks like for me to be successful in school, understanding what my goals might be for my career path, also just my relationships with people.

Beyond self-awareness, seven participants felt that they had grown in aspects related to “intentionally working with [people],” or interpersonal skills. For example, Carl articulated that working one-on-one with their mentee taught him “how to invest in other people.” They further commented that their experience mentoring has increased

their desire to understand others: “I want to understand why [other people] have those views, why they think that way, and how that impacts my views.” Similarly, Jana expressed a notable change in empathy: “I am a lot more aware of other people’s views and their values and their perspectives, so really being able to suspend my judgment.” Within the “intentionally working with [people] cluster,” four participants expressed that their mentoring experience enhanced their ability to individualize others. Demi noted, “[The LMP] has just really helped me recognize the individuality of anyone I work with.”

In addition to intrapersonal and interpersonal skills growth, six participants expressed that the leadership mentoring relationship led to a “ripple effect” that extended beyond the mentoring dyad. Tyler perceived that the growth they experienced from mentoring spilled over into other areas of their life—their relationship with younger family members and involvement on campus: “I have two cousins . . . I usually just have fun with them, but I think, after working with [mentee] for so long . . . I’ve started incorporating values and stuff into playing with my cousins.” Additionally, Tyler “started trying to be a little more active on the [dorm] floor and a little more active in the [campus] community.” Four participants articulated that their investment in their mentees has led their mentees to invest in others increasingly. Demi, describing their mentee, commented, “Ever since we brought [generativity] up, she does a great job of investing in girls on their gymnastics team and girls younger than her.” Similarly, Lia noted a ripple effect of investment through their one-on-one meetings with their mentee: “She helps different students at school . . . she says hi to everyone and invests in different kids.”

Textural and Structural Descriptions

After grouping the meaning units into themes, we used thematic analysis to describe *what* the participants experienced regarding the phenomenon (the textural description) and *how* the phenomenon was experienced (the structural description; Moerer-Urdahl & Creswell, 2004; Moustakas, 1994). In building the textural description, we considered the following question: *What did college student leaders who mentor experience regarding generativity development?* When asked to discuss their generativity development within the context of being a

mentor, all 10 participants articulated a perception that they had significantly increased in generativity from their three years as a leadership mentor. One participant expressed, “I would say [generativity]’s increased a lot.”

In building the structural description, we deliberated the following question: *How did this generativity development occur?* Before the mentoring relationship influenced generativity, participants discussed two developmental antecedents: (a) the context of LEAD 111, a leadership development class, and (b) exposure to the concept of generativity. These developmental antecedents demonstrate the importance of training and education to maximize generativity development within the context of mentoring. Four participants expressed that the LEAD 111 class was “when [generativity] started taking off,” and five participants noted that awareness of the concept of generativity was highly beneficial to their generativity development.

Within the generativity development throughout the mentoring experience, participants identified various factors connected to their personal growth, including exercising their generativity muscles and being an upper-class student within the LMP. Chelsea commented that being a leadership mentor was “learning the means of” being generative. Additionally, the context of being an upper-class student who held a leadership position within the LMP propelled growth in generativity. Having a formal position led the participants to view younger members “as future leaders of [the LMP]” and be “looked to . . . as someone who might know what’s going on.” Outside of the mentoring experience, participants discussed curricular and co-curricular experiences, such as participation in a sorority or fraternity, that benefited their generativity. As a result of this generativity development through mentoring, four participants expressed enhanced self-awareness, seven noted their capacity for “intentionally working with [people]” increased, and six witnessed a “ripple effect,” as generativity overflowed from their experience mentoring to other aspects of their lives, such as their involvements, careers, and relationships with family and friends.

