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Food Insecurity of Community College Students:

Addressing Barriers to Improve Persistence and Retention

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A Project Submitted to

GRAND VALLEY STATE UNIVERSITY

In

Partial Fulfillment of the Requirements

For the Degree of

Master of Education

Higher Education

Abstract

Food insecurity is a non-academic barrier that must be considered when determining factors affecting students' persistence and retention in college. Through the literature reviewed, food insecurity of community college students and the impact and barriers they face is explored in detail. The proposed solution addresses the stigma and lack of awareness regarding food insecurity resources available on campuses. Targeted communication with all students at the start of each semester will allow individuals to assess their level of food security. Depending on the level of food security, a targeted communication plan will follow providing information on resources available. Faculty and staff will have opportunities to learn about food insecurity and how it impacts students; creating awareness and sharing opportunities for assistance. Additionally, this project proposes having a master of social work student conduct their required fieldwork on-campus, by helping students who need more individualized support for food insecurity. Lastly, this project offers an opportunity for students to learn how to cook nutritionally on a budget. Through each of these project components, the hope is students feel the institution has shown care by recognizing and providing resources to address non-academic barriers, ultimately leading to greater persistence and retention.

Table of Contents

Abstract	i
Table of Contents	ii
Chapter One: Introduction	
Problem Statement	1
Importance and Rationale of the Project	2
Background of the Project	4
Statement of Purpose	5
Objective of the Project	5
Definition of Terms.	7
Scope of the Project	7
Chapter Two: Literature Review	
Introduction	10
Theory/Rationale	11
Research/Evaluation	13
Summary	19
Conclusion	20
Chapter Three: Project Description	
Introduction	22
Project Components	23
Project Evaluation	34
Project Conclusion	35

Plans for Implementation	35
References	37
Appendices	
Appendix A	45
Appendix B -	46
Appendix C	47
Appendix D -	48
Appendix E -	49
Appendix F	50

Chapter One: Introduction

Problem Statement

Food insecurity and the lack of meeting this basic need is a growing concern for many community college students across the country. Food insecurity can be defined as the limited ability to provide and access food in a socially acceptable manner due to financial constraints (Anderson, 1990; Nazmi et al., 2019; Wood et al., 2017). Students attending a community college have a higher risk of food insecurity compared to those at a four-year institution (Troester-Trate, 2020). Studies about community college students and food insecurity are intentionally conducted because these institutions are often more accessible and affordable, thus serving a different population of students than many four-year institutions (Goldrick-Rab et al., 2017). In a 2017 study of community college students, 67% of students reported struggling with some type of food insecurity (Goldrick-Rab et al., 2017). Food insecurity is important to address because of the potential negative effects on health and academics, such as poor physical and mental health, housing insecurity, lower GPAs, and difficulties focusing and concentrating on schoolwork (Jesch et al., 2021; Bruening et al., 2018).

Basic needs are fundamental, and a person who does not have one of their basic needs met will struggle to achieve higher-order skills (Goldrick-Rab, 2018; Maslow, 1943). Food insecurity in post-secondary education is not a new concern, but research suggests that food insecurity is more prevalent today (Henry, 2017). Additionally, Hughes et al. (2011) added that a college degree provides a pathway to

a successful career and financial security, leading many individuals to attend college. With an increase in attendance, the demographics of students have also changed to include more 'nontraditional' students whose characteristics are similar to those who come from low-income backgrounds, racial or ethnic minorities, and students juggling multiple family responsibilities (Henry, 2017). Given the current research, community college institutions must address the prevalence of food insecurity on their campuses.

Importance and Rationale of the Project

Community colleges serve a diverse population of students who come with varying levels of needs and end goals. With open admission policies, low tuition rates, and closer proximity to home, community colleges are often the first choice for low-income, non-traditional, and ethnic minority students (Ma & Baum, 2016). Based on the demographics of students served and the varying levels of outside commitments, community college students have a higher risk for food insecurity than students at a four-year institution (Maroto et al., 2015).

In 2015, Goldrick-Rab et al. conducted one of the first comprehensive studies of community college students, finding over half of students were food insecure. In 2017, Goldrick-Rab et al. conducted a more expansive study and found food insecurity of community college students increased, now impacting every two in three students. The results from the two studies provide a solid argument for why community college administrators must work to find ways to address this barrier. When food insecurity goes unaddressed, negative impacts on students' health and

academics include; poor physical and mental health (Bruening et al., 2018; El Zein et al., 2018; Jesch et al., 2021, Maroto et al., 2015), lower GPAs (El Zein et al., 2018; Maroto et al., 2015), and difficulty focusing on academics (Bruening et al., 2018; Jesch et al., 2021). The effects of food insecurity may negatively impact a student's ability to persist in higher education (Goldrick-Rab et al., 2015; Goldrick-Rab, 2018; Maroto et al., 2015; Troester-Trate, 2020).

Community college administrators often overlook meeting students' basic needs by ensuring food security (Goldrick-Rab, 2018). Ryan and Deci (2000) define a basic need as "an energized state that when met (i.e., satisfied) supports better health, motivation, and well-being" (p. 21). Similarly, Tinto's (1997) student integration theory promotes student success through engagement in the campus community and interaction with faculty and staff at the institution. Institutions must create effective programs that show persistent commitment to their students while remembering it is the work of all institution employees to provide this type of commitment (Spann & Tinto, 1990). Additionally, a culture of caring is created when the entire campus community shares the same commitment to all students' social and intellectual growth. (Spann & Tinto, 1990). When a sense of community and caring is encouraged on campus, students feel a sense of belonging that promotes their personal and academic growth (Spann & Tinto, 1990). Meeting students' psychological needs related to food insecurity (Ryan & Deci, 2000) by providing opportunities for positive interaction between students, faculty, and staff (Tinto, 1997) provides a framework for the proposed project.

