

PIAL Expansion Grant Report: Objective 2

Emerging Adult Edition

Year 2 Report – Evaluation of Fall 2022

Prepared by

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Table of Contents

Table of Contents	2
Introduction	3
Aims	4
Hypothesis	5
Procedure	5
Results	6
Demographics	6
Baseline Knowledge	8
Knowledge Gain and Behavior/Attitude Differences	10
Influence of Demographics on Responses	14
Emergent Themes from Open-Ended Questions	17
Impact of Debrief Facilitation on Responses	23
Summary and Future Directions	26
Study Implications and Changes to Be Implemented	27
References	29
Appendix	30



Introduction

Parenting: It's a Life (PIAL) is an outreach program that has served 7-12th grade students in Iowa for over 20 years and introduces students to knowledge about the realities of parenting and various life skills through a free curriculum (see McCurdy et al., 2021). PIAL is part of a contract between the Iowa State University (ISU) Child Welfare Research and Training Project and the Iowa Department of Health and Human Services Child Support Unit (Iowa Child Support; see Lee et al., 2020; Weems et al., 2020). CWRTP mobilizes expert knowledge and state-of-the-art practices through engaged scholarship/applied research, direct programming, and data analysis to facilitate CSRU goals (Weems et al., 2020). These include engaging and supporting schools in offering PIAL learning modules in Family and Consumer Sciences, Life Skills, Health, and Psychology classes. Unlike other school-based parenting programs, PIAL is one of a few programs that provide education around co-parenting, the costs of raising a child, information on establishing paternity, and child support education, topics often left out of other schoolbased parenting programs. A wealth of research indicates that parenting practices affect many areas of child development and continue to influence children's well-being across the lifespan (Belsky & de Haan, 2011; Lerner et al., 2015). Because of this, pre-parenting programs such as PIAL have been developed to help both current parents and individuals who plan to have or care for children. While numerous middle and high school-based parenting programs exist, the information provided in these programs can vary greatly, and such education is not always required for all students (Butler et al., 2018; Mueller et al., 2017).

In 2020, Iowa Child Support was a recipient of the Office of Child Support Enforcement (OCSE) Responsible Parenting grant. Iowa Child Support subcontracted with ISU to provide all the programming and data analysis to complete the objectives outlined in the grant proposal. The second grant objective, Objective 2, aims to expand PIAL to serve emerging adults, who are between the ages of 18 and 25, after high school. This expansion effort is called PIAL Emerging Adult Edition.

PIAL Emerging Adult Edition focuses on empowering emerging adults to be successful throughout critical life events. This program allows emerging adults to gain knowledge and skills related to accessing important services to achieve economic mobility, develop responsible parenting practices, and be involved in healthy relationships. The program is for all emerging adults, regardless of parenting status.

Objective 2 involves several learning activities, including the PIAL College Simulation that launched in the fall semester of 2021. The College Simulation includes a simulation related to the financial, legal, and emotional responsibilities of parenthood and the realities of being a college student while parenting. Participants, who are college students, role-play as a character for the duration of the simulation. Each character has a unique background and storyline. (In Appendix A, we provide the details for each character and its associated background and storyline.) Participants move around the room, visiting different tables that provide information on resources from the college, health and human services, and other community organizations. The simulation also includes a table that has participants go to class (complete a worksheet), a





work activity (spend two minutes working on a puzzle), and a personal table (discuss relationships with peers, coworkers, and family). The simulation allows emerging adults to engage in activities that require decision-making to successfully care for a child and attend college simultaneously. The PIAL program team had two goals for the College Simulation: first, students will increase their knowledge related to resources available at their college and in the surrounding community,

and second, students will perceive that they can be a parent and attend college successfully at the same time if that situation occurs. This report presents findings from the evaluation of the College Simulation from data collected in the fall semester of 2022.

Geographic Location

PIAL program leaders previously established partnerships with two community colleges in lowa: Southwestern Community College (SWCC) in Creston and Iowa Central Community College (ICCC) in Fort Dodge. These partnerships continued from the fall 2021 semester when PIAL delivered 11 sessions between the two colleges. The current report analyzes data collected in fall 2022 from 10 sessions between the two colleges. The simulations were presented between August 17, 2022, and November 7, 2022.



Aims

The overarching purpose of the analyses in this report was to expand on the initial data and report from Year 1 data from fall 2021 and further our understanding of the College Simulation's impact on participants. Specifically, we examined data that indicated the (1) baseline knowledge of participants, (2) behavior/attitude trends of respondents prior to participating in the College Simulation, (3) knowledge gain and behavior/attitude changes after participating in the College Simulation, (4) demographic influences on knowledge or behavior/attitudes relating to the program, (5) themes in response to open-ended questions,



(6) differences between the online and in-person debriefs after the simulation, and (7) response differences over time.

Hypothesis

We hypothesize that emerging adults who participate in the College Simulation will increase their knowledge of available resources for student parents and better understand the realities of being a parent while in college.

Procedure

PIAL originally contacted SWCC and ICCC in the spring semester of 2021 due to the geographic proximity of these colleges to other PIAL partnerships and connections to college staff. Both community colleges agreed to participate in the College Simulation and PIAL staff collaborated with instructors who included the program in their classes. College Simulation participants were enrolled in college experience-style classes. These orientation classes are meant to equip students with the resources and knowledge that are necessary to be successful at their community college. SWCC classes were one hour long, and ICCC classes were two hours long, but the college simulation and debrief took about 90 minutes. Delivery times differed as SWCC classes were reverting back to their pre-COVID schedules. During the pandemic, SWCC classes met weekly or twice a week for 1.5 or 2 hours to minimize contact.

During the 2022-2023 academic year, SWCC classes were structured as they were prior to the pandemic, meeting 2-3 times per week, for hour-long sessions. The same two PIAL staff members (staff members A and B) facilitated eight of the 10 facilitations. Due to health concerns of one of the facilitators (staff member A), another other PIAL staff member (staff member C) facilitated the remaining two facilitations. In other words, staff members A and B facilitated the program for eight sessions, while staff members B and C facilitated the program for two sessions. Paid staff from Iowa State and volunteers from the local communities of the colleges served as table monitors for the Health and Human Services tables at SWCC and the Human Services table at ICCC. Participants received the pre-program survey at the beginning of the simulation, but time restrictions determined whether the debrief and post-program survey were completed in person or online at a later date.

Two hundred thirty-nine (239) participants submitted a pre-program survey, and 183 participants completed a post-program survey. However, 10 surveys from the pre-program and 6 surveys from the post-program datasets did not include any information and were removed from the datasets during cleaning. In total, 159 participants responded to both the pre-program and post-program surveys. All participant surveys were completed online through Qualtrics.

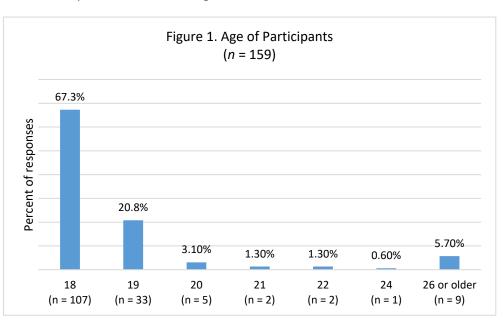
Fidelity checks were implemented to monitor the consistency between each simulation facilitation. All PIAL student facilitators, the contracted PIAL staff members, and community members who conducted the simulation were asked to complete a fidelity checklist. Fidelity items assessed how the simulation was set up, general presentation questions, specific



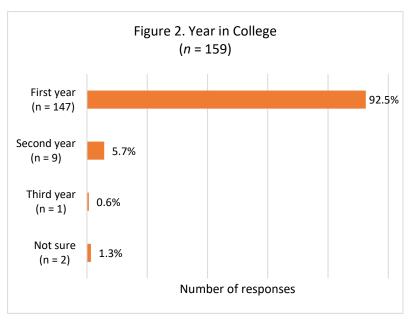
information about how the simulation was facilitated, and open-ended items to reflect on the facilitation. All fidelity checks were also completed online through Qualtrics.

