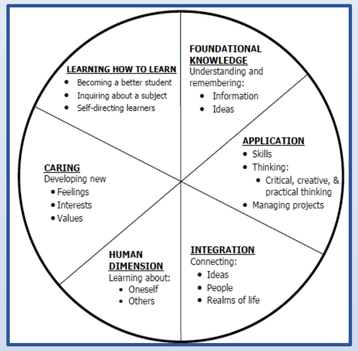
Race Predicts Significant Learning Before and After the COVID-19 Pandemic

Gabrielle McGee and Donna Webster Nelson, Ph.D., *Winthrop University*

mcgeeg4@winthrop.edu

nelsond@winthrop.edu

Rationale and Purpose



The quality of the college student learning experience can be assessed in various ways. Most often, there is an emphasis placed on the amount of academic knowledge gained by the student; however, many educators recognize that this form of learning is not enough (e.g., Amiran, 1989).

Fink (2013) defines significant learning as that which creates lasting change and has an important impact on the learner's life. He proposes a Taxonomy of Significant Learning that encompasses both academic learning (i.e., *Foundational Knowledge*, *Integration*, and *Application*) and learning associated with personal growth (i.e., *Human Dimension*, *Caring*, and *Learning How to Learn*).

The present study sought to investigate the significant learning experiences of college students before and after COVID-19. Specifically, researchers were interested in the reported prevalence of significant learning experiences, as defined by Fink (2013), during students' time in college before the pandemic as well as after the shift to remote instruction took place. The extent to which race predicted different perceptions of these experiences was also examined.

Method

Researchers recruited 127 undergraduate college students to participate in the study. Students identified as White (*n* = 78), African American (*n* = 38), Latinx/Hispanic (*n* = 5), Native Hawaiian or Pacific Islander (*n* = 1), and two participants chose not to list their race/ethnicity. The sample included 30 male and 94 female students, with one student identifying as transgender and two choosing to not self-identify. Participant age ranged from 18 to 49 (*M =30, SD* = 4.7).

All participants completed an anonymous online survey. Students began by responding to 18 researcher-created items that asked them to rate the extent to which they believed they had experienced the six types of learning as classified in Fink's (2013) taxonomy on a scale of 1 *(Strongly Disagree)* to 5 *(Strongly Agree).* Students responded to three items for each learning type (see sample items).

Following the completion of the 18 items, participants responded to seven researcher-created items that were intended to measure the impact of COVID-19 on each type of learning in Fink's taxonomy (see sample items). Specifically, students were asked to rate the extent to which COVID-19 impacted each type of learning by responding on a scale of 1 (*very negative impact*) to 5 (*very positive impact*).Two items were used to assess the Human Dimension taxon.

Sample Survey Items

Foundational Knowledge
"I developed an in-depth understanding of concepts in my courses."

Change in Caring
"I became excited about the topics in my courses."

Application
"I developed effective oral communication skills."

Foundational Knowledge
"To what extent did COVID-19 impact how much you were able to learn from your courses?"

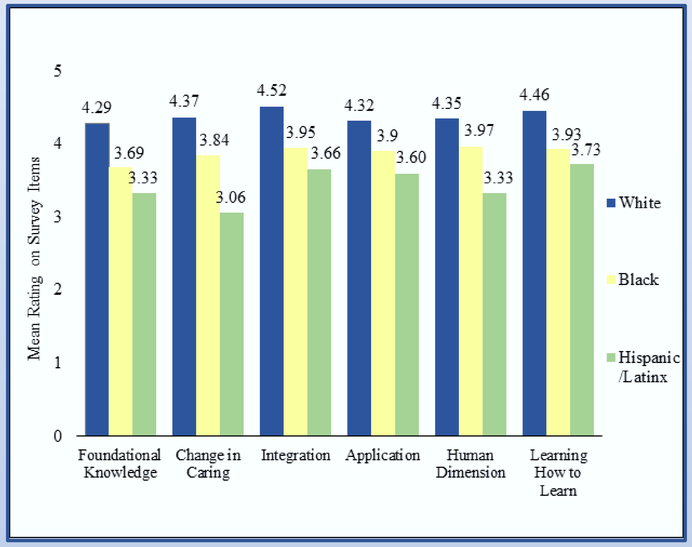
Change in Caring
"To what extent did COVID-19 impact how much you cared about the topics in your courses?"

Learning About the Self
"To what extent did COVID-19 impact how much you learned about yourself?"