Background of the Project

As previously stated, Goldrick-Rab et al. (2015) conducted one of the first surveys of community college students, finding over half were food-insecure. The results from this survey prompted Grand Rapids Community College (GRCC) to investigate the presence of food insecurity on its campus. Started in 1914 as the first community college in Michigan, GRCC is a public, open-enrollment institution serving approximately 12,000 degree-seeking students in downtown Grand Rapids, Michigan (National Center for Education Statistics, n.d.). Like most community colleges, GRCC serves a large non-traditional student population. GRCC's *Fall 2021 Enrollment Report* indicated the average age of students is 24.7, with 32.9 percent 25 or older (Grand Rapids Community College, 2021). The percentage of students representing a racially minoritized population at GRCC is 31.7 percent (Grand Rapids Community College, 2021). Based on the population of students GRCC serves and the data from Goldrick-Rab et al. (2015), GRCC students have a high risk of food insecurity.

To accurately assess the impact of food insecurity, GRCC participated in a 2016 survey conducted by the Hope Center for College, Community, and Justice. Across all participating institutions, results indicated 67% of students were food insecure (Goldrick-Rab et al., 2017). At the institutional level, 57% of GRCC students experienced some level of food insecurity (Wisconsin Hope Lab, 2016). Upon completion of the 2016 survey, the Student Alliance and the Office of Student Life and Conduct (OSLC) at GRCC implemented a food pantry and snack pantries

around campus. In 2016, a total of 81 students took advantage of this resource, representing less than one percent of the total student population (Grand Rapids Community College, n.d.-a). With more than half of GRCC students experiencing food insecurity (Grand Rapids Community College, n.d.-a) and a severely underutilized resource on campus, the proposed project provides opportunities to increase awareness of food insecurity within the campus community, as well as provide solutions to help remove food insecurity barriers for students.

Statement of Purpose

This project proactively identifies food-insecure students and provides opportunities for awareness and education. Targeted communication to students who identify as food-insecure, will promote awareness and education of the opportunities available to help remove this barrier. As part of awareness and education, faculty and staff will have opportunities to engage and learn about the impact food insecurity has on students. Faculty and staff will connect with students who identify as food insecure, providing opportunities for intentional interaction. This proactive approach to caring for students creates a sense of belonging and promotes an institution that cares about its students' success.

Objective of the Project

Based on the extensive amount of literature reviewed, food insecurity of community college students is a relevant and critical issue for community college administrators to address. Recent studies (Goldrick-Rab et al., 2015; Goldrick-Rab et al., 2017) of food-insecure community college students prompted community college

administrators to quickly implement food pantries on campus as a way to help remove food insecurity barriers (El Zein at el., 2018). Although campus food pantries have filled a need for some students, compared to the number of food-insecure students, institutions have more work to do.

Implementation of the proposed project provides ways GRCC can increase awareness, provide opportunities for education, and provide additional resources to food-insecure students. The first component of the project provides students with an opportunity to learn more about food insecurity on campus and assess their own level of food security, providing the first step in building awareness of the varying levels of food security. Next, faculty and staff will intentionally connect with food-insecure students throughout the semester, providing information about support services and resources available to them. Through consistent and intentional connection with students, faculty and staff have the opportunity to check in with students, creating a culture of caring. Additionally, education to the campus community about the presence of food insecurity helps to remove the stigma associated with needing assistance. Lastly, creating partnerships with external and internal resources will provide students with additional services they can take advantage of. GRCC would partner with GVSU and host a fieldwork opportunity for a Master of Social Work student, who would provide individualized support and resources to food-insecure students. Additionally, food-insecure students will have the opportunity to learn from students in the GRCC Secchia Institute for Culinary Education about how to cook

nutritiously on a budget. Providing students with other opportunities for assistance will help remove the stigma and increase awareness about food insecurity.

Definition of Terms

- Basic Needs are commonly referred to as having adequate access to food, shelter, and clothing (Martinez et al., 2021).
- Food Insecurity can be described as the limited ability to provide and access
 food in a socially acceptable manner due to financial constraints (Anderson,
 1990; Nazmi et al., 2019; Wood et al., 2017).
- *Non-Traditional Students* are defined as students over the age of 24, who work full-time and attend college part-time, and have dependents or other family members they support financially, physically, and emotionally (Forbus et al., 2011; Troester-Trate, 2020).
- *Persistence* can be described as completing semester requirements toward the goal of degree completion (Troester-Trate, 2020).
- *Retention* can be described as re-enrolling in consecutive semesters (Troester-Trate, 2020).
- Sense of Belonging is defined as a feeling and culture created by the institution to encourage students' personal and academic growth (Tinto, 2006).

Scope of the Project

Providing students with services aimed to address non-academic barriers is critical for the successful persistence and retention of community college students (Troester-Trate, 2020). This project invites all students to either opt in or opt out of receiving information about food insecurity on campus. While food insecurity impacts more than half of community college students (Goldrick-Rab et al., 2017), not all students recognize their own level of food insecurity and may be ashamed to admit it (Crutchfield et al., 2020). While the goal of this project identifies and supports all food-insecure students, the results are limited to students who opt in to receive communication and to those who self-identified as food insecure.

The success of this project depends on the follow-through of many faculty and staff who may not feel it is the work of the institution to provide social services to students (Goldrick-Rab, 2018). As part of the student integration theory, Tinto (2006) provided a deeper understanding of the role faculty and staff play, stating they have a responsibility to recognize and identify students at risk for academic and non-academic barriers. This project provides educational opportunities for both students and the campus community to develop a deeper understanding of the impact of food insecurity, as well as share information about resources available to address this barrier.

A critical component of this project works to identify food-insecure students and provide awareness and education to the entire campus community. El Zein et al. (2018) stated that providing support for food-insecure students goes beyond implementing an on-campus food pantry. Additionally, El Zein et al. (2018) found that on-campus food pantries were severely underutilized, citing the lack of awareness and the stigma associated with using a food resource. Through intentional

communication with students who self-identify as food insecure, this project will increase awareness of food insecurity on campus and provide information on the way the institution supports students with food insecurity. Meeting the needs of food-insecure students through the implementation of the proposed project helps to increase student success through persistence and retention.

