We Can Do This Thing Together: Intergenerational Learning and Academic Motivation among Community College Students

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ABSTRACT

This qualitative study examines how intergenerational learning contributed to academic motivation among students of different ages in the Florida College System, the state’s community college system. The data for this study included 166 semi-structured focus groups with 375 students collected during site visits to 21 state colleges over a five-year period. This study considers both familial intergenerational learning, in which members of different generations in the same family learn from one another, and extrafamilial intergenerational learning, in which members of different generations not in the same family learn from one another. Overall, familial intergenerational learning was a more prominent theme than extrafamilial intergenerational learning. Both familial and extrafamilial intergenerational learning included three similar patterns: 1) older to younger learning, 2) younger to older learning, and 3) reciprocal learning, but familial intergenerational learning also included a fourth pattern of indirect intergenerational learning that is not reflected in extrafamilial intergenerational learning. Recommendations for practice are also provided including formalizing some of the informal forms of intergenerational learning that we highlight in our data.

As open access institutions, community colleges enroll students who are diverse both in terms of age and racial and ethnic background. The students who attend community colleges are more likely to be adults or nontraditional students over the age of 24, have children, be unmarried, and work part- or full-time (Goldrick-Rab & Han, 2011; Goldrick-Rab & Sorensen, 2010; Sissel et al., 2001). Indeed, Sissel et al. (2001) has referred to nontraditional students as the new majority in higher education. In addition, the landscape of community college students includes a disproportionate number of racially minoritized students. For example, in the fall of 2016, 39% of students attending public, two-year institutions were Black or Latinx, compared to 30% of students attending public, four-year institutions (National Center for Education Statistics, 2018).

Though a strength of community colleges is that they are diverse institutions that enroll nearly half of America’s undergraduate students, many of them adults, fewer than 40% of these students graduate within six years (Bailey et al., 2015). This sobering statistic suggests that while community colleges are essential American institutions of higher learning, staff can benefit from innovative new ways to help these students persist and ultimately graduate. The present study, based on focus group data collected from 375 students from the Florida College System, the state’s community college system, proposes that intergenerational learning, or learning that occurs between members of different generations, represents an understudied yet essential strength of a community college education that could be better leveraged to academically motivate students of all ages.

Following Hoff (2007), we define intergenerational learning in this study as the “transfer of knowledge, skills, competencies, norms and values between generations” (p. 10). Familial
intergenerational learning occurs between different generations of a family while extrafamilial intergenerational learning occurs among students with a minimum of five years difference between their ages. In this study, we bound the phenomenon by excluding intergenerational learning between instructors and students.

The current study extends the construct of intergenerational learning to the context of higher education, specifically 21 of the state colleges (formerly community colleges) in the Florida College System (FCS). The purpose of this study is to examine the types of multi-age interactions that can contribute to academic motivation and success among students in community college. This study is important because intergenerational learning can be considered an underutilized asset in community colleges that brings together multiple generations of learners in one unique educational context. The research questions for this study, situated in the Florida College System, are:

1. What are the types of intergenerational learning among community college students?
2. How has intergenerational learning contributed to academic motivation among community college students of various ages?
3. What have been the barriers to intergenerational learning among community college students?

Literature review

Intergenerational learning (or multi-age learning) has occurred for centuries and traditionally involved wisdom and knowledge passed down by older adults to younger generations to perpetuate family and cultural traditions as well as value systems (Kaplan, 2002; Newman & Hatton-Yeo, 2008). Though intergenerational learning tended to take place within families in traditional cultures, the norm in modern society has been for intergenerational learning to take place both among family members and in extrafamilial relationships in society (Newman & Hatton-Yeo, 2008). Extrafamilial relationships are synonymous with fictive kin relationships, a term used by ethnographers to describe close relationships among people not related by genetics or marriage (Carsten, 2000). Fictive kin relationships have been explored in higher education contexts between peers (Tierney & Venegas, 2006) and between Black women faculty who form maternal mentoring bonds or othermothering relationships with Black students (Guiffrida, 2005).

Sánchez and Kaplan (2014) note that the old conception of intergenerational learning is “learning between generations” (p. 478), in which learning is produced through an awareness of commonalities and differences between generational positions. Kaplan (2002) asserts that to optimize the benefits of intergenerational learning, learning should be reciprocal so that older adults and younger adults (in the case of community college students) both benefit from these interactions. Strom and Strom (2011) suggest that intergenerational learning can be motivating for both generations when coupled with optimal support from the educational institution where it occurs.

Sánchez and Kaplan (2014) report that in the context of higher education, multiage and multigenerational classrooms are increasing and can be leveraged by instructors to improve learning and foster awareness of other generations among people of varying ages. Their research provides insight for staff in higher education institutions where student demographics are changing, and institutional leaders want to enhance intergenerational learning among diverse student groups.

