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Assessing Academic Advisement Preferences Among Master's Students: A Modification of the Prescriptive/Developmental Preference Scale

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Assessing Academic Advisement Preferences Among Master's Students: A Modification of the *Prescriptive/Developmental Preference Scale*

By

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Dedication

For Danny and Aela. My home, my heart.

For my mother, whose perseverance in earning a graduate degree while working full-time and raising four children gave me the push that I needed on the days it felt impossible.

And finally, for the master's students I had the honor of working with during my eight years as a graduate advisor. I am so grateful for all that I learned from you.

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Abstract

Academic advisement plays a significant role in enrollment retention and degree attainment. Little is known, however, about what master's students want and need from their advisement experience, as most research on advisement preferences has focused on undergraduate students. The *Prescriptive/Developmental Preference Scale* (Yarbrough, 2010) was designed to assess students' academic advisement preferences, particularly as they relate to prescriptive and developmental advisement. The author of the PDPS, which was piloted with undergraduate students, found that the instrument had construct validity issues, especially regarding the Prescriptive construct. This study aimed to modify and expand the PDPS to reliably assess master's students' advisement preferences and improve construct validity among the Prescriptive and Developmental scales. A first draft of the Modified PDPS was reviewed and edited by a panel of experts, composed of five academic advisors. Once a final draft of the Modified PDPS had been developed, the researcher distributed the instrument to actively-enrolled master's students at a southeastern, mid-sized, suburban institution. 176 valid responses were received. Results were analyzed via SmartPLS 4 using partial least squares structural equation modeling (PLS-SEM) to determine if items loaded on their respective constructs as expected. Multiple analyses were performed before a statistically reliable and valid model was generated. The final recommended model of the Modified PDPS contained 15 items total, with a seven-item Prescriptive scale and eight-item Developmental scale. Analysis of participant responses indicated overall higher preference/agreement with the Prescriptive scale, particularly among master's students who were enrolled in fully-online programs. Recommendations for continued research, implications for advising practice at the master's level, and insights regarding instrument validation and measurement of advisement preferences are discussed.

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Chapter I: Introduction

Academic advising has consistently been reported to be an important part of a student's higher education experience and degree attainment and is linked to a higher likelihood of graduation and retention (Zarges et al., 2018). Advisement originated as mentorship between faculty and students, and this model still persists in many programs today (Himes & Schulenberg, 2016). Additionally, the number of staff employed as professional academic advisors on university campuses has increased exponentially in recent years (Himes & Schulenberg, 2016). These staff most often serve undergraduate students, either in large central advisement centers, where advisors meet with students among various majors, or within individual degree programs, where advisors meet with students in one discipline. There is also a growing trend toward a professional advising model for graduate students, particularly at the master's degree level (Cross, 2015).

Background of the Problem

Although academic advisement has existed, in some form, since the inception of higher education (Rudolph, 1962), research that focuses on best practices in academic advisement is fairly recent, originating in the past few decades. Most current research on academic advising focuses either on undergraduate students, or on the relationship between doctoral students and faculty advisors (Cross, 2015). To date, little is known about best practices in academic advising for master's level students, whether by professional staff advisors or faculty advisors.

Advisement practices vary among different programs and institutions, but advisors generally engage in some form of prescriptive or developmental advising. These two terms, coined by Crookston (1972), describe advisement methods that are either linear (prescriptive), with the advisor giving the student explicit instructions on how to fulfill their academic

requirements, or exploratory (developmental), where the advisor and student work together to develop academic and career plans (Grites, 2013).

A great deal of previous research on best practices in academic advisement has been qualitative. While qualitative research can yield valuable results, samples sizes are generally smaller than quantitative or mixed methods research (Rothweiler, 2021). To help corroborate the information that is inferred from qualitative data, a quantitative instrument that is distributed to a larger sample can be helpful (Curry et al., 2009). The number of validated instruments that exist to assess students' advisement preferences is limited. The most commonly cited and utilized in the academic advisement literature is the *Academic Advising Inventory* (AAI) (Winston & Sandor, 1984). The AAI contains five sections, one of which assesses students' preferences for prescriptive versus developmental advisement. To date, there is no demonstrated use of the AAI with graduate students that has been published in the academic literature. Additionally, there are no psychometrically valid instruments available for assessing advisement preferences among master's or graduate students.

While the AAI may be utilized more often than any other quantitative instrument for measuring academic advisement preferences, potential concerns exist. The AAI provides either/or scenarios for each question. Students are directed to choose their preference for either prescriptive or developmental advisement. Weir et al. (2005) found that modifying the AAI from a survey that assesses prescriptive and developmental advisement on a continuum to one that measures prescriptive and developmental advisement as two separate constructs yielded different results among students representing the same population. The researchers also suggested that advisors can effectively use aspects of both prescriptive and developmental advising with

students, and that the advisor's overall disposition, rather than a specific advisement approach, is what matters when cultivating meaningful relationships with students.

To further assess the impact of measuring advisement preferences using individual statements, rather than two scenarios measured at opposites ends of a spectrum, Yarbrough (2010) developed a novel scale, referred to as the *Prescriptive/Developmental Preference Scale* (PDPS). Participants, who were undergraduate students, rated statements regarding their ideal advisor on a scale of importance. She hypothesized that the instrument would assess different constructs than the *Academic Advising Inventory*. Results indicated that her hypothesis was supported. Although a confirmatory factor analysis demonstrated that several items needed to be altered or removed to improve construct validity, results from Yarbrough's study provided additional evidence that the way preferences are measured may affect survey outcomes.