Chapter Two: Literature Review

Introduction

Many scholars have previously cited a lack of research on community college students who struggle to meet their basic needs (Maroto et al., 2015; Nazmi et al., 2019; O'Neill, 2019). Chaparro et al. (2009) conducted one of the first studies exploring college students and food insecurity at a four-year institution, finding 21% of students were food-insecure, with an additional 24% of students at risk of becoming food insecure. The numbers presented in the 2009 study by Chaparro et al. were concerning; however, their research only surveyed students at a four-year institution. Related to the differing demographics between four-year and two-year institutions, McFadden (2015) indicated community college students have a higher risk of food insecurity. Subsequent studies found half of community college students surveyed were food insecure (Goldrick-Rab et al., 2015). Additionally, scholars studied the impact and effect food insecurity has on students' academic performance, ultimately negatively impacting persistence and retention (Goldrick-Rab et al., 2015; Goldrick-Rab et al., 2017; Innis et al., 2020).

By analyzing the growing amount of research, the following literature review will explore food insecurity of community college students by examining the background of community college institutions and student demographics, analyzing the effects and impact of food insecurity on community college students, and exploring barriers that community college institutions face when working to address food insecurity on their campus.

Theory/Rationale

A review of two theoretical frameworks will connect the importance of recognizing students' basic needs to promote student success and provide a culture of caring and a sense of belonging. First, Ryan and Deci's (2000) basic psychological needs theory explains how fulfilling psychological needs is necessary to provide holistic support for students. Tinto's (1975) student integration theory explains why addressing students' basic needs helps create a culture of caring and a sense of belonging to their institution.

Basic Psychological Needs Theory

Meeting an individual's psychological needs is a necessary component to obtain an optimum level of functioning and, as a result, better health and well-being are achieved (Ryan & Deci, 2000). Ryan and Deci (2000) describe three psychological needs which support developing a sense of integrity and well-being: competence, autonomy, and relatedness. As defined by Ryan and Deci (2000), autonomy suggests an individual is responsible for their own decisions and behavior. Competence describes an individual's ability to feel confident in their interactions with the environment (Ryan & Deci, 2000). Lastly, Ryan and Deci (2000) define relatedness as the connection an individual has to another through caring for others and being cared for. Meeting individual psychological needs is essential for everyone through each developmental stage, but potentially even more so for college students due to the major life-changing choices they make (Reed-Fitzke & Greer, 2021). Reed-Fitzke and Greer (2021) suggest college administrators should meet all three students'

psychological needs by providing opportunities and resources to assist in developing students' overall well-being. Additionally, scholars added to the growing amount of literature suggesting meeting college students' basic psychological needs impacts persistence and retention (Goldrick-Rab, 2018; Maroto et al., 2015; Troester-Trate, 2020; Weiss et al., 2019). Part of the role of college faculty and staff is to help students understand and identify their basic needs insecurity while providing awareness about the available support.

Student Integration Theory

The first iteration of Vincent Tinto's (1975) student integration theory indicates that negative persistence and retention rates correlate with students who lack academic or social integration into their institution. Academic integration is an essential aspect of Tinto's (1975) student integration theory; however, this project will focus on the aspects of social integration as it relates to persistence and retention. Social integration of students occurs through informal peer group interaction, extracurricular activities, and interaction with faculty and administration at the institution (Tinto, 1975). Based on Tinto's (1975) student integration theory, interaction with faculty and staff are essential relationships impacting student success. Interaction with faculty and staff can happen inside and outside of the classroom. In 2006, Tinto revised the student integration theory, adding that faculty and staff hold responsibility for recognizing and identifying students' early risks inside and outside the classroom.

Troester-Trate (2020) used Tinto's (2006) student integration model to determine how non-academic barriers, such as food insecurity, transportation, and childcare, were related to students' persistence and retention. The 2020 study found students who received support for non-academic barriers persisted at the same rate as those students who were not in need of support for non-academic barriers (Troester-Trate, 2020). The 2020 (Troester-Trate) study validates why providing support to students who face non-academic barriers is critical to students' success in college, coinciding with positive persistence and retention rates.

Research/Evaluation

Community College Background and Student Demographics

Food insecurity of community college students had become a more prevalent issue when Goldrick-Rab et al. released the results from their 2015 survey. Students attending a community college have a higher risk for food insecurity because of the population they serve (Maroto et al., 2015). Community college institutions often provide a pathway to postsecondary education for students from underserved populations, specifically low-income and ethnic minorities (McFadden, 2015). To fully understand the issue of food insecurity related to community college students, it is essential to provide context to understand the background of community colleges, the demographics of community college students, and the costs and financial struggles community college students often encounter.

Community colleges serve approximately nine million students across 1,000 institutions, roughly 39% of all US undergraduates (Weiss et al., 2019). Students who

complete a community college degree create a positive trajectory for their life and career (Ilieva et al., 2018). Students who graduate from a community college have the potential to earn more than students who drop out of a four-year institution (Gill & Leigh, 2003; Ilieva et al., 2018). Primarily, community colleges provide education for students who otherwise might not afford the opportunity.

According to the American Association of Community Colleges (2018), nearly 40% of students enrolled at a community college were considered nontraditional students. The common characteristics of non-traditional students include; students over the age of 24, who work full-time and attend college part-time, or have dependents or other family members they support financially, physically, and emotionally (Forbus et al., 2011; Troester-Trate, 2020). Additionally, more lowincome students attend community colleges and, according to Troester-Trate (2020), low-income students make up 57% of the student population. Low-income students enrolled at a community college often come to school underprepared academically and financially (Weiss et al., 2019). Lastly, a more significant number of ethnic minorities attend community college. According to Ma and Baum (2016), community colleges serve 56% of all Latinx-undergraduate students and 44% of all Black undergraduates. The primary population of students at a community college includes; non-traditional, low-income, and ethnic minorities, representing the same population of students who struggle with food security (Maroto et al., 2015). Therefore, this provides a solid argument for why community colleges must address food insecurity among their students.

Community College Costs

The cost of attendance for community college is nearly one-third lower than the cost of attendance for a four-year university (Weiss et al., 2019). Even with a significantly lower price, community college students still struggle to finance their education. Lower tuition rates at community college institutions provide increased access to higher education for more economically and racially diverse students (Goldrick-Rab et al., 2017). However, Goldrick-Rab (2018) found that community college tuition has increased over the last several years. Even with the significant cost savings, community college students still struggle to fill the gap between what financial aid may cover and the overall cost to attend (Goldrick-Rab, 2018; Weiss et al., 2019). Federal financial aid covers 60% of education-related expenses for community college students (Goldrick-Rab, 2018); the gap in funding often requires students to work more hours or enroll part-time, which can impede persistence and retention (Weiss et al., 2019). Not meeting students' financial needs can cause harm to their health and well-being, leading to basic needs insecurity (Goldrick-Rab, 2018).