With respect to multigenerational classrooms, Sánchez and Kaplan (2014) found that at least some members of multigenerational classrooms need to have intergenerational intelligence, which Biggs and Lowenstein (2011) define as “empathy felt between generations” (p. 16). Without this type of intelligence among community college students, intergenerational learning in classroom settings is less meaningful.

Biggs and Lowenstein’s (2011) four-step strategy for increasing intergenerational intelligence includes: 1) recognizing that generations differ in their experiences, 2) understanding the relationships among differing generations, 3) asserting a normative position that generational differences
based on experience matter, and 4) behaving in ways that demonstrate generational awareness or empathy.

Besides the multigenerational classrooms applied in higher education, there are many programs and strategies in higher education institutions to support intergenerational learning (Kaplan, 2002). To identify which strategies are useful for enhancing intergenerational learning, some scholars have begun to evaluate and analyze the main strategies used in higher education institutions. Bratianu et al. (2015) used an integrated research approach to explore “the most suitable strategies for enhancing IGL (intergenerational learning) and reducing knowledge loss” (p. 551). Their assessment focused on four universities and findings from the study showed that mentoring, research teams of mixed ages, and multigenerational creativity workshops were the most common and useful strategies for enhancing intergenerational learning.

Some features of institutions can decrease intergenerational intelligence or empathy (Haapala et al., 2015). One example is age segregation by cohort such as exists in K-12 education and to a lesser extent in undergraduate and graduate university education (Kohli, 2007). A detrimental effect of age-based spaces, such as classrooms, can be the othering of students who are either significantly younger or older from the majority of students in an educational setting (Phillips et al., 2010). In this study, we show that intergenerational learning can contribute to increased academic motivation among students.

**Academic motivation**

Academic motivation is broadly considered a psychosocial factor in promoting student persistence and success in higher education (Habley et al., 2012). Habley et al. (2012) have grouped myriad theories of academic motivation in higher education into four broad constructs which include 1) motivation as drive (achievement motivation and need to belong), 2) motivation as goal attainment (attainment of academic goals and performance and mastery goals), 3) motivation as expectancy (academic self-efficacy and outcome expectations), and 4) motivation as self-worth (self-concept). Among these theories, motivation as drive and motivation as goal attainment are particularly prominent.

Covington (2000) distinguishes between two of the major bodies of research on academic motivation, one which defines motivation as a drive and one which defines motivation as goal attainment. The motivation as drive perspective views motivation as “an internal state, need, or condition that impels individuals toward action” (Covington, 2000, p. 173). In this research tradition, motivation is a trait of individuals that comes from a human desire for greater achievement relative to others as well as the power and social approval that individuals gain from achievement.

In contrast, the motivation as goal attainment perspective hypothesizes that individual differences in academic achievement can be attributed, at least in part, to students’ cognitive self-regulation processes. This study adopts the motivation as goal attainment perspective. Researchers in this tradition emphasize the linkage between motivation and the use of various cognitive strategies to achieve goals (Eccles & Wigfield, 2002). That is, “one’s achievement goals are thought to influence the quality, timing, and appropriateness of cognitive strategies, that, in turn, control the quality of one’s accomplishments” (Covington, 2000, p. 174). Specifically, motivation as goal attainment posits that student goals lead to cognitive states beneficial for learning, which lead to academic achievement. These cognitive states involve actively engaging in one’s own learning through activities such as planning for, gathering necessary resources, and analyzing the steps needed to complete coursework, and monitoring progress toward academic goals (Zimmerman, 1990).

**Method**

The data in this team-based qualitative study were verbatim transcripts of 166 semi-structured focus groups collected from 375 students during two-day site visits to 21 state colleges in Florida over a five-
year period. Site visits were conducted by teams of two to four researchers traveling to each institution with some repeat visits to institutions.

The student focus group data in the current study were one data source among several qualitative and quantitative data sources in a larger study. The larger mixed methods research project examined developmental education in the Florida College System (FCS). Though the larger study examined student success, the themes of intergenerational learning and academic motivation were prominent in the student focus group data during the data analysis process and were not the central focus of the larger mixed methods project.

**Data collection**

We sampled at both the institution-level and individual, participant-level. At both levels, our qualitative sampling strategy was a “purposive, maximum variation sample” (Patton, 2015, p. 243), which involved sampling widely to purposely choose a wide range of examples to achieve “variation on dimensions of interest” (Patton, 2015, p. 243). The 21 institutions in our five-year sample represented more than half of the 28 institutions in the FCS, including institutions in every region of the state and institutions that varied in terms of location (i.e., rural, suburban, and urban) and enrollment size.