Master's students are not necessarily similar enough to undergraduate or doctoral students to justify using research aimed at the latter two populations to inform master's advisement. Graduate students are typically older than undergraduate students, and are more likely to have families or other dependents of their own (Chen, 2010). Master's students are less likely to have a funded university position, such as a teaching assistantship, than doctoral students (Cataldi & Ho, 2010). Further, according to *U.S. News and World Report*, master's programs generally require fewer credits than undergraduate or doctoral programs (Soriano, 2019). Fewer hours to completion may mean less flexibility in the number of electives and courses that can be chosen at the student's discretion. If developmental advisement is based partly on an advisor's exploring a student's interests to recommend courses (Crookston, 1972), there will be fewer opportunities for this kind of interaction with master's students than

undergraduate or doctoral students. Therefore, an instrument that has been validated for use with master's students has significant implications for graduate advisement.

Given the previous findings listed above, and the common utility of the AAI, researchers may be inclined to repeat Weir et al.'s study with a sample of master's students to establish whether the modified AAI is valid for use with students who are not undergraduates. However, the AAI is currently owned by the National Academic Advising Association (NACADA, 2020), which stipulates that members may use the instrument as long as specified sections, including the one that assesses advisement preferences, are used in their entirety. In other words, items could not be modified or removed if they are deemed not applicable to master's students. With these limitations in mind, adapting and establishing the PDPS for use with master's students is preferable, as the researcher will have agency to modify, remove, and add items as needed to be relevant for the population of interest.

Statement of the Problem

Research on academic advising, including students' advisement preferences, has largely focused on undergraduate students. The literature on graduate students has mostly examined advisement preferences among doctoral students. Academic advising and student services professionals do not have established research to inform advisement for master's students. Additionally, a validated, quantitative instrument that assesses academic advisement preferences does not currently exist for master's or graduate students. In addition to establishing research in this area, academic advisors would benefit from having access to a validated survey from which they could assess their student population's academic advisement preferences.

Purpose of the Study

This study built upon the *Prescriptive/Developmental Preference Scale* for purposes of establishing construct validity among the two constructs the PDPS seeks to measure, i.e., prescriptive advisement preferences and developmental advisement preferences. Additionally, this study sought to validate the PDPS for use with master's students' academic advisement preferences.

Research Questions and Hypothesis

- R1: What modifications need to be made to the *Prescriptive/Developmental Preference Scale* to reliably assess master's students' academic advisement preferences?
    - $H1_0$: No modifications need to be made to the *Prescriptive/Developmental Preference Scale* to reliably assess master's students' academic advisement preferences.
    - $H1_1$: Modifications need to be made to the *Prescriptive/Developmental Preference Scale* to reliably assess master's students' academic advisement preferences.
- R2: What modifications need to be made to the *Prescriptive/Developmental Preference Scale* to improve construct validity for measuring prescriptive and developmental advisement preferences?
    - $H1_0$: No modifications need to be made to the *Prescriptive/Developmental Preference Scale* to improve construct validity for measuring prescriptive and developmental advisement preferences.

- $H1_1$: Modifications need to be made to the *Prescriptive/Developmental Preference Scale* to improve construct validity for measuring prescriptive and developmental advisement preferences.

Theoretical Framework

There is no one set theory of academic advisement. Rather, advisement styles are often formed by student development theories (Creamer, 2000). This study was based on multiple theories that have helped academic advisors make sense of student growth and learning, including Chickering's Stages of Student Development (Chickering, 1969), Perry's Theory of Intellectual and Ethical Development (Perry, 1970), and Baxter Magolda's Theory of Epistemological Reflection (2001). These theories will be described in much greater detail in the following chapter; their primary influence on this study was the assertation that maturity and development affect how students synthesize material, make decisions, and prioritize life goals. Master's students may be at a different stage of their lives and therefore have different advisement preferences. There is no one-size-fits-all approach, as students' developmental stages will vary.

Methodology Overview

The *Prescriptive/Developmental Preference Scale* was modified at the onset to change the wording at the beginning of each statement. The researcher then added items that were posited to belong to either the prescriptive advisement preferences construct or the developmental advisement preferences construct. Development of these items were informed by Crookston's definitions (1972) of the two forms of advisement. Once a first draft of the modified PDPS was developed, the researcher held a focus group with academic advisors who advised master's students. The advisors provided feedback on the statements that specifically addressed

whether they agreed that statements accurately reflected the construct they were supposed to represent, as well as whether the statements were relevant for master's students. After incorporating the suggested revisions, the updated instrument was distributed to master's students at a mid-sized, public university in the southeastern part of the United States. Results from the study were analyzed using partial least squares analysis, comparisons of mean scores across each construct, and analyses of variance (ANOVA). Reliability and validity were assessed to determine whether the instrument was psychometrically sound for future use.

Delimitations and Limitations

Delimitations included that this study did not include doctoral students or students in professional degree programs, like law or allied health professions, although the resulting instrument may be appropriate for other post-baccalaureate populations. Limitations include that master's students who participate were surveyed at one university and may not represent master's students at other institutions. Due to low sample sizes in certain age and racial/ethnic groups, the study sample also may not be representative. Additionally, the discipline or type of master's program may have affected students' survey responses, which could limit the ability to extrapolate findings to all master's students. Finally, this study did not assess previous advisement experiences, which may have influenced respondents' perceived value of academic advisement, as well as their advisement preferences.