Food Insecurity among Community College Students

Community college students face an increased risk of food insecurity, primarily due to the population community colleges serve (McFadden, 2015). Results from the 2015 study by Goldrick-Rab et al. showed more than half of community college students are food insecure. The 2015 study surveyed 4,000 students at ten community colleges across the country (Goldrick-Rab et al., 2015). A more comprehensive study was completed in 2017, which surveyed 33,000 students at 70

community colleges and found 68% of students had some level of food insecurity (Goldrick-Rab et al., 2017). The following definition assesses students' food insecurity: "limited or uncertain availability of nutritionally adequate and safe foods, or limited or uncertain ability to acquire acceptable foods in socially acceptable ways" (Anderson, 1990, p. 1560). Students facing food insecurity may struggle in varying ways. To represent the varying levels of food insecurity, the US Department of Agriculture (USDA) provided the following definitions:

- high food security: no reported indications of access to food or limitations.
- marginal food security: one or two indications anxiety over food sufficiency or shortage of food, with little or no changes in diet or food intake.
- low food security: reduced quality, variety, or desirability of a diet with
 little or no indication of reduced food intake.
- very low food security: reports of multiple indications of disrupted eating patterns and reduced food intake (United States Department of Agriculture, 2021).

Based on the previous definitions, Maroto et al. (2015) conducted a study of community college students' varying levels of food insecurity. Based on results from the 2015 study, 56% of students reported having low or very low food security, and 20% of students reported having marginal food security (Maroto et al., 2015). These results from several studies indicate the prevalence of food insecurity for community

college students (Goldrick-Rab et al., 2015, Goldrick-Rab et al., 2017; Maroto et al., 2015).

Effects of Food Insecurity

Based on the large number of community college students affected by food insecurity, understanding the full impact of those who struggle to meet their basic needs is essential. Ryan and Deci's (2000) basic psychological needs theory provides the context for why meeting students' basic needs, specifically those who are foodinsecure, is essential for college administrators to address. Due to limited funds, students facing food insecurity cannot afford balanced meals, maintain an adequate food supply, or often reduce portions or skip meals altogether (Broton and Goldrick-Rab, 2018). When food insecurity occurs, physical and mental health is impacted (Frongillo et al., 2017; Innis et al., 2019). When students go hungry, focusing and absorbing the information presented in the classroom becomes harder, as they worry more about where their next meal will come from (Henry, 2017). Consequentially, students who struggle with food insecurity have lower levels of attendance, decreased attention span during class, and often have a lower GPA (Hagedorn and Olfert, 2018; Innis et al., 2019; Maroto et al., 2015). Food-insecure students tend to fall behind on their educational goals, resulting in less confidence in their academic abilities (Trawver and Hedwig, 2020). The 2015 study done by Maroto et al. showed a negative correlation between food-insecure students and GPA. Students struggling with food insecurity have a GPA between 2.0 - 2.4, impacting students' persistence and retention rates (Maroto et al., 2015).

Community college students often take longer than two years to complete their associate degree (Weiss et al., 2019). Students who take longer to complete their degree may face financial struggles, which make it necessary to drop classes, take a semester off, or drop school altogether, ultimately impacting their academic goals (Ilieva et al., 2019; Weiss et al., 2019). Institutions need to look beyond academics and address the non-academic barriers students may face when assessing why students do not persist or retain from semester to semester. (Troester-Trate, 2020).

As stated previously, non-traditional students make up the majority population at community colleges. Non-traditional students typically do not participate in activities and resources outside the classroom, which presents a higher risk of withdrawing from college (Troester-Trate, 2020). Student engagement is a vital factor in students' overall success; however, non-traditional students have reported lower levels of engagement than traditional students (Forbus et al., 2011; Troester-Trate, 2020). Institutions have the opportunity to engage non-traditional students by addressing and supporting non-academic barriers. In turn, students who participate in campus activities feel a sense of belonging instead of isolation, contributing to favorable completion rates (Troester-Trate, 2020).

Barriers Associated with Food Insecurity

As food insecurity became a prevalent issue for college students, colleges began to implement food pantries on their campuses, and by 2018, 640 colleges had implemented on-campus food pantries (El Zein et al., 2018). While food pantries have become more common on campuses, Dubick et al. (2016) found through their

study of 3,765 food-insecure students, only 14% utilized the food pantry. With the high rate of food insecurity on campuses, scholars (O'Neill, 2019; El Zein et al., 2018) completed studies to discover why students do not seek resources.

O'Neill (2019) found the stigma associated with food pantry use often prevented students from utilizing the resource. Food-insecure students report being embarrassed and feared judgment for being in a position of needing help (O'Neill, 2019). Additionally, students reported a lack of awareness about the food pantry and not knowing the eligibility requirements as reasons for not utilizing the resource (El Zein et al., 2018). Students who identified with some level of food insecurity also indicated they did not want to take a resource away from someone who needs it more than they do (El Zein et al., 2018). Regardless of the resources offered to students, students often do not recognize they need help. Crutchfield et al. (2020) shared the idea of the starving student narrative, which implies to starve in college is a rite of passage. If students do not recognize their individual situation as one which would benefit from assistance, combined with the thought process that every college student is hungry, these are barriers institutions need to address when assisting food-insecure students.

Summary

While several researchers suggest additional areas to explore as it relates to how food insecurity affects community college students, in the last several years more studies and research have been conducted to bring light to this issue (Innis et al., 2020; Maroto et al., 2015; Nazmi et al., 2019; O'Neill, 2019). As seen through the

literature, community college students have a higher risk of facing problems of food insecurity based on community college student demographics (McFadden, 2015) and the lower cost associated with attending community college (Goldrick-Rab et al., 2017). When students face issues with food insecurity, there are factors which impact their academic journey; implications such as lower GPAs (Maroto et al., 2015), lower levels of engagement (Troester-Trate, 2020), and longer times to complete their degree, which ultimately impacts persistence and retention (Weiss et al., 2019). Recognizing food insecurity as a non-academic barrier, which negatively impacts students' success in college, is essential when considering the impacts of persistence and retention.