Focus group data afforded us a large number of participants, allowing us to increase the variation on dimensions of interest as compared to a smaller sample size with individual interviews. Institutions that participated in our study assisted researchers with soliciting potential focus group participants and securing on-campus space for the focus group sessions. Administrators were requested to select students reflecting the demographic diversity of the FCS, including adult students, students of color, English language learners, economically disadvantaged students, and veterans.

Focus groups were conducted by two experienced qualitative researchers with graduate students acting as assistants for each focus group. Digital recordings of all focus groups were used to generate transcripts, which were then imported into qualitative data analysis software, NVivo 10, for analysis by a team of researchers. The focus group protocols included a broad array of questions, which changed over the five-year period. As previous themes reached saturation in the focus group data, new themes were added to the protocol each year. Sample focus group questions from the larger project relevant to the current study include the following: *On a typical day, what happens during class? What do you spend most of your time doing on campus? Who do you interact with most on campus (e.g., instructors, advisors, support staff, other students)? What are your family commitments outside of school? Has anyone in your family ever attended college? If so, what information did they share with you about succeeding in college? If not, how does your family feel about your attending college? Have you been mentored by another student? If yes, what has been your experience with a peer mentor?*

**Data analysis**

Overall, the data analysis process for this study was iterative. Over the five-year period, we developed a coding framework, which incorporated a combination of *a priori* and emergent codes at three levels (i.e., parent, child, and grandchild codes). Parent codes included codes such as traditional-age students, adult students, parents, families, technology, intergenerational learning, and student success. Child codes included such codes as actions, interactions, familial learning, extrafamilial learning, positive emotions, engagement, relationships, meaning, and achievement. Grandchild codes included codes such as older to younger learning, younger to older learning, reciprocal learning, unintentional learning, and barriers to learning.

The large sample size increased the number of categories of intergenerational learning uncovered during the data analysis process. Our team-based data analysis process in this qualitative study consisted of seven overall steps: 1) open or first cycle coding of all the student focus group data for major themes; 2) identification of intergenerational learning and academic motivation as emergent
themes in the data; 3) identification of significant statements from the students related to intergenerational learning and academic motivation during second cycle coding; 4) sorting of the significant statements into categories for familial and extrafamilial examples of intergenerational learning; 5) further sorting of the familial and extrafamilial intergenerational learning examples into subthemes (presented in Tables 1 and 2 below); and, 6) identification of disconfirming or negative examples that were barriers to intergenerational learning and academic motivation (presented in Table 3 below; Corbin & Strauss, 2015; Miles et al., 2014). Researchers also wrote analytic memos throughout the research process in all five years, assisting us in developing the coding framework and identifying the themes of the present study (Corbin & Strauss, 2015).

Trustworthiness
The trustworthiness of our qualitative interpretations was established through an inter-coder reliability process, in which we kept a codebook with definitions of codes and met weekly to discuss and clarify codes on which we had lower levels of coding agreement in NVivo. We also engaged in member-checking with study participants and peer debriefing with two researchers who acted as devil’s advocates in questioning the study’s interpretations (Patton, 2015).

Researcher positionality statements
The first author, who engaged in student activism during her college years, is the daughter of White, middle class, baby boomer parents who engaged in anti-war protest as college students during the Vietnam War era. The first author’s parents imparted to their children and grandchildren the importance of choosing a vocation devoted to social change, and often engage in discussions with her child about historical parallels and differences between their college years and the present era. The second author is a Chinese international student who started her graduate study in the United States five years ago. Her parents did not attend college, but the high respect her parents held for education and knowledge encouraged her to start her postsecondary education and eventually to achieve the opportunity to study abroad. The educational support and motivation from her parents made a big difference to her education journey. The third author is the daughter of White, middle class parents who instilled the value of education in her and her older brother from a young age. Prior to her mother earning a postsecondary credential, no one in her family had graduated from college, and, as a result, conversations about the importance of college occurred frequently throughout her time in grade school. The fourth author is a Black woman and was the first in her immediate family, on both maternal and paternal sides, to complete undergraduate and graduate education. As a former community college instructor, she has observed the ways community college education can provide social, cultural, and economic capital that shapes lives on individual and generational levels. The fifth author is an Asian American who came to the United States for graduate education from China in the 1990s. He was the first one in the family to attend college, and eventually completed doctoral study at an American research university. The high expectation of and support from his parents played a significant role in his educational attainment process.

Collectively, the authors’ families are close-knit and share core values including the importance of education and respect for the wisdom of different generations. These shared and individual lived experiences provide the lens through which each of the authors understood and interpreted the data in this study. In the next section, we highlight specific findings related to intergenerational learning and academic motivation.