Definition of Terms

- Academic advisement – Academic advisement occurs when an advisement professional instructs, directs, or provides insight to college students about academic matters (Kuhn, 2008).

- Academic advisor – For the purposes of this research study, academic advisor will refer to any institutional professional who has been deemed qualified to engage in academic advising with college students (Miller, 2012).
- Developmental advisement – A form of academic advisement that focuses on a collaborative relationship between the advisor and student, in which the student's life outside of the academic program is taken into account when making decisions (Crookston, 1972).
- Prescriptive advisement – a form of academic advisement that has been compared to a doctor-patient relationship. The academic advisor is viewed as responsible for the student's academic success and for imparting information about student needs. The relationship focuses solely on academic matters (Crookston, 1972).

Significance of the Study

The current research study was intended to enrich the academic advisement literature by focusing on a subset of students that have largely been overlooked or grouped with other students who may not be of a similar population. Additionally, this study may assist academic advisors in their everyday work by providing a validated instrument for assessing master's students' advisement preferences.

Summary

The current research on advisement preferences among master's students is sparse. Research that quantifies those preferences via an established, validated survey is even more difficult to locate. The *Academic Advising Inventory: Part V* is the most commonly used instrument in the advisement literature for assessing advisement preferences. However, the AAI's usage has been limited to undergraduate students, and some researchers have questioned

the accuracy of measuring prescriptive and developmental advisement on a continuum, rather than as two separate constructs. The *Prescriptive/Developmental Preference Scale* was designed to assess advisement preferences by measuring prescriptive and developmental advisement as two separate constructs. While item analysis of the PDPS yielded several useful items for the scale, there were also multiple items did not load on either factor. Further, the PDPS was distributed to an undergraduate population. The current study will seek to develop a modified version of the PDPS and establish validity for its use with master's students.

Chapter II: Literature Review

Theoretical Framework

As stated in the previous chapter, there is no specific theory upon which academic advisement is built (Creamer, 2000). However, advising professionals and researchers often borrow from student development and psychosocial theories to develop models and frameworks for advising practice. These theories often focus on how students progress through different stages in their college careers, with their scholastic and social experiences informing how their identities are shaped (Creamer & Creamer, 1994). Utilizing student development theories as the basis for this study makes sense because graduate students are likely to be at different stages in their lives than undergraduate students because they are typically older (Chen, 2010). An advising instrument that has been primarily tested with an undergraduate population may not be appropriate in its current form for master's students, if graduate students are more advanced in identity and cognitive development.

Chickering's Stages of Student Development

Psychosocial development is a theory that was first introduced by psychologist Erik Erikson and explained identity development as a function of a person's interactions with biological and social influences (Patton et al., 2016). Many major student development theories were built upon Erikson's psychosocial theory. The first major theory to address college student development was developed by Arthur Chickering (1969). Chickering described the stages of student development in college as seven separate vectors. These vectors are not necessarily linear, and because they build upon each other, individuals may find themselves revisiting previous vectors as new experiences and growth cause them to reflect on previous times in their lives.

The first vector is *developing competence*, which includes intellectual, interpersonal, and physical skills (Chickering & Reisser, 1993). Intellectual competence includes both acquiring knowledge and a person's ability to evaluate information critically. Interpersonal competence refers to working with other people and communicating effectively. Physical competence is attained through engaging in athletics or other physical activities and more aesthetic endeavors like art and music.

The second vector, *managing emotions,* includes a student's ability to identify emotions and react to them socially appropriately. The third vector, *moving through autonomy toward interdependence,* includes students' being comfortable enough with their identity to rely less on others for validation and approval and the recognition that society exists within an interconnected web of which they are a part (Chickering & Reisser, 1993). Emotional independence is important at this stage, as is the acknowledgement that people typically do not experience life in isolation but in relationships with others (Patton et al., 2016).

The fourth vector, *developing mature interpersonal relationships*, encompasses a person's ability to create and maintain close relationships with romantic partners and friends. This level of development includes the ability to be emotionally intimate with another person while respecting individual differences, and a belief that relationships can grow and continue despite those differences. The fifth vector, *establishing identity*, is all-inclusive in terms of becoming secure in the sense of self; this vector covers sexual and gender identity and an understanding of the influences of one's cultural and ethnic background (Chickering & Reisser, 1993).

In the sixth vector, *developing purpose,* students discover the vocational and interpersonal commitments that bring meaning to their lives. Doing so involves identifying potential career prospects and hobbies, causes, and other values that one deems important and a

priority. Finally, the seventh vector, *developing integrity*, is based on adopting a personal value system (Chickering & Reisser, 1993). These values are seen as both their own and reflective of the interests of others. While a college student may have previously held values strictly focused on their interests, this vector involves identifying and balancing values with those that focus on other people's needs. Another important development within this vector is the alignment of values and actions. In other words, a person's actions become reflective of their value system because they feel compelled to act in a way they deem as socially responsible (Patton et al., 2016).

Perry's Theory of Intellectual and Ethical Development

William Perry's Theory of Intellectual and Ethical Development drew upon previous work by developmental psychologists, such as Piaget (Patton et al., 2016). He described nine positions grouped within four major categories. Perry purposefully avoided using the word "stages" and claimed that development occurred within the transitions between positions rather than within the actual positions themselves (Perry, 1981).