Conclusion

In conclusion, community college students face issues inside and outside the classroom. Community college faculty and staff need to consider the psychological needs of students as part of their academic journey. Students struggling with basic needs will have significantly different experiences in college compared to those who have their basic needs satisfied (Crutchfield et al., 2020). Because of the stigma associated with food insecurity, students often hide their struggles and wait too long to ask for help (Crutchfield et al., 2020). As Tinto (2006) indicated, faculty and staff should play a role in identifying struggling students and assist by referring them to resources and support services. When a faculty member notices a student is not catching on to the work assigned, faculty recognize the struggle and offer help and assistance to the student. Similarly, it is imperative for faculty and staff to understand

non-academic barriers which may impact students' ability in the classroom.

Identifying, recognizing, and providing support for students' basic needs early on in their educational journey is critically important to a student's academic and personal success.

Chapter Three: Project Description

Introduction

Lower persistence and retention rates for community college students require college administrators to determine factors, including non-academic barriers, impacting whether students remain at the institution (Troester-Trate, 2020). For several years, Grand Rapids Community College (GRCC) has worked to identify the reasons why students do not persist to degree completion. As outlined by GRCC's values, faculty and staff are committed to responsiveness by anticipating and addressing the needs of students, colleagues, and the community, both inside and outside of the classroom (Grand Rapids Community College, n.d.-c). Results from a recent study indicated that over half of community college students were food insecure (Goldrick-Rab et al. 2015). GRCC participated in a 2016 survey conducted by the Hope Center for College, Community, and Justice, finding 57% of GRCC students experienced some level of food insecurity (Wisconsin Hope Lab, 2016). GRCC's institutional results prompted quick action of college leaders to identify ways to address this basic need insecurity.

Tinto's (1997) student integration theory and Ryan and Deci's (2000) psychological needs theory provide the framework for the proposed project. Tinto (1997) indicates that students who integrate more with the campus community feel a sense of belonging and are more likely to persist from semester to semester. Ryan and Deci (2000) indicate that meeting the psychological needs of students is an important factor to consider when helping students persist from semester to semester. The goal

of this project allows faculty and staff opportunities to intentionally interact with students who are food insecure, which builds a culture of caring and a sense of belonging at GRCC.

Project Components

Current efforts at GRCC to address food insecurity have been successful and valuable to students in need. Upon completion of the 2016 survey related to food security, the Student Alliance and the Office of Student Life and Conduct (OSLC) at GRCC implemented a food pantry and snack pantries around campus. That year, a total of 81 students took advantage of this resource, representing less than one percent of the total student population (Grand Rapids Community College, n.d.-b). With more than half of GRCC students experiencing food insecurity (Grand Rapids Community College, n.d.-b) and less than one percent of students using on-campus resources, GRCC will implement the following project to help remove food insecurity barriers to support student success.

The first component of the project provides education and awareness about food insecurity on campus to new and returning students. El Zein et al. (2018) stressed the importance of educating new students at orientation about food insecurity, but also providing the same information to returning students. New and returning students will be sent an electronic communication where they will have the opportunity to opt-in to receive information about food insecurity.

The second component of this project includes a food security self-assessment survey, which is sent to students who opt in to receive communication about food

insecurity. Goldrick-Rab (2018) recommends that surveying students about their level of food insecurity is the first step to providing awareness about food insecurity on campus. Students who indicated a level of food insecurity on their self-assessment will be sent electronic communication throughout the semester to provide support and information on resources available to them. Goldrick-Rab (2018) indicates the importance of proactive outreach, which promotes a culture of caring and aims to reduce the stigma associated with food insecurity. El Zein et al. (2018) also suggested that college administrators create a communication campaign to spread awareness and knowledge about food pantry operations and other resources. Additionally, the data received from the self-assessment will be utilized to educate the campus community about the presence of food insecurity on campus. Raising awareness and educating faculty and staff is a critical step to addressing food insecurity on campus (Goldrick-Rab, 2018).

The last component of the project provides recommendations for additional resources GRCC can implement on campus to continue to build awareness and work to remove the stigma associated with food insecurity. Based on research, many scholars have provided recommendations to address food insecurity on campus beyond implementing a food pantry (El Zein et al., 2018; Goldrick-Rab et al., 2015; Goldrick-Rab et al., 2017), such as partnering with local organizations to expand resources to students, as well as utilizing existing campus resources to promote education about food security.

Stakeholders involved in the communication strategy will be the New Student Orientation Team (NSOT), the Dean of Students, the OSLC, and the Counseling and Career Development Office (CCDO). The NSOT is the first point of contact for first-year students, through mandatory orientation. The Dean of Students is a familiar name on campus as they communicate regularly with students throughout the semester about resources available to them. The OSLC is the hub where students can access resources, such as the food pantry. The CCDO is staffed with counselors that can provide support for academic and non-academic issues.

Awareness and Data Collection

Food Insecurity Awareness for New Students

At GRCC, new student orientation is mandatory for those who are first-time students and is a requirement in order to register for classes. Orientation is a half-day session that provides new students with information about GRCC, resources available to them as students, and an opportunity to meet with a GRCC advisor to enroll in classes. Information is presented to them by the NOST as well as other staff and faculty on campus that offer resources to students. Orientation is one of the first places where the culture of the institution is created, providing resources and information for students which shows GRCC cares about them inside and outside the classroom.

As part of the orientation session, information about food insecurity on GRCC's campus will be shared. The NSOT will introduce this segment of orientation by showing a video that shares stories of GRCC students who are impacted by food

insecurity. The stories shared by students will address how they personally have been impacted by food insecurity and will share the on-campus resources they utilized. After the video, the OSLC will provide details about how to use the food pantry, eligibility for use of the food pantry, and answer any questions students may have. The OSLC staff will finish this segment of orientation by informing students of an email communication they will receive at the end of orientation, which will provide an opportunity to opt-in to communication and resources about food insecurity (see appendix A).