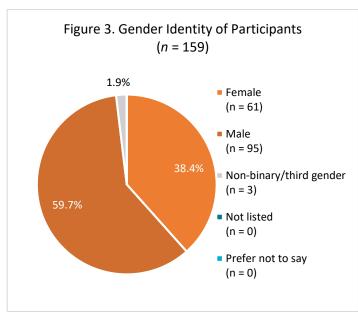
Results Demographics

On average, participants were 18.9 years old (Figure 1), and most were enrolled in their first year of college (147 out of 159, 92.5%; Figure 2). Most participants identified as male (95 out of 159, 59.7%; Figure 3), and most were White (131 out of 159, 82.4%; Figure 4). Additionally, 19 participants (11.9%; Figure 5) confirmed they were of Hispanic or Latino origin. Each participant who identified as Hispanic or

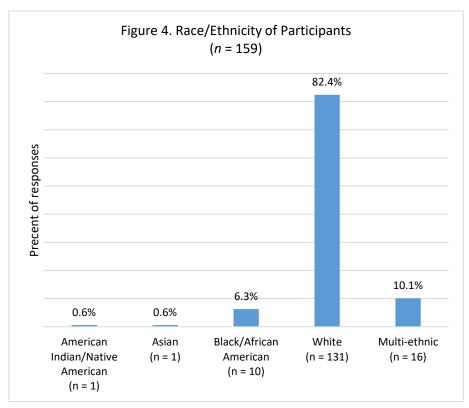


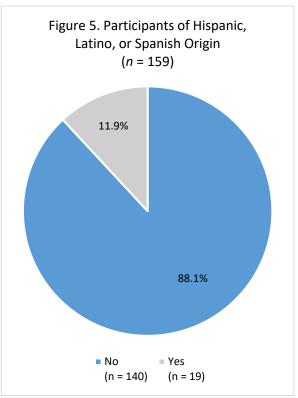
Latino also reported the race that they most identify with. Of those who identified as Hispanic or Latino, 10 also identified as White, 7 participants also identified as Multi-ethnic, and 2 participants also identified as Black/African American. Most participants reported their sexuality as straight/heterosexual (142 out of 159, 89.3%; Figure 6). Finally, 42.1% of respondents were in a romantic relationship at the time of data collection (67 out of 159; Figure 7); and 40.3% of respondents had been in a romantic relationship prior to but not when data were collected (64 out of 159; Figure 7); and 17.6% of respondents had never been in a romantic relationship at the time of data collection (28 out of 159; Figure 7). See Table 2 in Appendix B for a frequency analysis of participant demographics.

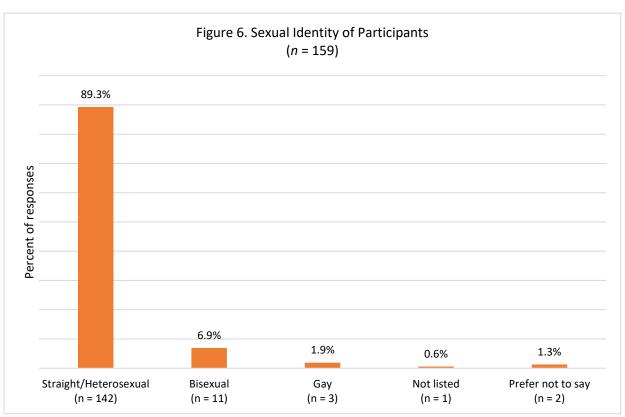




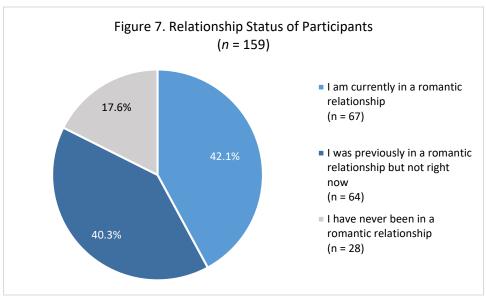








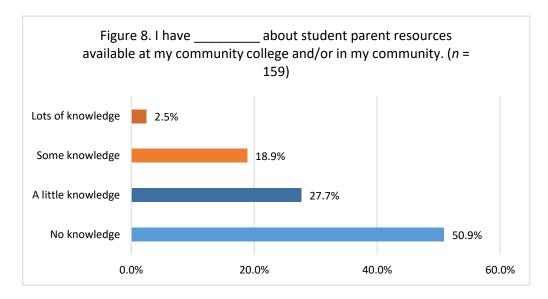




Knowledge Gain and Behavior/Attitude Differences

Knowledge

Participants' base knowledge of topics that are addressed in the College Simulation demonstrated minimal knowledge or uncertainty about knowledge. The majority of respondents had little or no knowledge about resources for student parents at their community college or community (78.6%; Figure 8).

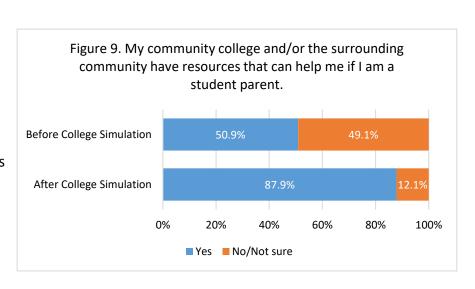


Three items were utilized to measure participant knowledge of resources. Chi-square analyses were used to examine the change in responses from the pre-program survey to the post-program survey. The first item asks about participant knowledge of the availability of resources (Figure 9). The second item asks about participant knowledge of the accessibility of resources (Figure 10). The third item asks about participant knowledge of specific contacts to utilize available resources (Figure 11). Participants could respond to each item with either "yes," "no,"



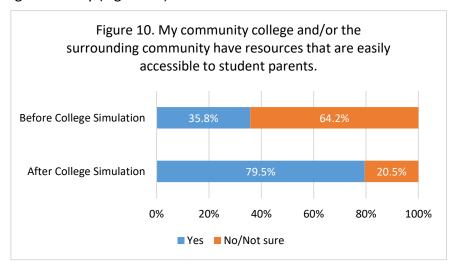
or "not sure." For the current analyses, "no" and "not sure" were combined into one category, as they are functionally equivalent responses.

Based on responses to the preprogram and post-program surveys, the results suggest that the College Simulation program provides participants with knowledge and confidence to access and use available resources to be successful parents and students simultaneously. Specifically, participants who reported that they had knowledge about the availability of resources increased significantly ($\chi^2(1) = 6.777$, $\rho <$



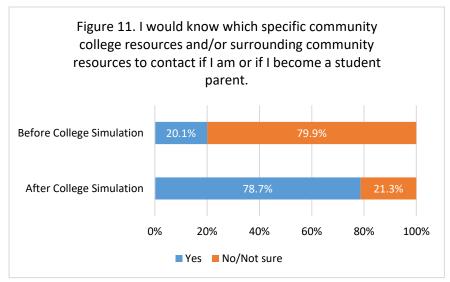
.01) from 50.9% at the pre-program survey to 87.9% at the post-program survey (Figure 9).

Participants who reported that they had knowledge about the accessibility of resources also increased significantly ($\chi^2(1) = 6.777$, $\rho < .01$) from 35.8% at the pre-program survey to 79.5% at the post-program survey (Figure 10).

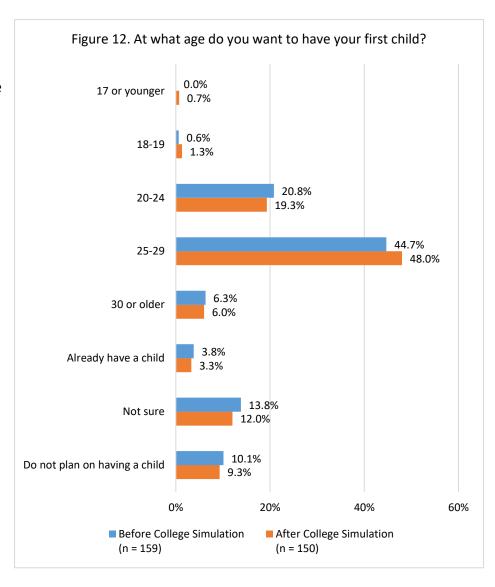


Lastly, participants who reported that they had knowledge about specific contacts they could use to access available resources also increased significantly ($\chi^2(1) = 5.144$, $\rho < .05$) from 20.1% at the pre-program survey to 78.7% at the post-program survey (Figure 11). The results from these analyses demonstrate that the College Simulation program does provide knowledge and information about resources to support student parents, which is an essential part of the program overall.