In essence, being a mentor was perceived to increase generativity substantially. Participation in a leadership development course that exposed students to the concept of generativity provided fertile ground for growth once the mentoring experience began. Not to say that the

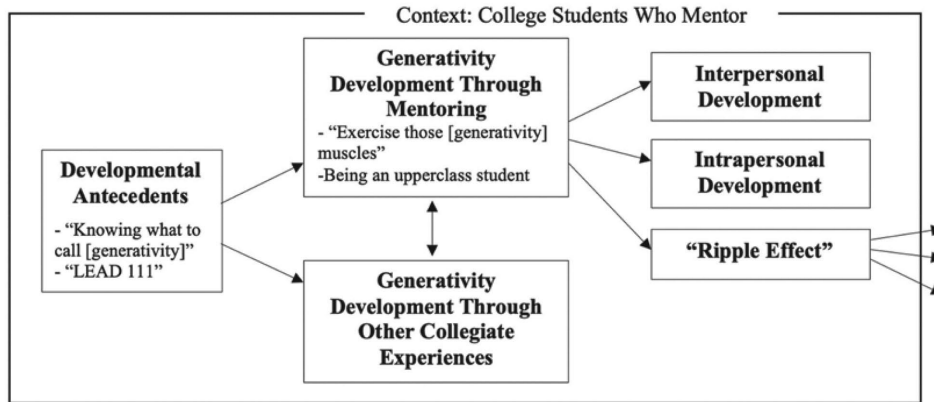


Figure 4. Suggested model of generativity development among college students who mentor.

capacity for generativity was absent before the LMP, but generativity growth occurred from practicing generativity through being a mentor and interacting with younger college students. The act of mentoring led to interpersonal development and intrapersonal development, ultimately spurring a positive “ripple effect” that extended beyond the mentoring dyad, so much so that mentors embraced “a mindset of generativity” in their approach to their leadership, careers, and all of their relationships (see **Figure 4**).

Discussion

Participants in the current study provided insight into the perceived connection between being a leadership mentor and generativity development. Based on their own experience, participants expressed a belief that being a mentor while in college had a notable and positive effect on generativity, which led to personal development and a positive ripple effect.

Implications for Research

The first implication of our study is its exploration of *how* being a mentor influences generativity development. Participants unanimously agreed that being a leadership mentor significantly contributed to their generativity development by allowing them to “exercise

those [generativity] muscles.” Further, participants also highlighted the positive effect of being a peer mentor to other students in the LMP on their generativity development. These results build on and expand the work of Hastings et al. (2015) by (a) emphasizing the developmental readiness of college students to engage in mentoring of both youth in the community and their peers and (b) charting the perceived growth trajectory of generativity through being a mentor, both of which argue for student affairs practitioners and leadership educators to engage college students in opportunities to be a mentor. It is recommended that future researchers extend the current results by conducting a similar study among a larger sample size or at a different type of institution.

Beyond exploring generativity development among college student leadership mentors, the current study explored antecedents of generativity, an expressed need in the field (McAdams, 2001). The model that emerged from the data echoes the call of Hastings et al. (2015) and Hastings and Sunderman (2019) for adding “being a mentor” to the list of developmental antecedents for generativity. The results from the current study confirm the distinct developmental influence of being a mentor on college students’ ability to utilize and grow their generativity. Further, the current study results present an argument for two additional developmental antecedents to generativity: (a) participation in a leadership development class and (b) exposure to the concept of generativity. Future research is needed to examine and explore the inclusion of these two experiences as developmental antecedents to generativity.

In addition to expanding upon the antecedents of generativity, the current study provides insight into the LID model for college students (Komives et al., 2006, 2005), an identified need in the field (Hastings et al., 2015). Stage five of the LID model is generativity. During this phase, students crystallized their leadership philosophies, were actively committed to the purposes of organizations, and developed younger group members in hopes that they would sustain campus organizations. Participants’ interview data and line graphs in the current study support the assertion of the LID model that generativity is increasingly present in the final years of college. Participants in the current study expressed that being upper-class students grew their generativity as they prepared the next generation of mentors to take their

place within the LMP, offering confirming evidence for stage five of the LID model. Illustrating the significance of the LID model and, subsequently, the importance of the current study, Google Scholar reports that the Komives et al. (2005) grounded theory study has been cited 975 times, and the subsequent Komives et al. (2006) model has been cited 724 times. We recommend that future qualitative and quantitative research analyze and explore the other stages of the LID model.