Food Insecurity Awareness for Returning Students

Community college students typically do not follow a traditional enrollment pattern; students change between full-time and part-time enrollment as well as skip semesters (Crosta, 2014). Additionally, the personal situations of students may have changed since they were last enrolled, such as family or relationship status, employment, and overall educational goals (Troester-Trate, 2020). Because not all students have consistent enrollment patterns, it is important to remind students about the support and resources available to them when they re-enroll. To ensure returning students are aware of food insecurity on campus, as well as available resources, the Registrar's office will run a list of students who are enrolled in the current semester but have not enrolled in the previous 12 months. The list of students will be provided to the OSLC, and students on that list will be sent an email asking them if they are interested in receiving more information about food insecurity and the resources available (see appendix B). When students opt-in to receive information about food

insecurity, they will receive an electronic survey to self-assess their level of food security.

Self-Assessment

At the start of the semester, new and returning students who opt-in to receive communication about food insecurity will be sent a self-assessment survey from the Dean of Students (see appendix C). The survey is meant to help students self-assess their level of food security and provide a deeper understanding of the varying levels of food security. The self-assessment survey will be administered by the Office of Institutional Research and Planning (OIRP), asking students three simple questions about their specific experience with food over the last six months. Questions include, (a) did you run out of food before having enough resources to buy more, (b) could you not afford to purchase healthy food options or a variety of food options, and (c) did you limit or skip meals because you did not have enough resources for food. GRCC's OIRP will compile and disseminate the results of the self-assessment survey. The students who respond 'No' to all the questions will be thanked for completing the survey and provided with the webpage listing resources if their situation changes. The OSLC will identify students who answered yes to one or two of the questions on the self-assessment and proceed with the communication plan outlined in component two of the project. Information on the students answering yes to all three questions will be sent to the CCDO for personalized counselor follow-up. For the purpose of this project, those students answering yes to one or two of the questions are considered to have low food security. Those students answering yes to all three questions are

considered to have very low food security. The data collected through the selfassessment survey will help staff intentionally engage with students who have selfidentified as food insecure, as well as provide an opportunity to educate the campus community about food insecurity of students.

Communication and Education

Communication to Low Food Secure Students

Once students complete their self-assessment, a series of email communication will be sent from the OSLC staff to any student identified as having low food security (see appendix D). This email must be timely and sent within one business day of receiving the student self-assessment results. Based on best practice and a similar communication strategy implemented by Amarillo College (Goldrick-Rab, et al., 2021), the following email components will be used:

- Personalized by using the student's first name;
- Connect the message to a specific academic situation, such as the start of the semester;
- Describe supports available to all students to dispel possible myths about eligibility;
- Emphasize how the college is prepared to assist.

A personalized message will provide students with information on how to access immediate resources such as the food pantry. Included in the communication will be a brief description of the experience that students have when they visit the food pantry. It is helpful for a student to understand the process and experience before they make

their visit. The hope is to make the experience as safe and private as possible. As indicated by Henry (2017), college administrators implementing solutions to address food insecurity on campus should consider stigmas associated with food insecurity and help remain discreet and confidential. If students are not comfortable visiting a food pantry on campus, a link to external resources will be provided.

Within this communication, students will also have the option to opt out of future communications regarding food security. In an effort to collect data on the needs of our students, a short opt-out survey will be available once a student selects this option (see appendix E). The responses from this survey will help staff at GRCC evaluate the effectiveness of the self-assessment survey, as well as other ideas that might be helpful to expand services and offerings. The students that opt to stay connected through email communication will then be sent monthly follow-up emails highlighting other areas of assistance available to students. The areas highlighted in subsequent emails will include information about snack pantry locations, emergency housing resources, emergency funding resources, mental health resources, and medical, dental, and vision resources. By consistently communicating with this group of students, students are aware of the resources available to help them. The intention is for students to take advantage of resources before the impacts of food insecurity negatively affect their coursework or persistence through the semester.

Communication to Very Low Food Secure Students

The last communication will be sent to students who responded 'yes' to all three questions in the self-assessment survey (see appendix F). This email

communication will be sent from counselors in the CCDO within one business day of receiving the survey results. Shared in this communication, is a video with stories of former GRCC students who utilized the food pantry and how accessing resources helped them achieve success in the classroom (Grand Rapids Community College, 2021b). Similar to the communication to students with low food security, information about the food pantry and operating hours will be provided. The difference with this email communication is students will receive information about free counseling resources on-campus from the CCDO, as well as provide information about emergency funding and how to access it. Also different from the previous communication is the frequency of follow-up. At this level of food insecurity, students are at a greater risk of dropping out; therefore, requiring more personal and frequent communication to remind students of the support available.

After students receive the initial communication, individual counselors from the CCDO will be assigned students to touch base with on a bi-weekly basis. The counselor will initiate each communication and ask questions such as, "How is everything going for you?" and "Is there anything I can do to help?" Depending on the response from the student, the counselor will offer the necessary support: one-on-one counseling appointments, food pantry information, emergency funding information, or housing resources. The personalized and targeted communication to students who are food insecure creates awareness of the resources we offer students and supports a culture of caring and a sense of belonging at GRCC.

Data Sharing with Faculty and Staff

Educating faculty and staff about basic needs insecurity is a critical step toward removing non-academic barriers (Goldrick-Rab, 2018). Sharing the data collected through the self-assessment is part of the process of raising awareness with faculty and staff (Goldrick-Rab, 2018). Not only should this information be shared with faculty and staff, but Wood et al. (2017) suggested institutions should share the information with the Board of Trustees and the leadership of the college. Midway through the semester, data collected from students who selected to fill out the self-assessment survey will be electronically distributed to all faculty, staff, and the board of trustees by the Dean of Students. The data will be synthesized to show the impact food insecurity currently has on GRCC's campus.

Included in this communication are stories of GRCC students who are food insecure. Stories of students like Bernard, a low food secure student who said, "It's very hard to concentrate. You're exhausted. You couldn't read a book and you fall asleep. It's not easy. Even in class, it really has affected me. I'm so stressed out trying to get things done. It's gotten hard" (Crutchfield et al., 2020, p. 414). Stories like Bernard's will provide powerful, real-life stories of our students who struggle to meet one of their most basic needs. Following the data and stories, information about how they can learn more and get involved will be provided. The OLSC will host Lunch and Learn sessions throughout the semester, where faculty, staff, and board members will be invited to bring their lunch and learn about the impacts of food insecurity. Also, information on ways to help and get involved will be provided, such as

providing support to the food pantry through cash or food donations, volunteering to help stock the shelves, and volunteering to be on the campus-wide committee to help remove non-academic barriers for students.