Results

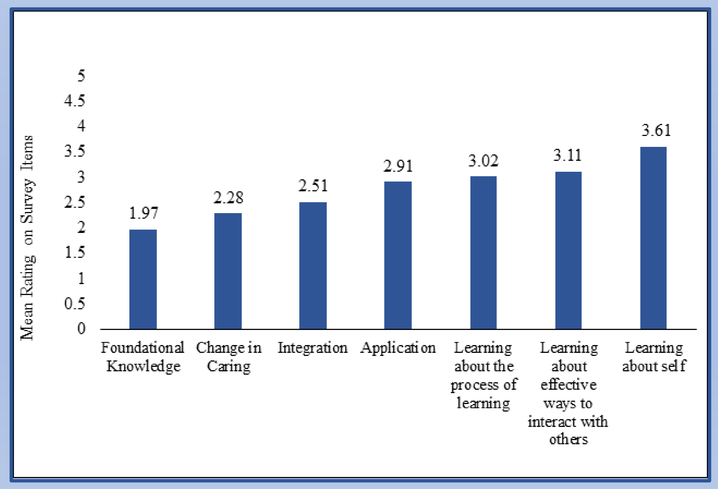
Researchers conducted between-groups ANOVAs followed by t-test comparisons to determine the differences in student reports of significant learning by race. The ANOVAs indicated that compared to Black or Hispanic/Latinx students, White students reported experiencing higher levels of all six categories of significant learning prior to the COVID-19 pandemic (see *Figure 1*).

Figure 1. **Student Reports of Significant Learning as a Function of Race/Ethnicity**



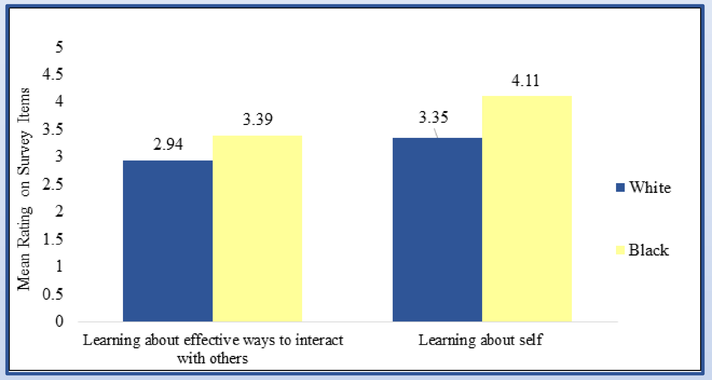
White students reported more foundational knowledge [$F(1,126) = 4.405$, p.002], greater caring about learning [$F(1,126) = 5.078$, p<.001], more integration skills [$F(1,126) = 4.776$, p<.001], more application skills [$F(1,126) = 3.051$, p<.02], more learning about self & others [$F(1,126) = 3.29$, p<.01] and greater learning about learning [$F(1,126) = 3.86$, p<.003] than both Black and Hispanic/Latinx students.

Figure 2. **Overall Perceptions of Significant Learning During COVID-19 Remote Instruction**



A within-subjects ANOVA yielded a significant effect of COVID-19 on Fink's six types of learning [$F(1,126)=60.139$, p<.001]. Specifically, as a result of the remote learning period brought about by COVID-19, students reported a decrease in foundational knowledge and caring and an increase in learning about the self and others (see *Figure 2*).

Figure 3. Race Differences in Perceptions of Significant Learning During COVID-19 Remote Instruction



Black students experienced a greater increase in learning about themselves [$t(114)=3.28$, p<.001] and learning about effective ways to interact with others [$t(114)=1.95$, p<.05] compared to their White counterparts, as a result of COVID-19 (see *Figure 3*).

Discussion

The findings of this study suggest there this a need to increase minority students' access to the types of learning experiences that impact their lives in lasting and meaningful ways. Results indicated that White students reported higher levels in all six of Fink's learning categories compared to students who identified as Black and Hispanic/Latinx.

It is important to note that the findings of this survey reflect students' perceptions of their learning experiences while in college. This presents a possible limitation, as perceptions do differ from actual experiences. That said, if Black and Hispanic/Latinx students are reporting that they feel they have engaged in lower levels of significant learning than White students, then this may indicate that there are larger forces at work in the college learning environment that may be impacting these perceptions, namely systemic bias, or other forms of discrimination (e.g., Han et al., 2018; Stevens et al., 2019; Sweat et al., 2013).

In addition to suggesting differences in student perceptions of significant learning based on race, the results of this study also indicate that remote instruction impacts Fink's six learning types in various ways. Specifically, results indicated that there was a decrease in Foundational Knowledge, Caring, and Integration during remote instruction, suggesting that students felt that they cared less, learned less, and made fewer connections between ideas, people, and realms of life during the COVID-19 remote learning period.

References

Amiran, M.R. with the General College Program Assessment Committee, 1989. The GCP and Student Learning: A Report to the Campus. Fredonia: State University College of New York at Fredonia.

Fink, D.L. (2013). Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses. San Francisco, CA: Jossey-Bass.

Han, S., Dean, M., & Okoroji, C. (2018). Minority student experiences in a living and learning community on a predominantly white college campus. *Journal of Ethnographic & Qualitative Research*, *13*(2).

Stevens, C., Liu, C. H., & Chen, J. A. (2018). Racial/ethnic disparities in US college students' experience: Discrimination as an impediment to academic performance. *Journal of American college health*, *66*(7), 665-673.

Sweat, J., Jones, G., Han, S., & Wolfgram, S. M. (2013). How does high impact practice predict student engagement? A comparison of white and minority students. *International Journal for the Scholarship of Teaching and Learning*, *7*(2).

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