Findings
We present our key findings in three sections that represent the main themes in this study (e.g., familial learning, extrafamilial learning, and barriers to intergenerational learning). First, we examine four types of familial intergenerational learning (or subthemes) that were induced from our data
including: a) older to younger learning, b) younger to older learning, c) reciprocal learning, and d) unintended learning. Next, we examine three types or subthemes of extrafamilial intergenerational learning including: a) older to younger learning, b) younger to older learning, and c) reciprocal learning. Finally, we explore barriers to both familial and extrafamilial intergenerational learning.

In keeping with newly emerging conventions for large qualitative datasets (Brower et al., 2019), we present our findings in two formats. First, we present tables summarizing the subthemes across all data that demonstrate the variety of forms of intergenerational learning present in our data. Then, because space limitations preclude us from providing examples of each type of intergenerational learning, we present three narrative examples of intergenerational learning from focus group participants. By including both summary tables and rich case examples, we illustrate both the breadth and depth of our data. Using Denzin’s (1989) classic criteria for cases, examples were considered for inclusion in this manuscript if they contained “thick, rich description” (Denzin, 1989, p. 83). We begin by presenting familial intergenerational learning.

**Familial intergenerational learning**

Regardless of the pattern of familial intergenerational learning (i.e., older to younger learning, younger to older learning, reciprocal learning, and indirect learning), when students of all ages in our focus groups were asked what motivated them to remain in community college and persist despite educational and life challenges, the most frequent answer was a family member. For traditional age students this was often a parent, particularly a mother, or another older adult family member, and for older adults this was often a child.

| Table 1. Familial intergenerational learning among community college students. |
|-----------------------------------------------|
| **Actions Fostering Academic Motivation**     |
| **Older to Younger Intergenerational Learning in Families:** Parent or older relative fostering learning in child | Role modeling and answering questions about how to be a student. |
|                                               | Communicating high expectations. |
|                                               | Discouraging negative attitudes toward education and academic challenge. |
|                                               | Role modeling self-sufficiency, agency and overcoming challenge to pursue education. |
|                                               | Helping the younger generation identify strengths, choose a course of study or major, and find a vocation. |
|                                               | Encouraging the younger generation to pursue higher education in early adulthood as opposed to later in life. |
|                                               | Taking coursework to be more effective parents as a result of education. |
|                                               | Providing childcare for grandchildren so that children can pursue higher education. |
|                                               | Sharing wisdom about life mistakes. |
|                                               | Families of color and immigrant families sharing life experiences about their lack of access to educational opportunities. |
|                                               | Helping parent or older relative with academic coursework such as math. |
| **Younger to Older Intergenerational Learning in Families:** Child fostering learning in parent or older relative | Helping parent or older relative use technology. |
| **Reciprocal Intergenerational Learning in Families:** Child and parent or older relative fostering learning in each other | Studying together. |
| **Indirect Intergenerational Learning in Families:** Parent or child unintentionally or indirectly fostering learning | Providing mutual social or emotional support. |
|                                               | Children motivating parents or parents motivating children to choose a meaningful caretaking vocation such as educator, social worker, or healthcare worker for special needs child or parent with illness or disability, etc. |
|                                               | Family hardship creating barriers to learning yet motivating students to persist. |
|                                               | Child motivating parent to pursue education to adequately support child financially. |
|                                               | Hardship in the family creating challenges but also motivating students to stay in college. |
Among the four primary patterns of intergenerational learning summarized in Table 1, older to younger intergenerational learning involved older students imparting knowledge and life wisdom to younger students as well as parents who imparted wisdom to their children about succeeding in college. Younger to older intergenerational learning primarily involved younger people assisting older students with academic tasks, oftentimes with technology or mathematics coursework. Reciprocal learning involved learning from a position of equality from both older to younger student and from younger to older students. Lastly, indirect intergenerational learning typically involved students either learning from the mistakes of the older generation or finding life purpose through personal hardship and/or caring for older or younger family members. These patterns are summarized in Table 1.

Particularly rich dynamics around intergenerational learning emerged from data provided by Black and Latinx students. In our first narrative example, we illuminate a vivid case of familial intergenerational learning. Pseudonyms are used to protect the identities of students in this research.

“We can do this thing together”
Anne described her ambition to write a Broadway play about raising her child Alice and how this aspiration was connected to her religious faith. She explained:

Not sure exactly the journey of how I’m going to get there, but I know faith without works is dead . . . I guess all of this surrounds my daughter. She’s disabled. And she’s in the process of graduating from high school. So, she’s transitioning from being dependent to independent on paper . . . But she can’t take care of herself without assistance. So, her everyday living skills still depends on my big dreams and aspirations. And she wants to be her own person and her own woman . . . So it all depends on [Alice] at the end of the day pretty much.

When the interviewer remarked that “It all depends on Alice” would be a good title for her play, Anne paused, wrote it down, looked up and said, “Don’t you make me cry.”