Additional Resources

External Partnerships

The previous two components of this project recommend ways GRCC can increase awareness and support for students who are food insecure. The last component of this project suggests other resources GRCC should consider when addressing barriers to food insecurity. Wood et al. (2017) suggested colleges should not do this work alone and should partner with external resources that can support students holistically. Additionally, Wood et al. (2017) recommended that institutions provide a space on campus for external partners to meet with students in an effort to streamline the services and resources offered.

GRCC would provide a fieldwork practicum for a Grand Valley State

University (GVSU) student in the Master of Social Work (MSW) program. Providing
this opportunity aligns with the MSW mission, which states "the MSW program
prepares advanced generalist social workers who enhance and sustain the welfare and
well-being of the individuals, families, groups, organizations, and communities of
West Michigan" (Grand Valley State University, n.d.). At the start of the semester,
GRCC faculty and staff will be introduced to the MSW student through an all-staff
email from the Dean of Students and will be encouraged to share this resource with
their students. Faculty and staff will also be encouraged to refer students who may

exhibit the following warning signs: decreased class attendance (Innis et al. 2019), lack of attention span (Hagedorn & Olfert, 2018), and lower GPA (Maroto et al. 2015). The MSW student will also support GRCC students who stop in the OSLC seeking more individualized support and who want assistance connecting with other resources at GRCC and in the community. The implementation of this partnership is two-fold: providing holistic support to GRCC food-insecure students and serving as an opportunity for MSW students to complete fieldwork.

Additional Education

As an institution of higher learning, GRCC continues to look for ways to educate students. Utilizing on-campus food resources and an opportunity to form a partnership with GRCC's Secchia Institute for Culinary Education (SICE), a series of nutritional cooking on-a-budget classes will be offered at no charge, two times throughout the semester. An electronic invitation from the OSLC and SICE will be sent to students who indicate on the self-assessment survey a level of food insecurity. Students will be invited to come into the kitchens of SICE and learn from fellow students in CA-112-Menu Planning and Nutrition how to plan a nutritious meal on a budget. One of the outcomes of CA-112 is "developing understanding through exploring and developing tools needed to create, modify and evaluate menus and recipes utilizing the 2020-2025 USDA Dietary Guidelines for Americans" (Grand Rapids Community College, n.d.-a). Attendees will be able to sample the food being cooked and will also be provided a box lunch. Providing this opportunity for students to be part of the solution, helps to remove the stigma associated with food insecurity.

Project Evaluation

To evaluate the impact of the self-assessment survey and communication strategy, student participants and staff involved with the program will complete an evaluation two weeks prior to the end of the semester. At the end of the semester, any student who indicated on their initial self-assessment a level of low or very low food security will be surveyed. Students will be asked questions such as, "Were the communications you received throughout the semester about food resources helpful to you?", "Did you take advantage of any of the resources available to you, why or why not?", "Did the resources you receive help you persist through the semester, why or why not?", "Because of the assistance you received, do you feel more connected to GRCC?", and "What more could we do to help students be successful inside and outside of the classroom?". GRCC will compile the results of the survey, statistically and anecdotally. GRCC will combine the narrative data received from the survey to identify common themes of students' responses. The synthesized themes will provide faculty and staff the opportunity to identify areas of success and areas for improvement. To determine if this type of intervention had a positive impact on persistence and retention, enrollment reports of students who identify as foodinsecure will be run each semester to determine semester-to-semester persistence and retention, GPA, and eventual completion of a degree. Feedback from the students that received support from this program is important to analyze so institutions can determine best how to help future students.

The staff in the OSLC and the CCDO will also be surveyed to solicit their feedback regarding how they feel about their interaction with the program. Survey questions include, "What worked well regarding your role with this program?", "Do you feel the interaction with students was meaningful and helpful to them?", and "What changes can be made to the program in an effort to benefit students and to be conscious of staff's workload?". Analyzing the feedback from student participants and staff participants will help determine if the communication strategy and awareness-building ultimately had an impact on student persistence and retention.

Project Conclusion

This program is developed to enhance and provide more awareness about the services offered to students with food insecurity. By using the self-assessment tool, students are better informed about their specific level of food security, and staff is provided with the specific students facing food insecurities. By segmenting the students who report a level of food insecurity, targeted communication will be sent throughout the semester to encourage the use of existing resources and an opportunity to seek additional assistance if needed. Ultimately, the hope is students feel a stronger sense of belonging to the institution, which helps increase the persistence and retention of students.

Plans for Implementation

The staff in the OSLC will primarily be responsible for the implementation and follow-through of each component of this project. The NSOT and the OSLC staff will start by working with the DS to develop the initial communication with students.

After students fill out the self-assessment, OSLC staff will gather the results from the self-assessment survey and segment students based on levels of food security. OSLC staff will begin the communication plan for students identified as having low food security, and the CCDO will begin the communication plan for those students who indicated a very low level of food security. The OSLC will be responsible for working with the MSW student, as well as initiating the planning and conversation with SICE to offer the free meal planning class to students. Additionally, the OSLC will be responsible for initiating the end-of-semester survey to student participants and staff involved in the program. Based on results from the end-of-semester survey, the Dean of Students, OSLC staff, and CCDO staff will analyze the feedback and determine the next steps for suggested changes to the program. At the end of the academic year, the Dean of Students will share results regarding the impact the program had on students' persistence and retention, including any stories from student participants. Sharing this information with the entire college community will continue to strengthen the narrative around why GRCC must support students inside and outside of the classroom.

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Appendix A New Student Opt-In Email – Food Insecurity Information

The following communication will be sent to students who completed new student orientation. and those students who are enrolled in the upcoming semester but have not enrolled in the previous 12 months.