Behavior/Attitude Change Based on the responses to the items that measured behavior/attitude change from the pre-program survey to the postprogram survey, the results suggest that the College Simulation program encourages participants to reconsider their behaviors and attitudes. Specifically, there was a significant change in responses from the preprogram survey to the postprogram survey when participants reported when they wanted to have their first child ($\chi^2(42)$ = 697.792, ρ < .01; Figure 12). Although the majority of participants reported wanting to have their first child between ages 25 and 29 both before and after the program, the post-program survey results indicated that there was a higher rate of respondents who wanted to have their first child between the ages of 25 and 29 after participating in the College Simulation program.

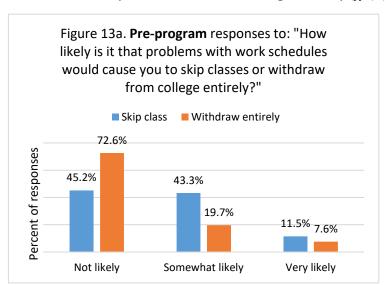


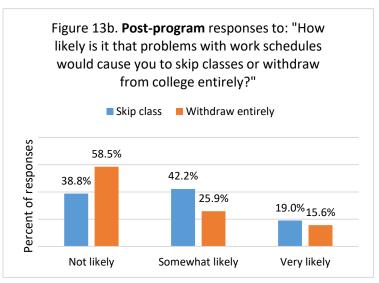


Differences Between Skipping Classes and Withdrawing from College
After determining how participants responded to survey items about skipping classes or withdrawing from college, results of further analyses indicated that each item demonstrated a significant difference in how participants would choose to react to conflicting work schedules, caring for dependents, childcare problems, and having a child after participating in the College Simulation program.

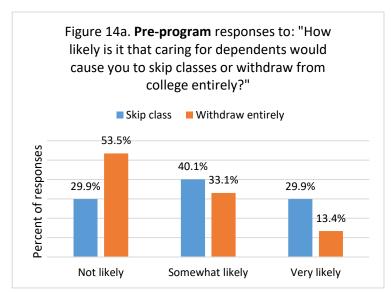
Before participating in the program, survey responses indicated that participants were somewhat or very likely to skip classes than withdraw from college entirely for problems with work schedules ($\chi^2(4) = 17.181$, $\rho < .01$; Figure 13a) and caring for dependents ($\chi^2(4) = 5.629$, $\rho < .01$; Figure 14a). However, participants indicated that they were somewhat likely to skip class and withdraw from college entirely at the same rate for childcare problems ($\chi^2(4) = 79.111$, $\rho < .01$; Figure 15a). When asked about skipping classes or withdrawing from college entirely if they have a child or have another child, participants reported that they were very likely to skip classes but somewhat likely to withdraw from college entirely ($\chi^2(4) = 81.755$, $\rho < .01$; Figure 16a).

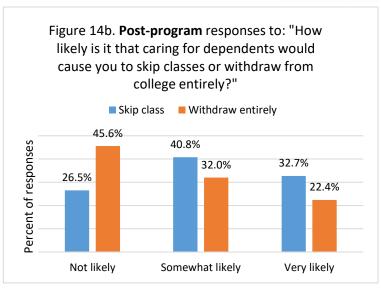
After participating in the program, survey responses indicated that participants were somewhat or very likely to skip classes than withdraw from college entirely for problems with work schedules ($\chi^2(4) = 116.743$, $\rho < .01$; Figure 13b), caring for dependents ($\chi^2(4) = 69.269$, $\rho < .01$; Figure 14b), and childcare problems ($\chi^2(4) = 70.466$, $\rho < .01$; Figure 15b). However, when asked about skipping classes or withdrawing from college entirely if they have a child or have another child, participants reported that they were very likely to skip classes but somewhat likely to withdraw from college entirely ($\chi^2(4) = 57.161$, $\rho < .01$; Figure 16b).

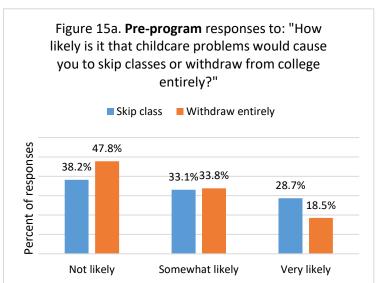


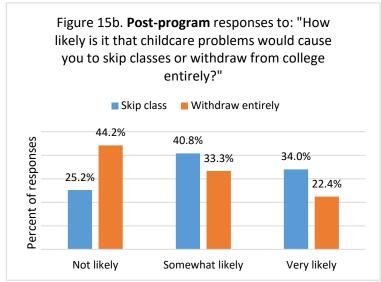


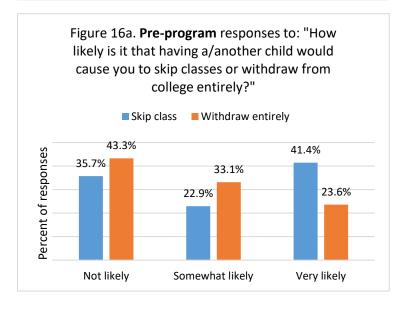


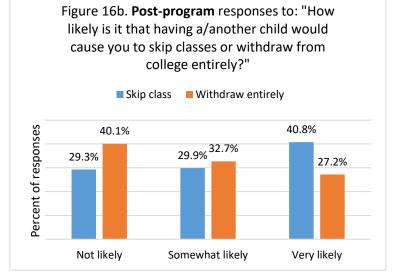












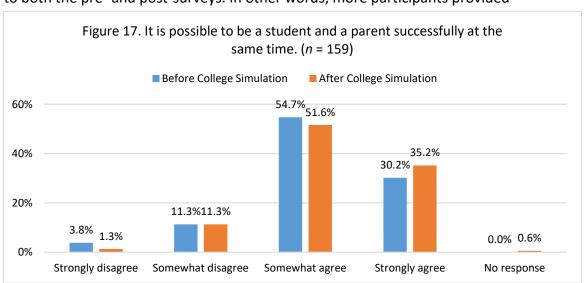


A goal of the College Simulation program is to inform participants that it is possible to be a successful student and parent simultaneously, so we believed that post-program results would demonstrate that participants have a higher response rate of "not likely" to the previous items, regardless of behavior. In general, the post-program results are reflective of the pre-program results. However, participants had higher rates of responding that they were "not likely," regardless of the scenario, to skip class or withdraw from college entirely before completing the College Sim program. Whereas after completing the program, participants had higher response rates that they were "very likely" to withdraw from college entirely for all four scenarios. This demonstrates that participants may have been overwhelmed by the responsibilities they had as student-parents in the simulation and could have been inadvertently discouraged by the tasks they needed to complete during the program.

Student/Parent Success

To determine if respondents thought it was possible to be a successful student and parent, participants were prompted to respond to the following item: "It is possible to be a student and a parent successfully at the same time." Participants could pick from a range of responses, from "strongly disagree" to "strongly agree." Results demonstrated that there was a significant change in responses after participating in the College Simulation program ($\chi^2(9) = 103.275, \rho < 100$.01). Although the rate of responses after participating in the program did not change for "somewhat disagree," there was a decrease in responses for "strongly disagree" and "somewhat agree." Before participating in the College Simulation program, 6 participants chose "strongly disagree", but 2 participants chose this option after participating, while 87 participants chose "somewhat agree" before completing the College Simulation and 82 chose this option after completing the program. Additionally, there was an increase in responses for "strongly agree" after participating in the program. Specifically, 48 participants chose "strongly agree" before participating and 56 chose this option after participating in the College Simulation program (Figure 17). The results for this analysis are not consistent with what we would expect if there were no associations between the pre- and post-surveys. Specifically, we expected to see fewer participants respond with "somewhat disagree", "somewhat agree", and "strongly agree" to both the pre- and post-surveys. In other words, more participants provided

the same response to the pre-survey and the post-survey than we would have anticipated.