Ultimately, Anne’s daughter Alice gives her the motivation to persist in community college.

Later in the focus group, Anne demonstrated her academic motivation to persist when she described the words she often repeated to herself:

After I get my paper done, then I can fix dinner . . . The good Lord is working it out to make sure that everybody’s needs are being met in a timely manner. Long as I keep – don’t beat myself up. Stay positive about it. [Mimics talking to herself] “You got this. You can do it. I have been through worse.”

Later Anne talked about the connection she made between her daughter and the younger college students in her classes:

I just be running my mouth with them kids. Don’t call them kids. I’m sorry. I just be running my mouth with those young adults. But you can see, like when you sit next to them and either if I’m struggling or even if the person next to me is struggling, I’ll always say, “You need my help? Cause I need yours.” So just I guess being a mother. They’re my children’s age . . . But it’s like, you need me, I need you and we can do this thing together.

Like the academic motivation Anne received from her daughter, Anne also derived the support and encouragement she needed to persist in community college from the students of her daughter’s generation with whom she interacted in class. We next consider subthemes related to extrafamilial intergenerational learning.

Extrafamilial intergenerational learning
Our examples of extrafamilial intergenerational learning followed patterns similar to familial intergenerational learning. However, we did not uncover examples of indirect learning among unrelated students of different generations. That is, among the patterns induced from our data in Table 2, extrafamilial intergenerational learning was from younger to older students, from older to younger students, and reciprocal.

We found that some older generation Black students willingly shared stories of their experiences with discrimination and racism in the Civil Rights era to inform younger generations of students about
Table 2. Extrafamilial intergenerational learning among community college students.

| Older to Younger Extrafamilial Intergenerational Learning: | Actions Fostering Academic Motivation |
|-------------------------------------------------------------|---------------------------------------|
| Older students fostering learning in younger students       | Role modeling how to be a student.    |
|                                                             | Role modeling how to communicate with and build rapport with faculty. |
|                                                             | Asking questions on behalf of younger students who are less confident about seeking help. |
|                                                             | Discouraging negative attitudes toward education and academic challenge. |
|                                                             | Reiterating the importance of pursuing education in early adulthood. |
|                                                             | Sharing wisdom about life mistakes.   |
|                                                             | Sharing life experiences about lack of access to educational opportunities. |

| Younger to Older Extrafamilial Intergenerational Learning: | Helping older student with academic coursework such as math. |
|-----------------------------------------------------------|-------------------------------------------------------------|
| Younger student fostering learning in older student       | Helping older students navigate college.                     |
|                                                             | Helping older students with technology.                      |

| Reciprocal Extrafamilial Intergenerational Learning:      | Studying together.                                           |
|-----------------------------------------------------------|-------------------------------------------------------------|
| Younger and older students fostering learning in each other| Providing mutual social and emotional support.              |

Table 3. Barriers to both familial and extrafamilial intergenerational learning.

| Barriers to Familial Intergenerational Learning | Feeling there is insufficient time to parent effectively. |
|-------------------------------------------------|----------------------------------------------------------|
| Inability to help children with difficult college material. | |
| Prioritizing children’s short term needs ahead of parent’s long term need for higher education. | |
| Failing to persist in college due to caregiving demands, especially for young children and family members with illness or disability. | |
| Communicating unrealistic academic expectations or not forgiving mistakes. | |
| Comparing siblings’ academic achievements unfavorably. | |

| Barriers to Extrafamilial Intergenerational Learning | Younger students unintentionally excluding older students from groups. |
|-------------------------------------------------------|---------------------------------------------------------------------|
| Younger students unintentionally making older students feel academically inadequate. | |

the historical realities they had faced. In addition, Black women were more likely to describe themselves as mothering or othermothering younger students. In our example of extrafamilial learning, Rebecca, a Black woman in her 50s, described to younger students in a focus group her parents’ participation in the Civil Rights movement and her experience with violent racism growing up.

“Chased by German shepherds”

During a wide-ranging discussion in which students were asked what challenges they faced in community college, a multi-age group of ethnically and racially diverse students shared their frustrations in navigating the community college environment. Many of the students, particularly traditional-age students mentioned their stress during exams weeks and how they would like the exam schedule to be rewritten. Rebecca agreed about the exam schedule but contrasted the students’ modern concerns with her experience growing up during the Civil Rights era. She explained:

I’m an old person. People don’t think that I’m a student . . . I’m 53 years old . . . And my father and mother, who were very much Civil Rights fighters, [and helped to] integrate neighborhoods. And so, as children . . . we were the first Black families in neighborhoods. And I was chased by German shepherds and threatened by older White men that I was going to be killed . . . So knowing all that growing up, I’m not bitter. It is what it is. It happened. I overcame.