Dualism describes dichotomous thought processes, in which students believe there are correct explanations for everything (Perry, 1999). Students believe in authority figures, such as parents or teachers, who possess the right answers. Dualism includes two positions: early and full dualism, which are differentiated primarily by full dualism's recognition that others may have different perspectives. Within this position, though, the differing perspectives are still viewed as "wrong."

As students begin to understand that there may be more than one right answer to a question, they move into the next category, *Multiplicity* (Perry, 1999). Students within these positions, which include early and late multiplicity, understand that some problems do not have a

solution and that ambiguity exists in the world. Early multiplicity involves recognizing that there are problems that have solutions and problems that do not have solutions. Late multiplicity is mostly characterized by the recognition that many problems fall into not having solutions, which allows room for people to hold different opinions.

Contextual Relativism includes positions five and six, relativism and commitment foreseen, respectively. Relativism involves a student's evaluation of different solutions to a problem and their attempts to be balanced and logical in their discernment. Within commitment foreseen, students make a tentative commitment to a solution and begin making decisions that more personally reflect their values, rather than making decisions based on the opinions of an authority figure (Patton et al., 2016).

The final category within Perry's theory is *Commitment in Relativism*, which contains the remaining three positions: commitment, challenges to commitment, and post commitment. A student in the commitment position will, appropriately, have committed to a decision and begun to establish their identity. Challenges to commitment include the natural consequences of making decisions and the subsequent responsibilities of those choices. Finally, post-commitment recognizes that, because ambiguity is a part of life and one's values will evolve, the student's commitments may need to be revisited and adjusted accordingly (Perry, 1981).

Baxter Magolda's Theory of Epistemological Reflection

Marcia Baxter Magolda's research is similar to William Perry's in many ways. One of the primary factors that set her work apart from other educational researchers is her inclusion of women, as previous research had focused primarily on men (Patton et al., 2016). Baxter Magolda conducted a longitudinal study of college men and women (during and after their collegiate experiences), and from there, developed her Theory of Epistemological Reflection, which

described four perspectives of knowing (Baxter Magolda, 1992). Within the first stage, *absolute knowing,* the student believes knowledge is certain, and teachers who impart knowledge are viewed as authority figures. In the second stage, *transitional knowing,* students can acknowledge that some knowledge could be uncertain or tenuous. In this sense, instructors are not necessarily all-knowing. Rather than implicitly trust the information provided, students want information that cultivates an understanding of concepts and how they can be applied.

In the third stage, *independent knowing,* the perspective is that knowledge is largely uncertain (Baxter Magolda, 1992). Students desire instructors who promote a learning environment that encourages them to evaluate and discuss ideas before accepting them as truth. Those in the final stage, *contextual knowing*, still develop their points of view but require supporting evidence before forming opinions. Additionally, context matters when endorsing ideas, so students within this stage understand that their experiences and backgrounds contribute to how their opinions are formed. Interestingly, *contextual knowing* was rarely observed among undergraduate students during Baxter Magolda's study (Patton et al., 2016). The maturity that develops as students graduate from undergraduate programs and move onto the next phase of their lives (including graduate programs) is further evidence that undergraduate and graduate students should be treated as separate populations.

Limitations of Study Development Theories for Today's Student Populations

When the aforementioned theories were developed, institutions of higher education were still majority-populated by white, cisgender men. Since then, the number of minority and first-generation students have increased exponentially (Espinosa, 2019), and the vocabulary for describing one's identity has increased as well (Jourian, 2015). Although Baxter Magolda did focus some of her work on non-male students, the literature on which advisement practice is

based is largely from a time when research and development theory focused on a small and homogenous demographic of students.

First-Generation Students. A student is considered first-generation if neither of their parents attended college (Engle, 2007). Although students in any racial or ethnic group can be first-generation, Latin-American students are much more likely to be first-generation students than other groups (Canaba, 2021). This subpopulation of students is more likely to experience financial hardships, including food insecurity and difficulty paying for textbooks and other college-related expenses (Soria, 2020). Students whose parents are unfamiliar with the college experience may arrive at the university less prepared for what to expect and how to succeed in college than students who are not first-generation college students (Engle, 2007). The cultural mismatch theory proposed by Stephens et al. (2012), helps explain some of the struggles encountered by many first-generation students, as they often have cultural backgrounds that value interdependence and community. First-generation students may feel isolated at universities that encourage a culture of independence and creating one's own path to success, rather than focusing on fostering a sense of responsibility and belonging to a larger group (Stephens et al., 2012).

Racial and Ethnic Minority Students. Having been built largely from observations of white males, traditional student development theories are not inherently relevant to the experiences of non-white populations who have historically faced racial inequities and oppression (Torres et al., 2009). This reality has led some scholars to call for racial identity theories that account for the feelings, experiences, and trauma that minority students may bring to the college environment, and how institutional policies can help or hinder personal growth among its minority students (Alschuler, 1986). A commonly-cited concept within this research is

critical race theory (CRT), which examines how social institutions contribute to the oppression of marginalized racial groups (Solorzano & Villapando, 1998). CRT helps explain, for example, why contextualizing racism and experiences of oppression matter when examining a student's path to self-authorship (Hernández, 2016), a term described in greater detail in a later section.