Relationship of Demographics to Responses

Two sets of analyses were conducted to examine associations between participant demographics and their responses to survey items and overall knowledge and attitude scores. Correlations were conducted to identify if age or grade relate to how participants responded. Three significant correlations were identified for age (two significant correlations in the preprogram survey and one in the post-program survey), while two significant correlations from the pre-program were identified for year in college.

Age was significantly correlated with how participants responded to the following items: (a) "It is possible to be a student and a parent successfully at the same time," before participating in the College Simulation program [r(159) = .221, p < .01], (b) "My community college and/or the surrounding community have resources that are easily accessible to student parents," before participating in the program [r(159) = -.172, p < .05], and (c) "How likely is it that the following situations would cause you to withdraw from college entirely? Having a child/another child," after participating in the program [r(147) = -.227, p < .01].

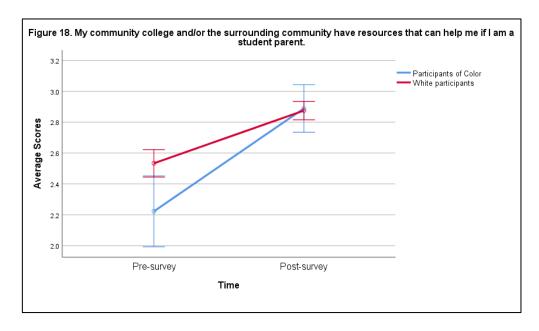
Year in college was significantly correlated with the following items in the pre-program survey: (a) "How likely is it that the following situations would cause you to skip classes? Childcare problems" [r(157) = -.168, p < .05], and (b) "For these situations, how likely is it they would cause you to withdraw from college entirely? Having a child/another child" [r(157) = -.158, p < .05]. Although each of these correlations was significant, the results demonstrate that the relationship between the survey items and age or year in college was weak. This means that there was an association between the items and demographics, but not enough to determine that age or year in college predicted responses to these survey items.

For race, participants were grouped into those who identified as White and those who identified as a person of color, although the sizes of each group were not equivalent. One hundred twenty-one (121) participants identified as White, and 19 participants did not. The 19 participants who did not identify as White identified as either American Indian/Native American, Asian, Black/African American, Pacific Islander, or Multi-ethnic (categorized for these analyses as people of color; see Flanagin et al., 2021). Participants who identified as Hispanic were not included in these analyses, as participants who identified as Hispanic also identified as White, Black/African American, or Multi-ethnic. Therefore, separate analyses were conducted to determine if ethnicity influenced how participants responded. However, ethnicity (i.e., being of Hispanic or Latino origin) did not influence how participants responded to any items. That said, there were three items that demonstrated significant differences in participant responses, dependent upon how participants identified their race.

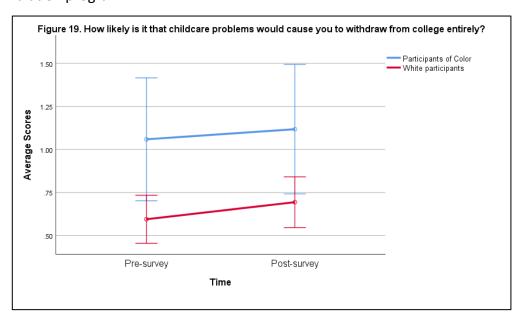
In the pre-survey, there was a significant difference in responses to "My community college and/or the surrounding community have resources that can help me if I am a student parent." Between participants who identified as White and as people of color [t(26.782) = -23.072, p < .01], but not in the post-survey [t(136) = .166, p = .868; Figure 18]. Participants could respond with "no," "not sure," or "yes" (labeled as 1, 2, and 3, respectively). The results indicate that race/ethnicity was associated with how participants responded to this item before completing



the College Simulation program, with participants of color scoring lower at pre but not at post suggesting relatively more improvement for students of color.

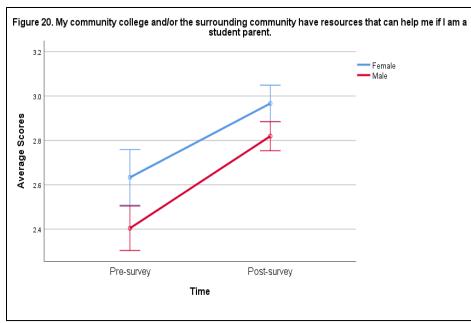


When asked, "How likely is it that childcare problems would cause you to withdraw from college entirely?", there was a significant difference in responses between White participants and participants of color in the pre-survey [t(136) = 2.391, p < .05] and in the post-survey [t(128) = 2.041, p < .05; Figure 19]. Participants could respond with "not likely," "somewhat likely," or "very likely" (labeled as 0, 1, and 2, respectively). The results indicate that race/ethnicity was associated with a participants' decision about whether childcare problems would cause them to withdraw from college entirely before and after participating in the College Simulation program.



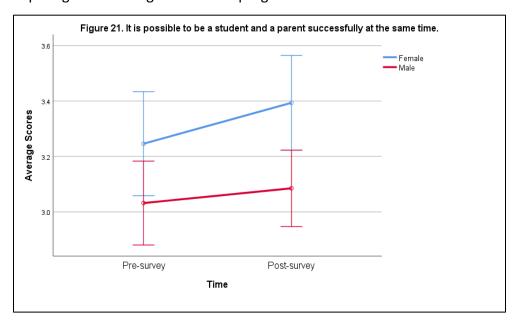


For **gender**, participants were grouped into those who identified as male and those who identified as female. In response to "My community college and/or the surrounding community have resources that can help me if I am a student parent.", there was a significant difference between male and female responses in the pre-survey [t(154) = 2.982, p < .01]and in the post-survey [t(141.486)] = 3.190, p < .01; Figure 20]. Participants could respond to this item with "no," "not sure," or "yes" (labeled as 1, 2, and 3, respectively). This indicates that



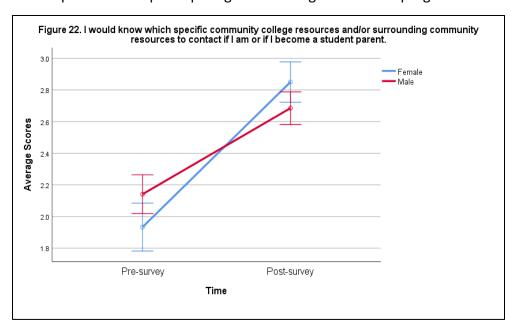
gender was associated with whether participants had knowledge of community resources that support student parents. However, it is unclear why the difference between male and female responses exists, so further analysis would be beneficial.

When asked to respond to "It is possible to be a student and a parent successfully at the same time.", there was not a significant difference in pre-survey responses [t(154) = 1.842, p = .067], but there was in post-survey responses (t(153) = 2.775, p < .01]; Figure 21). Participants could respond to this item with "strongly disagree," "somewhat disagree," "somewhat agree," or "strongly agree" (labeled as 1, 2, 3, and 4, respectively). This indicates that gender influenced whether participants believed that it is possible to be a student parent successfully at the same time after participating in the College Simulation program.





When asked to respond to "I would know which specific community college resources and/or surrounding community resources to contact if I am or if I become a student parent.", there was not a significant difference in pre-survey responses [t(98.134) = -1.955, p = .053], but there was in post-survey responses [t(141.123) = 2.069, p < .05; Figure 22]. Participants could respond to this item with "no," "not sure," or "yes" (labeled as 1, 2, and 3, respectively). This indicates that gender was associated with whether participants were knowledgeable of specific resources for student parents after participating in the College Simulation program.