In response, Stephen, a traditional college age Black male, smiled and teased Rebecca saying, “You don’t look 52.” She replied to him:

Thank you . . . But, you know, it’s almost – you hate saying this because this is used in a bad way sometimes, but if you’re part of this campus, it’s color blind, you know? . . . You know, we don’t avoid each other. And we can discuss race openly . . . We had a conversation about Civil Rights in my history class, how some of the students, because they were younger, didn’t understand what happened in the fifties . . . [P]eople [younger students] . . .
they said, “Well, what do you mean? It’s police brutality” ... They would ask, ‘Well, how did this come about? Why didn’t the police do anything about it? I don’t understand.” Because they didn’t grow up with that ... [B] ecuse it seems like these younger people here accept each other as they are.

Rebecca continued describing how her classroom interactions with younger students contributed to her academic motivation by helping her engage more fully with the history curriculum. She contrasted her educational experiences in young adulthood with those of younger students in community college today:

So, all of the students here that I’ve seen and been in class with, they get along so well, and they openly talk about race ... Why is it like this with Black people? Why is it like this with white people? What is white privilege?. In my day, we didn’t discuss it ... You didn’t call it out. We’d get involved. We protested, but we didn’t have open discussions like we do now ... It’s part of the curriculum [now], and then sometimes they’ll look and ask me [about history] because they know I was like back there. I always laugh. I tell them, yeah, I was [alive with] Moses.

Rebecca described how she helped traditional age college students understand the history of race relations in the United States from someone who had witnessed it directly and whose parents had played an important role in that history. Like Anne in the previous example, Rebecca’s relationships with younger students in the classroom contributed to her motivation as a student by helping both her and the younger students to be more engaged with the course material, more motivated to succeed academically, and to find learning more personally meaningful.

**Barriers to intergenerational learning**

When our data were analyzed for disconfirming cases, another key finding emerged with respect to the barriers to intergenerational learning. We found that while familial intergenerational learning was generally a positive force in the lives of students, many students with children, especially mothers, reported conflicted feelings with respect to their children. Mothers in our focus groups described competing priorities and discomfort with putting their own needs for education and fulfillment ahead of the needs of their children. In addition, barriers to extrafamilial intergenerational learning tended to occur when older students felt alienated or excluded as a result of their age or felt academically inadequate because they perceived younger students as grasping academic content more readily. The patterns induced from our data are summarized in Table 3.

Our final narrative example involves Robert, a Black male military veteran, who explained why his experiences with discrimination during his early schooling made his transition to higher education so challenging.

**“I come from the Jim Crow era”**

Initially Robert felt stigmatized in community college not only by his age but also by what he described as his lack of preparation for college-level work. He explained the educational generation gap to one instructor:

I had to tell Summertime [name of instructor] don’t assume just because the kids are in school – in class, that we all had the same thing. I come from the Jim Crow era. I don’t know if you all understand that, that I come from just all-Black schools. They didn’t integrate until 1972, by that time, I was on my way out. So, a lot of this stuff that you guys got today, well, I didn’t have it back in school ... We had the hand-me-down books, and this is the reason why they integrated – started integration, because of the fact that we had to get the same books as the white students got.

Robert continued explaining how he felt he had no choice but to communicate his early schooling experience to his community college instructor. He explained:

So, I had to tell her (the instructor) that, don’t assume anything with me because of the thing that I come through. Because everything I’m doing now guys in this college is new, it doesn’t matter what it is, and when you is telling me something easy, it’s easy for you, but it’s not easy for me.
Referring to another instructor as “son”, the student had a similar conversation, stating, “He (the instructor) said he’s got people (students) been two years out (from high school) and having a hard time. I’m over 41 years (out of high school), son, over 41 years.”

Robert explained that the two most significant challenges he had faced as an older community college student included technology and the math curriculum. Due to his early schooling, he’d had little exposure to technology. Nonetheless, Robert explained how crucial the academic support staff and younger students in the labs had been in helping him persist in college by teaching him computer skills:

But I have never used so much computers in my life. Of course, I didn’t grow up with it. And coming to college and having to get online and stuff, that was a lesson itself. It was very helpful in those labs because of those [peer] tutors and they helped me to navigate, because I didn’t have no formal class in school, no computers . . . But the technology part with the iPads, the iPhones, the computers, everything for me, in order for me to work, guys, thank God for the labs because if it wasn’t for the labs I don’t know – I wouldn’t – I’d have probably been so frustrated that I would just have to quit . . . But as far as technology . . . being a military guy, and I was in that field, you know, missiles and stuff back in the days, that I knew things was gonna be changing.