LGBTQIA+ Students. The campus climate and support for members of the LGBTQIA+ community have improved at many higher education institutions over the past few decades, but research indicates that these students still do not have access to educational environments that are equitable to their heterosexual and cisgender peers (Evans et al., 2017; Tetreault et al., 2013). Like many concepts, development theories for people who do not identify as cisgender and/or heterosexual continue to evolve. The identity theories that were originally used in understanding sexual and gender identity in college students focused on the journey to publicly announcing and embracing one's orientation and identity (Cass, 1979; D'Augelli, 1994). However, Renn (2021) notes that focusing on the phenomenon of "coming out" is not culturally consistent and does not account for students for whom identity may continue to evolve or change. As such, Renn (2021) and other scholars (Garvey, 2020) recommend a more inclusive model that focuses on overall sexual identity development and accounts for fluidity, such as the framework proposed by Dillon et al (2011).

Historical Overview of Academic Advising

Academic Advising at the Inception of Higher Education

Formal higher education was introduced in the United States with the establishment of Harvard College in 1663 (Cook, 2009). Although the term "academic advisement" would not be used for some time, the institutional president and its faculty members guided students on their intellectual and extracurricular interests, as well as how to lead moral lives. Harvard eventually

developed a board of advisors to assist with student counsel, as student needs outweighed the number of existing faculty (Rudolph, 1962). The first structured advising system was introduced at Kenyon College in Ohio in 1841, where every student was assigned a faculty advisor (Cook, 2009).

Although early higher education largely focused on the lives and enrichment of young men, a group of "deans of women" were hired in the early 1900s at the University of Chicago to provide similar guidance to female undergraduate and graduate students (Talbot, 1910). Like the structure of early advisement at Harvard College, these dean positions offered academic counsel to students but were also seen as a way to supervise and discipline young women in their parents' absence. The academic side of advisement began to emerge further in 1906 when The Ohio State University announced a new advising structure in which faculty advisors would assist with course selection to better prepare students for their career aspirations (Gordon, 2004).

Between 1910 and 1920, many higher education institutions began offering some form of freshman orientation. Reed College in Portland, Oregon, developed the first orientation course offered for academic credit in 1911, which was offered to both men and women, albeit as a segregated class (Gardner, 1986). In 1916, Oberlin College designed a required, non-credit course for freshmen in which they learned about potential future careers (Cook, 2009), and by the late-1920s, more than half of institutions had begun offering "Freshmen Week," for new students to be advised, complete testing, and register for their courses (Rudolph, 1962).

In 1932, the University of Chicago described an advising structure that focused on addressing student adjustment issues that arose from the transition to college, which was the start of an advisement approach that focused on the "whole student" (Cook, 2009). The relationship between students and their faculty advisors was a considerable factor in a student's adjustment

and well-being. For this reason, a student would be assigned to the same advisor for a substantial period, rather than rotating to a new advisor each academic year.

The need to focus on the whole student became even more relevant in post-World War II, as veterans began taking advantage of the GI Bill and enrolling in coursework. This group of students had unique advisement needs due to their recent experiences at war. In agreement with the Veterans Administration, advising professionals offered the typical career-related and academic advisement, as well as psychological testing and adjustment-related counseling (Cook, 2009).

Academic Advising in the Mid- to Late 20th Century: Theories and Research Emerge

By the late 1950s, despite the growth of a more holistic approach, academic advisement was commonly viewed as complicated and rife with issues due to the increased number of students on campus and lack of incentives to motivate faculty to take on larger advising caseloads. In response, J. H. Robertson published an article in *North Central Association Quarterly* that outlined student needs versus their experiences. He cited a top-down rather than exploratory approach, in which advisors were viewed as authoritarians, not collaborators (Robertson, 1958). This article purported that advisement was an institutional responsibility and that each university needed to establish a transparent philosophy of academic advisement so that there was less ambiguity about the type and quality of services that students should be receiving.

In the early 1960s, some institutions began a more deliberate approach toward delineating advisement and counseling as two related but separate concepts. The Ohio State University established its first centralized counseling center for helping students manage personal issues that faculty advisors may not be the best trained or equipped to assist with (Gordon, 2004). As such,

the term “advisement” began to be used specifically to refer to helping students navigate their academic pursuits (Cook, 2009).

Major theories still used in advisement practice and research today began to emerge in the early 1970s, starting with Crookston’s article (1972), in which he coined the term *developmental advising*, juxtaposed with what he felt was an inferior form of advisement, *prescriptive advising.* The separation of counseling and advisement, which limited advising to academic matters, likely gave rise to prescriptive advising, which Crookston saw as a physician-patient model, where advisors deliver information strictly related to the student’s academic program. Developmental advising included more discussion of outside interests and vocational pursuits, and the student was often an active part of the advisement process rather than merely a recipient of information. These two styles of advisement will be discussed in greater detail later on.

That same year, Terry O'Banion (1972) described a five-step process for academic advisement that incorporated overall aspirations, beginning with exploring overarching life goals to career goals, and then which major or program would be the best fit for achieving those goals. This model is visually similar to a funnel, as advisors and students narrow academic programs, then course selection, and finally, which course options are available based on the student's schedule (Burton, 1998; O’Banion, 1972).

In addition to developing theoretical underpinnings of advisement, there began to be a focus on establishing a national consortium of advisement professionals and stakeholders. The first state-wide conference on academic advisement was held in California in 1976, and the first national conference was held in Vermont the following year (Cook, 2009). A couple of years

later, in 1979, the National Academic Advising Association (NACADA) was founded (Schulenberg & Lindhorst, 2008).