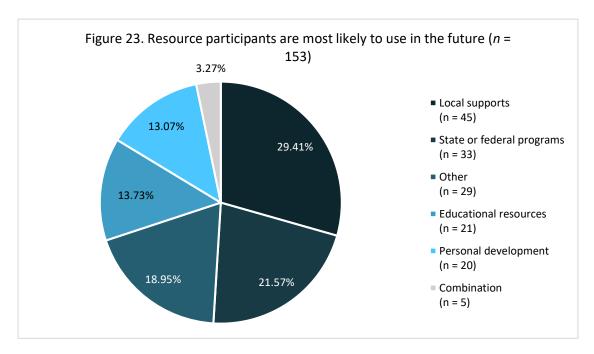
Emergent Themes from Open-Ended Questions

After participating in the College Simulation program, the 159 participants who completed the post-program survey were prompted to answer three open-ended questions. Specifically, participants were asked (a) "Which resource did you learn about during the College Simulation that you are most likely to use in the future?", (b) "What was your favorite part about the College Simulation?", and (c) "What is one thing we can improve about the College Simulation?". There were other opportunities for participants to provide written feedback about their decisions behind responses to quantitative questions, with one opportunity resulting in a 60.38% response rate. The prompt for this item was: "You answered very or somewhat likely that one or more of the situations would cause you to withdraw from college entirely. Please explain why."

One hundred fifty-three (153) participants responded to the first open-ended question in the post-program survey, which asked: "Which resource did you learn about during the College Simulation that you are most likely to use in the future?" (96.23% response rate). Responses to this item were categorized by two coders into six themes including but not limited to: local supports, educational resources, and personal development. Based on the content-related responses, the coders came to a substantial agreement for this item based on Cohen's kappa standards with an inter-rater reliability (IRR) where k = .769, p < .001. 100% of the responses



were coded by both coders. Any coding discrepancies were resolved during a discussion between both coders, who rationalized their respective coding processes and came to an agreement to comprehensively understand and analyze the data. The coding that was agreed upon was used to generate the findings in Figure 23. However, the IRR for this item was based on the first round of coding. See Figure 23 for the distribution of emergent themes and Table 3 in Appendix C for a description of the themes.

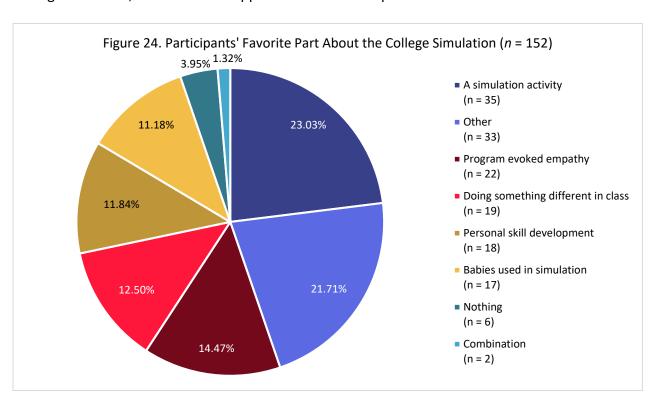


Themes	Examples
	"Mental health services"
Local supports	 "Childcare assistance"
	 "Youth Counseling Services"
State or federal	• "WIC"
	"Human Resources"
programs	• "Vpa"
	• "None"
Other	• "I don't know"
	 "I don't want to ever have children"
	"Academic Advising"
Educational resources	"Campus advisors"
	• "TRIO"
Parsonal dayalanment	"Use time management"
Personal development	"Personal table with advice"



•	"How to prioritize and balance things out, it was a lot easier		
to get everything done knowing when I was going to [be]			
	done with work or be done with classes."		
•	"TRIO and childcare"		
•	"Wic and [childcare] assistance"		
•	"I'm not sure, the table with WIC and DHS was the most helpful for outside of this classroom."		
	•		

One hundred fifty-two (152) participants responded to the second open-ended question in the post-program survey, which asked: "What was your favorite part about the College Simulation?" (95.60% response rate). Responses to this item were categorized into eight themes including but not limited to: an activity, program evoked empathy, personal skill development, and the child(ren). Based on the content-related responses, the coders came to a substantial agreement for this item based on Cohen's kappa standards with IRR where k = .665, p < .001. 100% of the responses were coded by both coders. Any coding discrepancies were resolved during a discussion between both coders, who rationalized their respective coding processes and came to an agreement to comprehensively understand and analyze the data. The coding that was agreed upon was used to generate the findings in Figure 24. However, the IRR for this item was based on the first round of coding. See Figure 24 for the distribution of emergent themes, and Table 4 in Appendix C for a description of the themes.

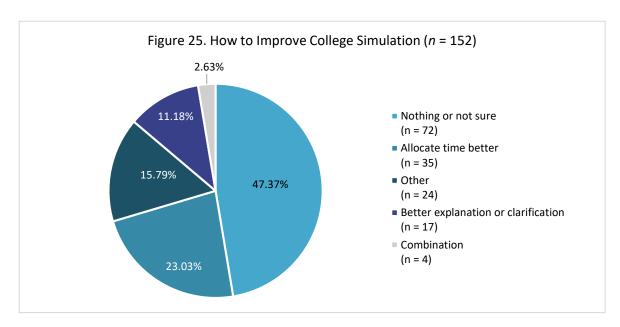




Themes	Examples
A simulation activity	"Going to work on the puzzle"
	 "Taking care of the baby"
	"doing the tasks"
	"Everything"
Other	 "Having to explain why you are at the resource you were at."
	"meeting new people"
	"Being able to experience what some people have to go
Program evoked	through"
empathy	 "Getting an understanding of what it actually might be like to
empatry	have a child right now in my life."
	 "Seeing what it's like to be a parent and be in college"
	 "It was a fun way to get out of the classroom and learn hands
Doing comothing	on"
Doing something different in class	 "Being able to get up and walk around"
different in class	 "Not having to go to a real class and getting to do something
	else"
Personal skill	"Balancing everything"
development	 "Learning how important time management is."
development	 "Trying to figure everything out and prioritize."
Babies used in	"carrying around a baby doll"
	"The babies"
simulation	 "My baby was cute healthy and happy"
Nothing	• "None"
Nothing	• "Nothing"
Combination	 "running around and trying to figure stuff out"

One hundred fifty-two (152) participants responded to the third open-ended question in the post-program survey, which asked: "What is one thing we can improve about the College Simulation?" (95.60% response rate). Responses to this item were categorized into five themes including but not limited to: nothing or not sure, allocate time better, and better explanation or clarification. Based on the content-related responses, the coders came to a substantial agreement for this item based on Cohen's kappa standards with IRR where k = .815, p < .001. 100% of the responses were coded by both coders. Any coding discrepancies were resolved during a discussion between both coders, who rationalized their respective coding processes and came to an agreement to comprehensively understand and analyze the data. The coding that was agreed upon was used to generate the findings in Figure 25. However, the IRR for this item was based on the first round of coding. See Figure 25 for the distribution of emergent themes and Table 5 in Appendix C for a description of the themes.



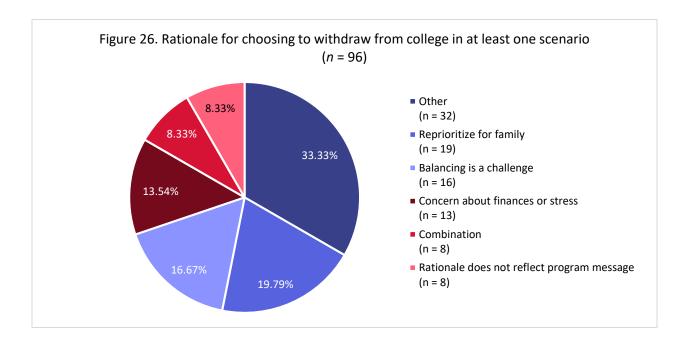


Themes	Examples	
	"I can't think of anything, I thought it was smooth sailing"	
Nothing or not sure	"keep it the same"	
	 "Nothing, it helps demonstrate real life scenarios." 	
	 "Allowing time in between each semester to discuss how to 	
Allocate time better	be more successful."	
Anocate time better	 "The wait times at certain stations" 	
	 "A little more time so not so rushed" 	
	"A bigger location"	
Other	"add sports"	
Other	 "One thing you can do is gear it more towards the student 	
	and less like a middle school class"	
	 "Clarifying what [the] goal is of the simulation and specify 	
	that we have to do everything on the life card each	
	semester"	
	 "A little more explanation in the beginning of what we are 	
Better explanation or	[supposed] to do. I didn't understand it at all until the	
clarification	"Second Semester" of the year one."	
	 "The childcare chance cards didn't really make sense and 	
	what are we supposed to do when the parent takes care of	
	the child but we can't leave them at the desk or take them to work/class?"	