He also remarked about how academic support staff and fellow students helped him with the math curriculum. Though Robert was determined to persist in community college, he acknowledged significant barriers to his success due to the “separate but unequal” education he had received as a young man:

I’m pretty much living in the labs . . . Math is my Achilles heel. I know what I need, I need more time to catch up. Formulas I have never seen before, integers, whole numbers, fractions. I mean it’s like I had to start elementary and work my way back up just to get to that basic level. But see, I know my weaknesses and that’s the good thing about it. I’m not gonna disguise them . . . I got some good professors, it’s just that I can’t comprehend the courses fast enough . . . And I’m not making no excuses, that’s just the facts . . . But they forgot about us, because now, if you all notice, there’s some new generation of older people coming to school, coming to college. I happen to be 60 years old.

After describing his challenges with technology and math, Robert stated that his motivation for participating in our research project was to give voice to people who had opted to return to college later in life:

I came here to voice speaking for the older generation that’s coming back to school now. And thank God that I have the capacity to be able to go to college because some of my friends is not in my shape, psychologically. You know, they’re mentally – not only physically but mentally also [struggling] . . . That’s why this [my educational journey] has to be so successful in order to encourage my other buddies to be able to come to school and not be so, like I was, so petrified to come back to school.

Robert shared that he wanted to serve as a role model and mentor to motivate his older veteran friends to overcome their fears and consider returning to community college. Having presented the specific patterns in the data in three sections (familial learning, extrafamilial learning, and barriers to intergenerational learning), we next consider some implications of these findings for community college staff and their students.

**Discussion**

Our findings confirm much of the work of researchers who have previously studied intergenerational learning in higher education and other contexts. Our three in-depth cases, for example, illustrate key points related to intergenerational learning. First, Anne’s case, which involved both familial and extrafamilial intergenerational learning, reinforces Newman and Hatton-Yeo (2008) contention that a new norm in society is for familial and extrafamilial intergenerational learning to occur simultaneously. Next, the case of Rebecca and her interactions with Stephen and other younger students typifies Biggs and Lowenstein (2011) definition of intergenerational intelligence as “empathy felt between generations” (p. 16). Lastly, Robert’s case, in contrast to the other two cases presented,
illustrates the othering of much older students among traditional age students (Phillips et al., 2010) that can occur when institutions do not make intentional efforts to foster positive intergenerational interactions.

In addition to confirming previous work on intergenerational learning, we also extend this work by examining the dynamics of this phenomenon in a new context: community colleges. Specifically, our findings suggest several important themes related to intergenerational learning and academic motivation in community colleges. First, we found two broad categories and several subcategories of intergenerational learning among community college students in the FCS. Among these categories, the most frequent type of intergenerational learning was among family members while extrafamilial intergenerational learning was a frequent, though less prominent, theme.

The most common pattern of familial intergenerational learning was older to younger learning. While some of these examples involved instrumental support like childcare, the majority involved the older generation offering social support and reinforcing values with the younger generation. Though less common in the data than older to younger learning, when the younger generation engaged in intergenerational learning, it was frequently to help the older generation with practical matters such as using technology effectively and completing mathematics assignments. Our data suggest that older generations of students were doing more heavy lifting in terms of maintaining these relationships and extending social support, which suggests areas for improvement in institutional practice. However, like older to younger intergenerational learning, when the relationship was reciprocal, it typically involved members of different generations offering each other academic and social support.

An unexpected finding related to situations that we labeled “unintentional intergenerational learning.” These examples tended to follow one of three patterns: a parent was motivated out of necessity to find a career in order to support their children financially, parents found their vocation as a result of caring for children, or children found their occupational calling as a result of caring for aging parents. The most common examples of this were parents of children with disabilities or children whose parents were suffering from long-term illness or dementia. Other types of unintentional intergenerational learning included children who experienced significant hardship in their immediate families through no fault of the families as well as children who described their families as dysfunctional and vowed to parent their own children differently than they had been parented.

We found somewhat different patterns among diverse groups of students though these examples were less numerous. For example, Black and Latinx students were more likely to gain historical perspective on discrimination from the older generation and Black women in extrafamilial friendships were more likely to othermother younger students, especially younger Black women. Though these examples of historical perspective and othermothering were less frequent in our data, they are nevertheless an important subtheme that emerged during the data analysis process.

Across all of the examples of familial and extrafamilial intergenerational learning in our data, the overriding pattern was that interactions between individuals of different generations contributed to students’ motivation to persist and succeed in community college. How, then, did intergenerational learning concretely contribute to academic motivation and ultimately to student success? In classroom settings, learning labs, study groups, and at home, when older and younger students interacted, most of the interactions fostered positive emotions. As a result of intergenerational interactions, students of all ages felt better about themselves as students; perceived themselves as capable of succeeding in college (i.e., had increased academic self-efficacy); were more engaged with the curriculum when they actively helped one another learn (regardless of whether the content was historical, mathematical, or technological); and placed greater value on their educational journeys and accomplishments. We next consider implications of these findings for future research.
**Implications for future research**

This study contributes new insights that suggest important new directions for research. We examined how intergenerational learning contributed to community college students’ academic motivation. Our review of the literature uncovered a dearth of research that applied these constructs to the community college setting. Because previous research has shown that age-based cohorts can other students of differing ages (Kohli, 2007; Phillips et al., 2010), intergenerational learning presents a strength of the community college model that deserves further qualitative and quantitative study.