There had been little research in the demonstrated efficacy of advisement styles until this point. Crookston (1972) and O'Banion (1972) had expressed clear preferences for a more involved, comprehensive form of advisement, but their assertions were more speculative than established. In 1984, Winston and Sandor helped solidify their viewpoints when they distributed a survey to students at the University of Georgia, measuring which type of advisement students received and preferred (Winston & Sandor, 1984). Overall, students reported a higher preference for characteristics of developmental advisement. Winston and Sandor presented their results that year, titling their publication with the same name as their newly-developed instrument, the *Academic Advising Inventory.*

Academic Advising in the 1990s to Today: A Profession and Academic Field

Hiring staff solely for the purpose of advising first came about in the mid-20th century, although the bulk of advisement was still handled by faculty (Gordon, 2004). The founders of NACADA certainly thought of themselves as advisement professionals, but the question remained as to whether or not the existence of NACADA meant that academic advising could now be seen as a profession in itself, rather than one of numerous duties within a job description (Shaffer et al., 2010). One reason for not viewing advisement as a profession was a lack of agreed-upon advising theory and structure. Additionally, there was no clear pathway for professionals, as up until this point, there were no degree programs or specific credentials for becoming an academic advisor.

One of the aforementioned issues began to be addressed in the early 1990s, as the first handbook for the advising profession, *Handbook of Academic Advising*, was published by

Virginia Gordon (Gordon, 1992). Although there remains no consensus on one advisement theory or model, Gordon's book was the first to comprehensively lay out different advisement approaches and recommendations for how to best serve students. Strommer (1994) also contributed heavily to advising literature at this time, purporting that developmental advisement was more of an ideal than regularly-practiced reality, and that more institutions needed to move toward a form of advisement that centered on student learning. Additionally, Strommer (1995) touted the need for more inclusive advisement, as the goal of advisement should be to assist all students, including students on academic warning or experiencing other disadvantages, rather than just those who are high-achieving.

Credentialing for advising professionals would not emerge until after the millennium, when NACADA began offering an online graduate certificate in academic advisement in 2003 (Cook, 2009). This certificate was followed by a master's program in academic advising (in conjunction with Kansas State University), which enrolled its first students in 2007. Around this time, NACADA began to publicly endorse the student learning-focused model of advisement introduced by Strommer, and resources for developing advisement rubrics and syllabi began to be developed (Martin, 2007).

Following the Great Recession in 2008, higher education institutions suffered major financial losses, and students largely took on the debt via increased tuition rates (Brown & Hoxby, 2014). Universities also cut underperforming programs to save money, and many student service professionals were seen as more expendable than faculty, which meant fewer advisors were now responsible for helping students navigate complicated situations, such as a path to graduation in a major that was no longer available (Carr et al., 2010). Students were understandably affected emotionally, as well, by the state of economy and questions regarding

future job prospects. Although job cuts had put a strain on the academic advisors who remained in the workforce, the need to serve students who now had to think creatively about their lives after graduation may have helped cultivate new developments in advising culture. Around this time, Bloom et al. (2008), released a book called *The Appreciative Advising Revolution*, which described a collaborative approach to advisement that helped students identify their strengths and connect them to their future goals. An expansion of the concept of developmental advisement, appreciative advising showed promise in increasing students' grade point averages, as well as their sense of connectedness and perceptions of support (Hutson & He, 2011). As a result, multiple institutions began adopting the appreciative advising model for use in their programs and advisement centers (Hutson et al., 2014).

In 2015, researchers from The Primary Research Group in New York, surveyed 45 institutions about their academic advising practices to develop a picture of the overall advising landscape at the time (Moses, 2015). The diverse sample included small (i.e., less than 1,200 students) to larger (i.e., 6000+ students) institutions, both private and public. All responding institutions offered some form of academic advising. Most advising was offered through centralized university advisement offices, although some schools also offered department-specific advisement. Over half also offered some form of peer mentoring program to help address some of the adjustment-related issues that college students face. Smaller institutions were more likely to utilize faculty advising. By far, the most likely to utilize professional staff advisors were larger research universities, possibly due to faculty research obligations, which may reduce their availability to meet with students outside of the classroom. A little over half of surveyed institutions reported no existing budget to pay for professional development/training

for advisement staff, and the majority of staff training took place internally, via an advisement director and/or by shadowing other advisors (Moses, 2015).

A possible obstacle to adopting and implementing an advisement model may be the time that advisement professionals, both faculty and professional, have to spend undergoing training just to remain informed of federal, state, and institutional policies. For example, FERPA, or the Family Educational Rights and Privacy Act, requires that student educational records be kept confidential. Although training is not required by law, the potential ramifications for violating FERPA has led the majority of public institutions to require training for employees who have access to student records (AACRAO, 2016). Another example is the U.S. Department of Education's policies regarding federal financial aid. Students must be enrolled in a minimum number of credits that apply toward their chosen major or concentration in order to have financial aid applied or disbursed (Federal Student Aid, n.d.). Advising professionals must be aware of and understand current policies so that students are not advised to take unapproved courses, even if the course content is applicable to the student's interests or career aspirations. Finally, working with special populations, such as military students, or students on academic probation, may require additional training to ensure that students remain in compliance.