Combination	 "A little more time and explain the beginning better."
	 "Bigger area, more people at each station because a lot of
	people had very very long lines"
	 "try to make it a bit more difficult, less time"

Ninety-six (96) participants responded to the follow-up prompt, "You answered very or somewhat likely that one or more of the situations would cause you to withdraw from college entirely. Please explain why.", in the post-program survey (60.38% response rate). Responses to this item were categorized into six themes including but not limited to: balancing is a challenge, concern about finances or stress, and reprioritize for family. Based on the content-related responses, the coders came to a moderate agreement for this item based on Cohen's kappa standards with IRR where k = .552, p < .001. 100% of the responses were coded by both coders. Any coding discrepancies were resolved during a discussion between both coders, who rationalized their respective coding processes and came to an agreement to comprehensively understand and analyze the data. However, the IRR for this item was based on the first round of coding. The coding that was agreed upon was used to generate the findings in Figure 26. See Figure 26 for the distribution of emergent themes and Table 6 in Appendix C for a description of the themes.



Themes	Examples
	"I would stick to it"
Other	"No explanation"
	 "Cause maybe [I] figured it out"
Reprioritize for family	"if you need to take care of family that comes first"

22



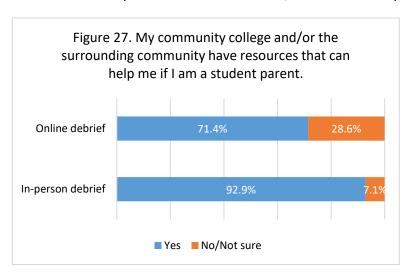
	 "If I had a kid in college I would prioritize work more to support the kid and go back to college later" "The answers would be higher on my priority list. If I had a child, I need to devote my time to them and provide for
	them as best as I can."
	"I feel like I couldn't balance school and a child."
Balancing is a challenge	 "those things would add a lot more to my work load and it might be too much"
	 "Because it would just get too hard"
	 "Because I may not have enough money for child care services and may need to work more" "Being a parent while going to college would be hard.
Concern about finances or stress	Especially since you need to be able to provide for your child. Getting a job that can pay the bills would [sound] like the best bet to me."
	 "may be too stressful for the individual to handle"
Combination	 "Different things need to happen, my child is more important than class." "not being mental stable enough to do it. or not having time"
Rationale does not	"because it's the real world"
reflect program message	 "i couldn't be a parent and go to college"

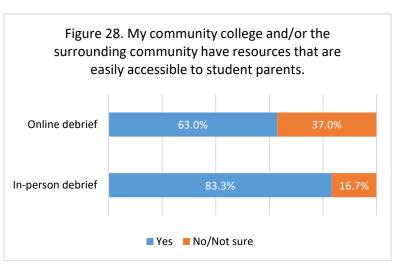
<u>Impact of Debrief Facilitation on Responses</u>

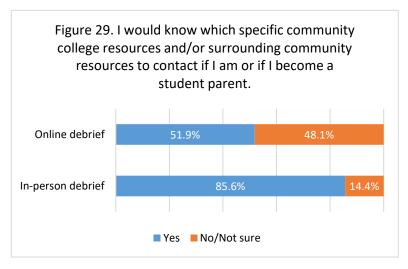
The College Simulation program includes a debrief of the simulation for participants, either inperson with the simulation facilitators at the end of the program or online at a later time. The online debrief included the same information that was provided in the in-person debrief. To determine if the debrief style influenced participant responses, chi-square tests, and Mann-Whitney U tests were conducted. Chi-square tests were used for those survey items that were dichotomized, while Mann-Whitney U tests were used as the nonparametric equivalent to the independent sample *t*-tests, as some survey items and collected data were not assumed to come from a normal distribution. Once more data is collected, if the program continues to utilize those items in surveys, an independent sample *t*-test may be more appropriate to use if the data can be assumed to meet the requirements of a normal distribution.



All three items that measured knowledge that were analyzed with the chi-square test demonstrated statistical significance: (a) "My community college and/or the surrounding community have resources that can help me if I am a student parent." ($\chi^2(1) = 10.712$, $\rho < .01$; Figure 27), (b) "My community college and/or the surrounding community have resources that are easily accessible to student parents ($\chi^2(1) = 5.711$, $\rho < .05$; Figure 28), and (c) "I would know which specific community college resources and/or surrounding community resources to contact if I am or if I become a student parent." ($\chi^2(1) = 15.577$, $\rho < .001$; Figure 29). Response options for these items included "no/not sure" (0) and "yes" (1). These results indicate that participants who completed the debrief in person demonstrated more knowledge of resources that support student parents, resources that are easily accessible to student parents, and resources to contact if they are or become a student parent compared to the participants that completed the debrief online, without PIAL supervision.



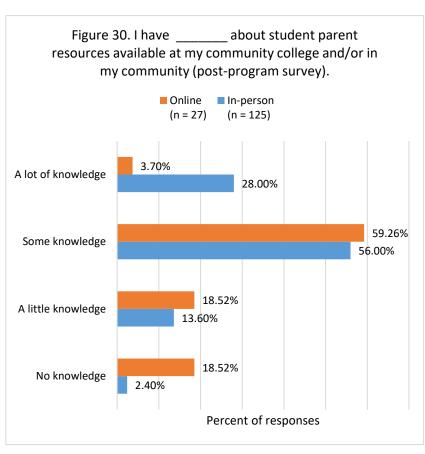




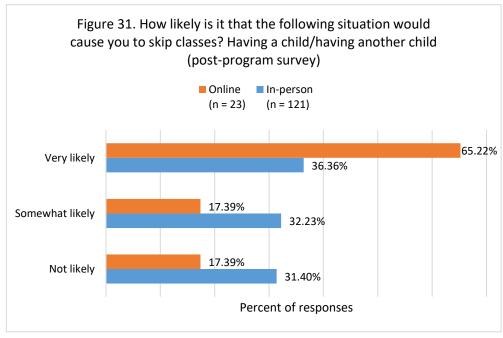


For the Mann Whitney U tests, two out of the 15 items analyzed demonstrated statistical significance: (a) "I have _____ about student parent resources available at my community college and/or in my community." (U = 1052.500, p < .01; see Figure 30), and (b) "How likely is it that the following situation would cause you to skip classes? Having a child/having another

child" (U = 992.00, p < .05; see Figure 31). Response options for item (a) included "no knowledge" (1), "a little knowledge" (2), "some knowledge" (3), and "a lot of knowledge" (4); response options for item (b) included "not likely" (0), "somewhat likely" (1), and "very likely" (2). These results indicate that there was a significant difference in how participants who completed the debrief in person and how participants who completed the debrief online responded to these items. Specifically, participants who completed the debrief in person with PIAL staff members were more likely to report having a lot of knowledge, while participants who completed the debrief online without PIAL staff members were more likely to report having no knowledge of student parent resources that are available at their community college after completing the College Sim program.



Additionally, when asked about skipping classes to have a child/another child, participants who completed the debrief in person with PIAL staff members had a higher rate of responding that they were somewhat or not likely to skip classes. Simultaneously, the online debrief participants were almost twice as likely to report that they were very likely to skip classes if they had a child/another child than their in-person counterparts.





Summary and Future Directions

After participating in the College Simulation program, participants demonstrated a significant change in knowledge and behaviors/attitudes about the resources available to them and decisions they might make if they were to be students and parents simultaneously. Each item measuring knowledge and behaviors/attitudes resulted in a significant difference, meaning participant responses changed significantly from the pre-program survey to the post-program survey.