Finally, asking participants to visually demonstrate and reflect upon their experiences with the phenomenon via a line graph was an innovative methodological technique. Specifically, the line graph drawings triangulated the interview data (Creswell & Poth, 2018) and visually depicted the participants' perspectives. A visual depiction facilitated reflection throughout the interview as participants shared their experiences of generativity development about points on their line graph. Further, we utilized the line graph as a degree-of-change technique to explore the perceived effect of the leadership development intervention (i.e., mentoring) on personal development (i.e., generativity). Degree-of-change methodology is particularly valuable because it addresses the Horizon Effect (Rosch & Schwartz, 2009), a prevalent problem in which pretest scores become decreasingly accurate as participants grow throughout a leadership development intervention. Line graph drawings are a degree-of-change technique used to answer broad questions about theories and concepts in various fields of student affairs and leadership education. We recommend that future scholars implement the line graph drawings as a research and evaluation technique within curricular and co-curricular settings to better understand the nuances of this data collection approach.

Implications for Practice

The first implication for practice of the current study is that the results demonstrate the significant role of mentoring in students' psychosocial development, specifically around generativity. Generativity is, notably, significantly connected to socially responsible leadership (Hastings & Sunderman, 2019) and the highest predictor of social responsibility (Rossi, 2001) —a stated goal of higher education (Council for the Advancement of Standards in Higher Education, 2015). Given the importance of mentoring in student development, we recommend

that collegiate development programs actively engage students in various mentoring experiences (e.g., being a peer mentor or youth mentor), with a specific focus on the intentional development of generativity. While higher education scholars discuss mentoring as a central tool in leadership development (Hastings et al., 2015; Komives et al., 2009), the presence of a mentoring program or relationship does not guarantee favorable outcomes (Hastings & Sunderman, 2020). Therefore, here are four recommendations for effective mentoring practice and programs in higher education based on the findings of the current research: (a) provide formal education and training for mentors; (b) discuss the concept of generativity within the training opportunities; (c) provide opportunities for mentors to reflect; and (d) encourage mentors to engage in multiple forms of mentoring.

First, the current study emphasizes the importance of providing formal education and mentor training. Before our research, training for mentors was assumed to be nice but unnecessary (Bearman et al., 2007). However, the current findings revealed that formal education and training are critical to maximizing the positive outcomes associated with being a mentor. Building upon the first suggestion, our second recommendation encourages practitioners to consider pairing the mentoring experience with education on the concept of generativity to maximize the formation of “a mindset of generativity” among mentors. Mentoring programs may provide generativity training in various ways, such as an online training module that highlights generativity. As the current research demonstrates, opportunities to formally engage mentors in training are not just perfunctory but critical to mentor development. Third, as mentors engage in training opportunities and the work of mentoring, we urge mentoring program staff and student affairs practitioners to provide opportunities for mentors to reflect and make meaning of their experience (Hastings & Sunderman, 2020). We recommend that future research explore formal and informal conversations, activities, and training that facilitate meaningful reflection and growth.

Fourth, we encourage mentoring programs to engage mentors in multiple forms of mentoring (e.g., youth mentoring and peer mentoring). The results from the current study emphasize that mentoring a K–12 youth allowed students to exercise their generativity muscles, an outcome that was felt more prominently when done in tangent

with mentoring peers in the LMP. Peer mentoring and youth mentoring yield distinct leadership development outcomes (Hastings & Sunderman, 2020). Peer mentoring is imperative in developing leadership identities (Komives et al., 2009), while youth mentoring has been connected to higher generativity and socially responsible leadership (Hastings & Sunderman, 2019; Rossi, 2001). Given the outcomes associated with various forms of mentoring, we recommend encouraging mentors to engage in diverse mentorship roles to fuel their generativity development, which results from the current study reveal are connected to interpersonal development, intrapersonal development, and the creation of a positive ripple effect.