As technology has become more ubiquitous in everyday life, academic advisors have made use of innovations in communications, including email, video conferencing, and even text messaging and applications. These options have overall been perceived by students as a way to feel connected and accountable (Arnold et al., 2020). Forms of online and virtual advisement became more of a necessity than convenience, however, when the COVID-19 pandemic forced many universities to shut down in-person operations and think creatively about how to continue to serve students (Primary Research Group, Inc., 2020). As such, many institutions were required

to move student support services, including academic advising, fully online. Research of the perceived and demonstrated effectiveness of virtual advisement since March 2020 is likely ongoing; one recent study reported that students rated online advisement as useful but preferred in-person advisement if given the option (Wang & Houdyshell, 2021). Another study, examining responses from higher education administrators, purported the possible benefits of expanding virtual services, including increased access for distance learners or those who may not be available to attend in-person meetings during normal business hours (Bouchey et al., 2021). As of this writing, higher education continues to grapple with the impacts of the ongoing pandemic, although the degree to which operations remain virtual or have returned to an in-person format varies based on region and guidance from the institution's governing board (Kose, et al., 2022).

Advisement Styles

The style of academic advising that is practiced can vary by institution or even by advising professional. Academic advisors primarily utilize some form of either prescriptive or developmental advisement (Jeschke et al., 2001). The following section describes attitributes of the aforementioned advisement styles, along with descriptions of newer forms of advisement that have branched off from the developmental advisement model.

Prescriptive Advisement

The term "prescriptive advisement" was first used by Crookston (1972) to describe an advisor-led model of academic guidance. Prescriptive advisement is typically fast and efficient, with the advisor responsible for imparting information to the student, who is more of a recipient than collaborator during advisement meetings (Jeschke et al., 2001). Some liken prescriptive advising to a doctor-patient model, while others have described it as authoritarian (Robbins, 2012).

Prescriptive advisement may be more highly utilized by faculty advisors than professional staff advisors, in part due to the nature of the relationship. Faculty are used to being teachers who impart knowledge to their students, so they may default or prefer the prescriptive model because it is similar to their role as an instructor (Crookston, 1972). Additionally, professional staff advisors who have large caseloads of students may practice prescriptive advisement out of sheer need for efficiency. The median ratio of students to advisor is 296:1, and many advisors' student populations exceed this number (Carlstrom & Miller, 2013). In addition to providing information, with the idea that students who follow the advisor's advice will succeed, prescriptive advising is typically limited to academic matters only. Advisement professionals who practice this form of advisement are less likely to explore the students' outside interests, details about their personal life, or extracurricular activities (Crookston, 1972).

Developmental Advisement

The "developmental" form of advisement was also first described by Crookston (1972). Developmental advisement differs from prescriptive advisement in the sense that advisors and advisees are a cooperative unit. Learning and conclusions result from collaborative efforts and thorough discussion, rather than the advisor possessing all of the answers upfront (Crookston, 1972). Students' backgrounds, interests, and future goals are taken into consideration when selecting academic majors and elective courses. Appointments are less efficient than prescriptive advising appointments, in that they make take longer per session and require additional sessions as the student and advisor work toward identifying the student's goals and the best path to reach them. Although O'Banion (1972) did not specifically use the words "developmental advisement," he detailed a holistic five-step advising process that reflected the same concepts and values that Crookston described. The actual terminology, "developmental academic

advisement," was first utilized by Winston et al., in their 1982 text, *Developmental Approaches to Academic Advising.*

Kramer and Gardner (1977) outlined the faculty advisor's role in practicing developmental advisement, claiming that the goal is not just to help students identify academic goals and solutions, but to listen and help students make sense of their feelings about their collegiate experiences, in a manner that demonstrates high regard and respect. Frost (1991) agreed with these statements, asserting that advising should be goal-focused and collaborative and also requires a caring nature by the advisor to advisee. Currently, developmental advising is the model primarily recommended by NACADA, largely due to its focus on the whole student (Grites, 2013).

Other Types of Advisement

Intrusive Advisement. Although a less-commonly-known form of advisement, intrusive advising is not new. Glennen (1975) wrote about its utility in attrition helping students stay connected, particularly if they are not taking the initiative to meet with their advisor. Intrusive advising has its roots in developmental advising, as the advisor and advisee are collaborators who are focused on the student's development and goals. The primary difference is that meeting with an advisor may be a condition of enrollment rather than optional (Donaldson et al., 2016) and/or initiated by the advisor. Rather than waiting for a student to schedule an advisement appointment, advisors may reach out first with a call or email. Students who do not follow up to initial requests for contact may find their advisors waiting for them outside of one of their classes. This form of advisement has been reported to be useful for freshmen and younger students who may be transitioning from their parents' homes to a new form of independence, and

whose ability to take initiative for their academic progress may still be developing (Glennen & Baxley, 1985).

Appreciative Advisement. Another model for academic advisement, related to the developmental approach, is appreciative advisement. This framework, which was first developed based on the theory of appreciative inquiry in the early 2000s (Bloom & Martin, 2002), was revolutionary for many advisors and advising centers, due to its person-centered approach and structured resources for evaluation and assessment (Bloom et al., 2008). Appreciative advising is constructed of six phases. In the first phase, Disarm, advisors work to build rapport with students, in the hopes of helping their advisees to feel comfortable meeting and sharing with them (Bloom et al., 2008). The second phase is known as the Discover phase, in which the advisor asks open-ended questions about the student's perceived abilities and competencies, in order to gather information about how those strengths can be connected to the student's future goals.