New Student Orientation Follow-Up:

Subject Line – Food Insecurity Education and Resources To – Students who completed new student orientation From – Dean of Students

<Student Name>,

Congratulations on completing one of your first tasks as a new GRCC student – new student orientation. We hope the information you received at orientation is helpful as you start your educational journey at GRCC. As part of the orientation session, you heard about our own GRCC students who face food insecurity. This is a common struggle for nearly half of our students. Whether someone cannot afford a balanced meal, or they have skipped melas because they could not afford it, GRCC is here to help.

By clicking this link <insert link> you are opting-in to receive information and resources regarding food insecurity. A self-assessment will also be provided so you are able to assess your own level of food security.

Your success inside and outside the classroom is important to us. Please do not hesitate to take advantage of the resources available to you.

Best Wishes,

<Electronic Signature Dean of Students>

Appendix B Returning Student Opt-In Email – Food Insecurity Information

The following communication will be sent to students who are enrolled in the upcoming semester but have not enrolled in the previous 12 months

Returning Student Follow-Up:

Subject Line – Food Insecurity Education and Resources

To – Students who are enrolled in the upcoming semester but not enrolled in the last 12 months

From – Dean of Students

<Student Name>,

Welcome back to GRCC! We are glad you are here. As a returning student to GRCC, we want to make sure you know certain resources available to you. Food insecurity is an issue that nearly half of our students face. Whether someone cannot afford a balanced meal, or they have skipped meals because they could not afford it, GRCC is here to help.

By clicking this link <insert link> you are opting-in to receive information and resources regarding food insecurity. A self-assessment will also be provided so you are able to assess your own level of food security.

Your success inside and outside the classroom is important to us. Please do not hesitate to take advantage of the resources available to you.

Best Wishes,

<Electronic Signature Dean of Students>

Appendix C Food Security Self-Assessment

The following food security student self-assessment is meant to help identify students who are at low or very low levels of food insecurity. By identifying these students, targeted communication will be deployed, encouraging students to take advantage of the resources offered to them.

Answer Yes or No on the following questions, indicating how these statements applied to you in the past 6 months:

1.	Did you worry you may run out of food before you had the resources to buy more?	
	□ Yes	□No
2.	Did you find th variety of food ☐ Yes	at you could not afford to purchase healthy food options or a options?
3.	Did you limit of food? □Yes	r skip meals because you did not have enough resources for \square No
Scoring is based on the number of Yes responses you had:		
□ 0 Y	$Y_{\mathbf{es}} = \text{Based on y}$	our responses, you appear to be food insecure.
availal		sit our webpage, grcc.edu/gethelp, for a list of resources w-up communication from the Office of Student Life and nortly.
to you		our webpage, grcc.edu/gethelp, for a list of resources available munication from the Office of Student Life and Conduct will
For emergency assistance, please contact the Office of Student Life and Conduct, located on the first floor of the Student Community Center.		

Adapted from Michigan State University, MSU Student Food Bank online self-assessment of food security. Retrieved: https://foodbank.msu.edu/about/self-assessment.html

Appendix D Follow-Up Communication to Low Food Secure Students

The following electronic communication is designed to send to students who answered yes to one or two questions on the food security self-assessment. The email will be sent from the Office of Student Life and Conduct.

Email Communication: Subject – We are here to help! To – All students with low food security From – studentlife@grcc.edu

Dear <Student Name>,

We are here to help! Based on your responses to the food security self-assessment, we wanted to make sure you were aware of resources that are free and available to you while you are a student at GRCC. Did you know we have an on-campus food pantry? The food pantry is open Monday-Friday from 8:00 a.m. to 5:00 p.m. and is located on the first floor of the Student Center in the Office of Student Life and Conduct. You will be asked to show your RaiderCard to ensure enrollment for the current semester. Once verified, you will be given a bag that you can use to shop in the pantry – for free. Take what you need to sustain yourself through the week. Students can visit the food pantry once a week. There are also other community food resources available, please visit grcc.edu/gethelp for a list of those resources.

We want to say in touch with you to make sure you continue on a path of success. We plan to check in with you once a month. If you feel like you have the resources you need in order to be successful, inside and outside of the classroom, please click here to opt-out of future communications.

Best Wishes,

Electronic Signature < Office of Student Life and Conduct Staff Member>

Appendix E Opt-Out Survey

This electronic survey will be prompted when a student selects to opt-out of future follow-up communications.

follow-up communications.
Survey:
You have selected to opt-out of future communication regarding food security. Please select a response that best describes why you are opting out?
\square I have the information I need regarding food resources and will take advantage when necessary.
\square I do not feel like I need to access the resources provided by the college.
\square I already get food assistance outside of the college.
\square I answered incorrectly on the original self-assessment survey. I do not have food insecurities.
☐ Other – Please describe.

Appendix F Follow-Up Communication to Very Low Food Secure Students

The following electronic communication is designed to send to students who answered yes to all three questions on the food security self-assessment. The email will be sent from the Counseling and Career Development Office.

Email Communication:
Subject – We are here to help!
To – Students with very low food security
From – counseling@grcc.edu

Dear <Student Name>,

We are here to help! Based on your responses to the food security self-assessment, we wanted to make sure you were aware of resources that are free and available to you while you are a student at GRCC. First, <u>hear</u> from your fellow peers about the resources they have utilized on campus.

Did you know we have an on-campus food pantry? The food pantry is open Monday-Friday from 8:00 a.m. to 5:00 p.m. and is located on the first floor of the Student Center in the Office of Student Life and Conduct. Students can visit the food pantry once a week. There are also other community food resources available, please visit grcc.edu/gethelp for a list of those resources and more details about how the food pantry operates.

Want to speak with a counselor? The Counseling and Career Development Office offer free counseling services to students. Please visit grcc.edu/counseling to schedule an appointment. There is also a staff member available in the Student Life and Conduct Office dedicated to helping students navigate additional resources.

Need emergency financial assistance? We have dedicated funds for students that are facing significant financial barriers. Please visit grcc.edu/gethelp and select emergency funding. You will then be prompted to complete an intake form. A member of the CCDO will be in contact with you once the form is reviewed.

We want to say in touch with you to make sure you continue on a path of success. We plan to check in with you a couple of times a month. If you feel like you have the resources you need in order to be successful, inside and outside of the classroom, please click here to opt-out of future communications.

Best Wishes,

Electronic Signature < Counseling and Career Development staff member>