The final implication for practice is the line graph drawing technique. Line graph drawing falls within retrospective assessment or then-now methodology (Rosch & Schwartz, 2009). Retrospective assessment is valuable because it assesses learning following the intervention and avoids flaws related to pre-post tests, including the Horizon Effect (Rosch & Schwartz, 2009). Combining line graph drawing with more traditional evaluative methods, such as surveys, incorporates multiple methods into the evaluation process. Multiple methods are a best practice for enhancing the rigor of evaluation (Hoole & Martineau, 2014). Given these benefits, practitioners are encouraged to utilize line graphs alongside other data collection techniques as a method of evaluating learning objectives and program effectiveness in both curricular and noncurricular settings.

Limitations

The current study possesses several limitations that influence the results' application. Namely, the partial sample size may not have provided the data necessary to achieve the intended depth of a thick description of the phenomenon (Guetterman, 2015). Additionally, researcher biases limit the research findings. Despite attempts to limit their influence, bias undoubtedly shaped the interpretation of the interview data. Finally, the current study is limited by the homogeneity of the sample, who were students in the same LMP at one institution of higher education.

Conclusion

The results from the current study emphasize the unique impact of mentoring on psychosocial development, specifically generativity, among college students. Our findings demonstrate that knowing the concept of generativity and having a formal training experience are antecedents to generativity development. Further, participants described that mentoring allowed them to utilize and grow their generativity while being an upper-class student within the LMP helped to further define their generativity. In light of these findings, we encourage leadership educators and student affairs practitioners to engage college students in mentoring experiences. We offer four specific recommendations: (a) formally train mentors; (b) discuss generativity; (c) engage mentors in reflection; and (d) encourage mentors to engage in multiple forms of mentoring (e.g., youth mentoring and peer mentoring).

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References

- Austin, A. E. (2002). Preparing the next generation of faculty. *The Journal of Higher Education*, 73(1), 94-122. <http://doi.org/10.1080/00221546.2002.11777132>
- Bearman, S., Blake-Beard, S., Hunt, L., & Crosby, F. J. (2007). New directions in mentoring. In T. D. Allen & L. T. Eby (Eds.), *The Blackwell handbook of mentoring: A multiple perspectives approach* (pp. 375-396). Blackwell Publishing.
- Cohler, B. J., Hostetler, A. J., & Boxer, A. M. (1998). Generativity, social context, and lived experience: Narratives of gay men in middle adulthood. In D. P. McAdams & E. de St. Aubin (Eds.), *Generativity and adult development* (pp. 265-310). American Psychological Association.
- Council for the Advancement of Standards in Higher Education. (2015). CAS learning and development outcomes. In J. B. Wells (Ed.), *CAS professional standards for higher education* (9th ed., pp. 24-28).
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE.
- Doerwald, F., Zacher, H., Van Yperen, N. W., & Scheibe, S. (2021). Generativity at work: A meta-analysis. *Journal of Vocational Behavior*, 125, 103521. <https://doi.org/10.1016/j.jvb.2020.103521>