Additionally, some demographics influenced how participants responded to certain items. Age was significantly correlated with three survey items, and year in college was significantly correlated with two survey items. This means that there were associations between age and the items that demonstrated significant correlations, as well as associations between year in college and the items that demonstrated significant correlations. However, we are currently limited in our understanding of those associations.

Results indicated that race/ethnicity was associated with two items measuring knowledge and behavior. This demonstrates that White students and students of color respond differently to limited items. While White students' responses were more likely to be stable, students of color generally reported higher agreement that parenting challenges would cause them to withdraw from college entirely. Our findings may be explained by the fact that students of color are more likely to have greater academic risk than their White counterparts, as students of color tend to be less academically prepared, more in need of financial assistance, and are more likely to need to balance full-time employment and family responsibilities with their education (Greene et al., 2008). Similarly, results indicated that there was a mean difference in how self-identified male and female participants responded to one knowledge item about college or community resources for student-parent support from the pre-program survey and to one belief item about the possibility of successfully being a parent and student simultaneously from the post-program survey.

For the qualitative survey items, emergent themes were analyzed to understand how participants responded to the program and rationalized their responses. Four qualitative items were analyzed for this report. Six themes emerged from participant responses about what resources they are most likely to use, including (in order of response frequency): local supports, state or federal programs, other, educational resources, personal development, and combination. Seven themes emerged about participants' favorite part of the program, including a simulation activity, other, program evoked empathy, doing something different in class, personal skill development, babies used in simulation, nothing, and combination. Lastly, five themes emerged from participant suggestions for improvements to the program, including nothing/not sure, allocate time better, other, better explanation or clarification, and combination. These qualitative survey items allowed participants the opportunity to provide feedback about the program, itself. Only one qualitative item prompted participants to state why they might withdraw from college, where six themes emerged from participant responses. This item was prompted if participants identified that problems with work schedules, caring for dependents, childcare problems, or having a child/another child would cause them to withdraw



from college entirely ("You answered very or somewhat likely that one or more of the situations would cause you to withdraw from college entirely. Please explain why.").

Analyses based on how the debrief component was implemented indicated that the in-person debrief is a better option for participants. This means that participants who completed the debrief in person responded to attitude and belief items that represent the message of the College Simulation, which is that it is possible to be a student and a parent at the same time, successfully. However, there was a large difference in the number of participants who received the debrief in person compared to the number of participants who received the debrief virtually. Specifically, 30 participants completed the debrief online, while 126 participants completed the debrief in person. Therefore, it is suggested that the program either has a more equal sampling of participants who receive the debrief in person and virtually to have more accurate analyses and results, or solely utilize in-person debriefs.

Study Implications and Changes to Be Implemented

Students who participated in the simulation during the Fall 2022 semester demonstrated a good baseline understanding of the concepts that are introduced in the College Simulation program, meaning that they were fairly knowledgeable that there are resources available at their community colleges or in their communities before participating. This may be because they knew someone who participated in the program previously, or because the ideas introduced during the 2021 program delivery have started to be more integrated within the community colleges that have agreed to be a part of this program. Additionally, there seems to be a change in participant knowledge, attitudes, and behaviors about the feasibility of parenting as a student, as well as the available resources to current and future student-parents compared with the 2021 program results (see the Year 1 report). This means that in 2022 the participants reported that their knowledge about being a student-parent increased and their attitudes/behaviors were more optimistic about being a student-parent if they were ever to become a student-parent than in 2021. However, based on the 2022 results, there are modifications that will be implemented to the program and survey in future iterations of the College Simulation.

Modifications that were made to the program delivered during the Fall 2022 semester focus on adjustments that address the student/participant experience, facilitator/volunteer experience, and materials. Revisions that addressed the student/participant experience mostly included shorter descriptions on the Chance cards, documents with resources, and the post-program debrief and surveys. Adjustments that addressed the facilitator/volunteer experience included more supports to guide facilitators and volunteers and ensure the necessary information was discussed. Material adjustments addressed minor challenges with the set-up of the facilitations. See Table 7 in Appendix D for a summary of the changes made during the Fall 2022 semester.

Alterations that will be implemented in the Fall 2023 semester focus mainly on the student/participant experience. Changes to the student/participant experience will provide information to strengthen the online debrief, correct a survey error, and add activities during



the simulation. See Table 8 in Appendix D for a summary of the changes that will be made for the Fall 2023 semester.

Additionally, although the results indicate changes in participant knowledge and behavior, we cannot assume that the College Simulation program is the cause of the changes, as this program does not include a control group. This means the participants of the College Sim program may experience external factors that influence their knowledge or behaviors that are not included in the current program. Therefore, in the future, it is suggested that a group of participants who do not participate in the College Sim program should also complete the preand post-surveys to appropriately identify if participants' change in responses is the result of the program itself.



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Appendix A

Table 1. Character Information

	Alona
Major	Professional Music
Parenting status	Alona is mom to 11-month-old Jonas.
Employment status	Alona is interested in finding a tutoring job on campus.
Relationship status	Alona is not romantically involved with Jonas' father, Zach, but they share custody evenly.
Childcare	Jonas attends daycare on the days Alona has him.
Family	Alona's parents live nearby and are involved and willing to help.
	Rudi
Major	Crop Production
Parenting status	Rudi is four months pregnant with baby Ava.
Employment status	Rudi's family has a farming operation, so Rudi is employed at the family farm.
Relationship status	Ava's father, Elijah, is still working toward his degree at Kansas State University. Elijah wants to be involved in raising Ava, but there is no romantic involvement between him and Rudi.
Childcare	Rudi's parents agree to watch Ava when Rudi is in class in exchange for working on the farm.
Family	Rudi and Elijah coparent long-distance. Rudi's parents are happy to help out with raising Ava.
	Natalia
Major	Criminal Justice
Parenting status	Natalia is the mother of two 2-year-old twins, Grace and Isabella.
Employment status	Natalia works at the dining center.
Relationship status	Natalia is not romantically involved with her daughters' father.
Childcare	Natalia's parents watch Grace and Isabella while she is at class and work.
Family	Natalia's parents are involved and willing to help.
	Malik
Major	Graphic Design



Parenting status	Malik is the father and primary caregiver of 6-month-old Imani. You need to establish paternity, but need to coordinate the logistics with Imani's mom.
Employment status	Malik works part-time at UPS in the evenings.
Relationship status	Malik and Imani's mother are not in a romantic relationship. Imani's mom moved to Colorado.
Childcare	Imani attends daycare, and Malik and his mother coordinate who picks up Imani each day. You have not established paternity for Imani, but have kinship custody of her.
Family	Malik's mother is happy to help out with Imani. Imani's mother is not directly involved in her life.
	Kristen
Major	Nursing (RN) program
Parenting status	Miles, Kristen's son, is now in grade school. Kristen became pregnant with Miles when she was a senior in high school.
Employment status	Kristen is employed as a Certified Nursing Assistant (CNA) at the local assisted living center. Kristen has worked there for 6 years.
Relationship status	Kristen and her current partner, Alex, are in a committed romantic relationship and parent Miles together. Kristen and Miles' dad signed a paternity affidavit when Miles was born and are no longer together. Miles' dad does not pay child support.
Childcare	Miles is attending grade school now, so he does not need childcare during the day. However, if Kristen has commitments that interfere with Mile's schedule, Kristen may need to find childcare for Miles.
Family	Kristen's relationship with her parents can be complicated. However, Kristen's brother, Ross, and Miles have a great relationship. Ross always tells Kristen to reach out if she needs help with anything.
	Lucas
Major	Biology
Parenting status	Lucas' baby is due during your first semester of college.
Employment status	Lucas works 20 hours per week as a cook at the local diner.
Relationship status Childcare	Lucas' baby's mother is Sarah. Lucas and Sarah are not romantically involved, but plan to coparent together. Lucas and Sarah have opposite schedules, so they trade off childcare
Cilliucare	responsibilities. When needed, Lucas' parents are able to help out and they live 30 minutes away.



Family

Lucas' parents are happy to help out with the baby when Lucas and Sarah are at school and work, if needed.