Moving forward, it will be important to extend this line of research to other types of higher education institutions. In addition, our study uncovered examples of both extrafamilial intergenerational learning (Newman & Hatton-Yeo, 2008) among students of different ages and othermothering (Guiffrida, 2005) among peer students. Further research is needed to determine whether these peer relationships are more common in community colleges than other types of higher education institutions and whether othermothering relationships among students of different ages are more prevalent than othermothering relationships between faculty members and students due to the age diversity in two-year institutions. Next, we explore how the benefits of intergenerational learning described in this study can help to improve institutional practice in community colleges nationwide.

**Implications for institutional practice**

The participants in our study suggested many changes that community colleges can make to promote intergenerational learning, supporting Strom and Strom (2011) finding that intergenerational learning requires optimal support. With respect to familial intergenerational learning, participants indicated that community colleges could be made more family friendly. Accommodations for busy families could include items such as: 1) more online coursework, 2) childcare on campus or childcare subsidies for off campus childcare, 3) academic support centers where children and parents can study together or assistance establishing play groups for parents to study on a rotating basis, 3) learning communities and support groups tailored to the needs of parents, and 4) coaching on how to discuss family responsibilities with campus personnel, particularly faculty members (Bailey et al., 2015; Kruvelis, 2017; Quaye & Harper, 2015; Tull et al., 2015). In addition, professional development for administrators, faculty, student affairs professionals, and academic advisors can help campus personnel better understand the key family relationships that play a role in motivating students to persist and succeed in community college (Knowles et al., 2015).

Community colleges can also improve practice with respect to adult children whose parents are not enrolled at the institution by inviting students’ families to participate in campus life in more meaningful ways. This could include designing multicultural campus events, parallel events for parents and children, orientation and informational sessions about college life open to family members, and free workshops for families about how to support their family member’s academic success (Quaye & Harper, 2015; Tull et al., 2015).

Kaplan (2002) showed that intergenerational learning is more effective when it is reciprocal rather than unidirectional. In terms of extrafamilial intergenerational learning, some institutions have created student peer support groups as well as peer mentoring and tutoring groups. Peer mentors and tutors have been used to provide direct support in classes and outside of class by offering technology training, campus resource tours, and other general supports for students (Bailey et al., 2015; Knowles et al., 2015; Long, 2015). When faced with academic or personal challenges, students in our focus groups often took the initiative to organize new groups or work within existing structures to help their peers achieve academic success. FCS faculty members also noted several instances in which students came together to form study groups and informal academic support groups to help each other pass courses.

Making these programs intentionally intergenerational allows for students to see themselves in the mentor or tutor role and for the younger generation to take on more of the heavy lifting when it comes
to intergenerational learning. Whether institution initiated or student-initiated, we suggest that community colleges support and promote these student groups by providing space in libraries, learning labs, student unions, or other designated areas in common spaces for these activities (Bailey et al., 2015).

Lastly, we suggest that faculty adopt culturally responsive teaching practices that incorporate a variety of life experiences and identities in their course materials and examples in class (Knowles et al., 2015). The examples of students in our data with direct Civil Rights experience suggest that students could be called upon to share their experiences. However, we would caution faculty to refrain from tokenizing students (Quaye & Harper, 2015), but instead use Biggs and Lowenstein’s (2011) four-step strategy to make students of diverse ages feel included. These strategies could be used in class discussions on historical and cultural topics with open ended questions such as: What do all of you already know about this topic? What other potential sources of information could you find about this topic? How might different generations understand these events or issues differently? How are different generations connected to each other? What might we do differently when we consider the perspective of other generations?

Conclusion

In summary, our study found that intergenerational learning contributed to students’ motivation to persist in community college. The most frequent type of intergenerational learning was among family members and the most common pattern of familial intergenerational learning was older to younger learning. Across all examples of intergenerational learning, the predominant pattern was for the older generation to extend social support and reinforce values with the younger generation.

Taken together, each of the types of intergenerational learning represents a hidden strength of community colleges. We suggest that age diversity and racial and ethnic diversity of students in two-year institutions adds a critically important dimension to the quality of a community college education. Future work on intergenerational learning should examine how it can be leveraged to promote academic success among students of mixed ages in a variety of higher education institutions.

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