- Erikson, E. H. (1963). *Childhood and society*. Norton (Original work published 1950).
- Guetterman, T. (2015). Descriptions of sampling practices within five approaches to qualitative research in education and the health sciences. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 16(2). <https://doi.org/10.17169/fqs-16.2.2290>
- Hastings, L. J., Griesen, J. V., Hoover, R. E., Creswell, J. W., & Dlugosh, L. L. (2015). Generativity in college students: Comparing and explaining the impact of mentoring. *Journal of College Student Development*, 56(7), 651-669. <https://doi.org/10.1353/csd.2015.0070>
- Hastings, L. J., & Sunderman, H. M. (2019). Generativity and socially responsible leadership among college student leaders who mentor. *Journal of Leadership Education*, 18(3), 1-14. <https://doi.org/10.12806/V18/I3/R1>
- Hastings, L. J., & Sunderman, H. M. (2020). Evidence-based practices in mentoring for leadership development. In M. R. Johnson & K. M. Soria (Eds.), *Evidence-based practices to strengthen leadership development* (pp. 75-84). New Directions for Student Leadership, 168. Jossey Bass.
- Hoole, E., & Martineau, J. (2014). Evaluation methods. In D. V. Day (Ed.), *The Oxford handbook of leadership and organizations* (pp. 167-196). Oxford University Press.
- Huta, V., & Zuroff, D. C. (2007). Examining mediators of the link between generativity and well-being. *Journal of Adult Development*, 14(1-2), 47-52. <https://doi.org/10.1007/s10804-007-9030-7>
- Komives, S. R., Owen, J. E., Longerbeam, S. D., Mainella, F. C., & Osteen, L. (2005). Developing a leadership identity: A grounded theory. *Journal of College Student Development*, 46(6), 593-611. Project MUSE database. <https://doi.org/10.1353/csd.2005.0061>
- Komives, S. R., Longerbeam, S. D., Owen, J. E., Mainella, F. C., & Osteen, L. (2006). A leadership identity development model: Applications from a grounded theory. *Journal of College Student Development*, 47(4), 401-418. Project MUSE database. <https://doi.org/10.1353/csd.2006.0048>
- Komives, S. R., Longerbeam, S. D., Mainella, F., Osteen, L., & Owen, J. E. (2009). Leadership identity development: Challenges in applying a developmental model. *Journal of Leadership Education*, 8(1), 11-47. <https://doi.org/10.12806/V8/I1/TF2>
- Kotre, J. (1984). *Outliving the self: Generativity and the interpretation of lives*. Johns Hopkins University Press.
- Lawford, H., Pratt, M. W., Hunsberger, B., & Pancer, S. M. (2005). Adolescent generativity: A longitudinal study of two possible contexts for learning concern for future generations. *Journal of Research on Adolescence*, 15(3), 261-273. <https://doi.org/10.1111/j.1532-7795.2005.00096.x>
- McAdams, D. P. (2001). Generativity in midlife. In M. Lachman (Ed.), *Handbook of midlife development* (pp. 395-443). Wiley.

- Moerer-Urdahl, T., & Creswell, J. W. (2004). Using transcendental phenomenology to explore the “ripple effect” in a leadership mentoring program. *International Journal of Qualitative Methods*, 3(2), 19–35. <https://doi.org/10.1177/160940690400300202>
- Moustakas, C. E. (1994). *Phenomenological research methods*. Sage Publications.
- Murray, M., & Owen, M. A. (1991). *Beyond the myths and magic of mentoring: How to facilitate an effective mentoring program*. Jossey-Bass.
- Ramaswami, A., & Dreher, G. F. (2007). The benefits associated with workplace mentoring relationships. In T. D. Allen & L. T. Eby (Eds.), *The Blackwell handbook of mentoring: A multiple perspectives approach* (pp. 211–231). Blackwell Publishing.
- Rosch, D. M., & Schwartz, L. M. (2009). Potential issues and pitfalls in outcomes assessment in leadership education. *Journal of Leadership Education*, 8(1), 177–194. <https://doi.org/10.12806/V8/I1/IB5>
- Rossi, A. S. (2001). Domains and dimensions of social responsibility: A sociodemographic profile. In A. S. Rossi (Ed.), *Caring and doing for others: Social responsibility in the domains of family, work, and community* (pp. 97–134). University of Chicago Press.
- Singer, J. A., King, L. A., Green, M. C., & Barr, S. C. (2002). Personal identity and civic responsibility: “Rising to the occasion” narratives and generativity in community action student interns. *Journal of Social Issues*, 58(3), 535–556. <https://doi.org/10.1111/1540-4560.00275>
- Snow, N. (2015). Generativity and flourishing. *Journal of Moral Education*, 44(3), 263–277. <https://doi.org/10.1080/03057240.2015.1043876>
- Sunderman, H. M. (2020). *The development of generativity among college student leaders who mentor: A growth curve analysis* [Doctoral dissertation; University of Nebraska-Lincoln]. <http://digitalcommons.unl.edu/cehsdiss/354>