Appendix B

Table 2. Demographic Characteristics of Participants

	Variables	Frequency	Percentage
		(n)	(%)
	17 or younger	0	0.0
	18	107	67.3
	19	33	20.8
	20	5	3.1
Age	21	2	1.3
(n = 159)	22	2	1.3
,	23	0	0.0
	24	1	0.6
	25	0	0.0
	26 or older	9	5.7
	First year	147	92.5
Year in	Second year	9	5.7
college	Third year	1	0.6
(n = 159)	Fourth year	0	0.0
	Not sure	2	1.3
	Female	61	38.4
0 1	Male	95	59.7
Gender	Non-binary/third gender	3	1.9
(<i>n</i> = 159)	Not listed	0	0.0
	Prefer not to say	0	0.0
	Bisexual	11	6.9
	Gay	2	1.3
Sexuality	Lesbian	1	0.6
(n = 159)	Straight/Heterosexual	142	89.3
	Not listed	1	0.6
	Prefer not to say	2	1.3
Dalasta celeta	I am currently in a romantic relationship.	67	42.1
Relationship	I was previously in a romantic relationship	64	40.3
status	but not right now.		
(n = 159)	I have never been in a romantic relationship.	28	17.6
Dana /Fills date	American Indian/Native American	1	0.6
Race/Ethnicity	Asian	1	0.6
(n = 159)	Black/African American	10	6.3



	Pacific Islander White Multi-ethnic	0 131 16	0.0 82.4 10.1	
Hispanic	Yes	19	11.9	
(n = 159)	No	140	88.1	



Appendix C

Table 3. Description of Themes for Resources Participants Are Most Likely to Use

Theme	Description
Local supports	Response included supports like child care, health access, and community services that could be accessed locally
State or federal programs	Response indicated that the participant learned about and would most likely use state or federal programs such as human resources/services, federal organizations, or federal welfare programs
Other	Response indicated that the participant learned about Iowa statewide programs, general information/wants, or provided other feedback that did not address a clear resource
Educational resources	Response identified financial and educational resources that would support their ability to attend/be involved in higher education
Personal development	Response implied that the participant would most likely use personal skills such as prioritization and time management
Combination	Response was fitting for multiple themes



Table 4. Description of Themes for Participants' Favorite Part of Program

Theme	Description
An activity	Response indicated that a specific activity was the participant's favorite part of the simulation
Other	Response ranged from the speed of the simulation to the program facilitators or the whole experience, and did not fit in the remaining themes
Program evoked empathy	Response indicated that the participant enjoyed either role playing or other aspects of the simulation that allowed them to experience/have a better understanding of what someone else would experience
Doing something different in class	Response demonstrated that the participant's favorite part of the simulation included either learning new things, being active in (moving around the) class, or doing something out of the ordinary during class time
Personal skill development	Participant response implied that they enjoyed the opportunity to work on personal skills that would support their growth
The child(ren)	Response explicitly mentioned that the participant's favorite part of the simulation was having a child or baby to take with them to the various stations
Nothing	Response stated that the participant did not have a favorite part of the simulation
Combination	Response was fitting for multiple themes



Table 5. Description of Themes for Improvements to the Program

Theme	Description
Nothing or not sure	Response indicated that the participant was pleased with the College Simulation, or they were unsure how to improve the program
Allocate time better	Response requested more time to complete simulation activities or better efficiency regarding wait times
Other	Participant provided a response that either did not fit in the remaining themes, or did not provide a clear response to address the survey item
Better explanation or clarification	Response identified a scenario that could have been less challenging with more thorough explanations, or explicitly mentioned needing better instructions
Combination	Response was fitting for multiple themes



Table 6. Description of Themes to Clarify Why Participants Would Withdraw from College

Theme	Description
Other	Participant did not identify a clear response that was relevant to the question being asked
Reprioritize for family	Response identified that participant actions would reflect a change in priority or specifically identified that a child would be the main concern
Balancing is a challenge	Response implied that the respondent believed that balancing various responsibilities would be difficult for them
Concern about finances or stress	Respondent reported a concern/worry either about their abilities to provide financially for their family while attending schools or their stress levels
Combination	Response was fitting for multiple themes
Rationale does not reflect program message	Response included rationale that did not reflect the intended message of the College Simulation



Appendix D

Table 7. Changes to the Program Made During the Fall 2022 Semester

Current/Implemented Practice FY23	Category of Change	Summary of Change	Explanation of Change
Handout information missing	Materials	The character Lucas needed an action item for a chance card about seeking to be mentor.	Handout about mentoring was created. Participant will get a handout with tips for being a good mentor.
Band-Aids for babies	Materials	In FY22, Band-Aids were used on babies at the health table for one of the chance cards. Changing to using stickers.	Band-Aids were difficult to remove from fabric.
Instructional video	Facilitator/volunteer experience	At the simulation locations, either the audio or visual for the video was not working. Each group was given verbal instructions by the facilitator.	With timing and audio issues, the most realistic option was to provide verbal directions.
Floaters would self- identify where their help was needed	Facilitator/volunteer experience	Floaters often had to facilitate due to lack of availability of PIAL staff.	Individuals knew they may have to be a table guide when needed.
Mental health handouts	Materials	Added a general mental health handout for all mental health related chance cards.	Previously, there was not information on mental health. Handouts shared information about when to seek help for mental health.
Fort Dodge resource takeaways	Student experience	Students received a handout from the	A volunteer brought these handouts, which



		Fort Dodge Child Support Office that had a list of all the local resources.	were county specific. Both ICCC groups received these packets.
Surveys on 10/3	Student/participant experience	Original facilitator was not present, so a graduate student administered the simulation.	Students accidentally completed the inperson debrief and post-program survey instead of the intended online debrief and post-program survey. Professors of participants were contacted to encourage their students to not complete the survey at the end of the online debrief to avoid repeated responses.
Surveys for third session on 10/4	Student/participant experience	The last session was supposed to take the online debrief, but it was a very small group so everything was completed in a timely manner, and the in-person debrief and post-survey were completed.	Students experienced the entire debrief and survey as if it were a 1.5 hour simulation instead of a 1 hour simulation.
Malik envelope	Materials	Malik received an envelope to fulfill a chance card.	This change gave a physical material to Malik to present when mailing the paternity affidavit form.
Child support volunteers	Facilitator/volunteer experience	Volunteers from local child support	Ensured factual information was being



		agencies were table	discussed and allowed
		guides.	for questions to be
			answered.
			Relationships were
			also formed between
			participants and
			volunteers.
			Ensured factual
			information was being
			discussed and allowed
Mental health volunteers	Facilitator/volunteer	Volunteers from local	for questions to be
	•	mental health clinics	answered.
	experience	were table guides.	Relationships were
			also formed between
			participants and
			volunteers.



Table 8. Changes to the Program that Will Be Made for the Fall 2023 Semester

Current/Implemented Practice FY23	Category of Change	Summary of Change	Explanation of Change
Resource handouts for online debrief	Student/participant experience	Those who received the online debrief were given a resource guide to distribute to students instead of a physical copy.	The resource guide was to be distributed at the end of the debrief. Those who did the debrief online got an online version of resources with quick links to all web pages.
Pre-program survey error	Student/participant experience	On the paper version of the survey, there were two questions missing about what would make participants skip class and what would make participants consider withdrawing from college.	When entering the paper pre-program surveys, a staff member made the questions optional in order to answer all questions. Researchers were informed of the error.
New puzzle or interview prep	Student/participant experience	Proposed change of having an easier puzzle or something more engaging at the work table such as interview prep.	Participants will get more out of the work table if they are doing something that feels more productive and helpful for their career.
Additional QR code	Set-up	Participants who came late did not have access to QR code and had to take a paper survey.	QR code was created and printed
Mental health feedback	Student/participant experience	Feedback suggested that we make mental health more routine than only visiting services when	Feedback suggested that we have mental health as one of the life stops to show that taking care of mental



		characters are	health should be as
		already in crisis.	routine as going to a
			well-child visit.
Missing information	Other	Natalia needs to be	Natalia will be added
		added to the table	to the table guide so
		guide for one of the	the monitors know to
		semesters.	give the study tips.