Those goals are then sought out in the Dream phase, where students can share their hopes for the future. In the fourth phase, Design, advisors and students work together to develop a plan for helping students reach their goals and materialize their dreams. Students are then responsible, at this point, for the Deliver phase, where they follow through on the plan they helped develop, and check in with their advisors about their progress. The advisors serve in a supportive role, encouraging the student's perseverance and helping the student troubleshoot obstacles. Finally, in the Don't Settle phase, advisors encourage students to continue to strive for greatness and raise the bar on their own self-expectations. Objectives that have been met from the Design stage are celebrated and seen as a way to instill confidence in being able to dream, plan, and achieve even more ambitious goals (Bloom et al., 2008).

Overall, research on appreciative advising has been shown to have significant results in improving retention, degree completion, and increasing student satisfaction with advisement and the overall academic experience (Kamphoff et al., 2007). One researcher (Pulcini, 2016) described these advising techniques as a way to cultivate hope in students who may be struggling, either overtly (e.g., their grade point average), or inwardly (e.g., lack of confidence or indecisiveness about a chosen career path). Academic advisors who seek to become formally trained in appreciative advising are able to work toward an official certification, although doing so is not required to utilize the framework in everyday practice (Appreciative Advising Training, 2018).

Research on Advisement Preferences

The majority of existing research that could be located regarding academic advisement preferences have resulted from qualitative studies. Occasionally, data were gathered using a survey or other quantitative instrument, but typically, focus groups or individual interviews were conducted among students and advisement professionals. Common themes of preferred academic advising techniques, formats, advisor/student relationships, and advisor dispositions were extracted from interview transcripts to develop the findings outlined below.

The Undergraduate Student's Perspective

Overall, undergraduate students value academic advisement as an important part of their academic experience. The support of an advisor is viewed as a significant factor in educational perseverance and degree attainment (Holland et al., 2020). The perception among advisement professionals has long been that developmental advisement is superior to prescriptive advisement due to its holistic approach (Grites, 2013). In many ways, research supports this idea. Undergraduate students want advisors with warm and welcoming dispositions, who engage

students in conversations about their lives and outside interests, rather than keeping advisement sessions on academic topics alone (Grites, 2013; Mottarella et al., 2004). Undergraduate students also find individual advisement to be preferable to group advisement due to the desire for personalized attention (Holland et al., 2020). Ideally, the advising relationship would be long-term and with the same advisor throughout their undergraduate career, although many students professed that this was not their personal experience (Donaldson et al., 2016). Preferences for developmental advising have overall been consistent for undergraduate men and women, although women's preferences for developmental characteristics are typically stronger (Byrd & Kerns, 2019).

Good communication skills are consistently mentioned in undergraduate student interviews about ideal advisor characteristics (Walker et al., 2017). What a student judges as "good" typically refers to clear, concise information that is delivered by an individual the student deems to be caring and concerned. Another common theme in preferred advisor characteristics is accessibility, or responsiveness (Gordon, 2019). Undergraduate students prefer advisors who are widely available for appointments and respond to inquiries in a timely manner.

As previously mentioned, in-person advisement sessions are typically preferable to virtual advisement (Wang & Houdyshell, 2021), but the reality is that an increasing number of undergraduate students are entering fully online programs (Stephen & Rockinson-Szapkiw, 2021). Online undergraduate students have the added layer of distance and remote learning, which can complicate the ability to foster connections with academic advisors (Kuhn & Garcia, 2020). Like on-campus students, online students want prompt and customized feedback from their advisors (Hicks, 2016). The mode of delivery is not perceived to be as important as the advisor's ability to make students feel valued and provide a personalized experience; advisors

may view this objective to be overly ambitious, however, as on-campus students were more likely to report receiving developmental advising than online students (Hicks, 2016).

Developmental advising is not a one-size-fits-all approach, however. Other studies have demonstrated that freshmen or first-year students are more likely to have a difficult time differentiating between the roles of their high school guidance counselors and their college academic advisors (Smith, 2002). As such, they preferred the role that was familiar, in which the advisor provided specific instructions about the objectives the student must complete. This process is more indicative of prescriptive advisement and suggests that preferences for academic advising may evolve over time.

Another group of undergraduate students who do not necessarily prefer developmental advising are those at community colleges, which tend to have a larger proportion of non-traditional students. Older students, who are more likely to be employed full-time and have families to support, tend to be neutral in their preferences toward either developmental or prescriptive advisement (Dedmon, 2012). This finding could be due to their already being established in careers and attending school later in life, making them less in need of someone to guide them through the college experience, or help them explore their interests and goals.

The Graduate Student's Perspective

In much of the research involving undergraduate student advisement, students rated their satisfaction or preferences regarding their experiences with professional staff advisors. Graduate students, on the other hand, are still more likely to be advised by faculty members in their department, although the utilization of professional staff advisors for the graduate population is becoming more common (Cross, 2015). The current published research on graduate advisement preferences is relatively sparse, but one relevant study looked at the qualitative experiences of

master's students in three different settings: online, cohort, and on-campus (Schroeder & Terras, 2015). Online students completed at least 80% of their education virtually, cohort students completed at least 80% of their education as part of a small cohort that was geographically distanced from the university, and on-campus students completed at least 80% of their education in a normal classroom setting. Students among all groups reported the importance of their academic advisor's role in providing academic guidance; they also described trust and confidence in their advisors as an imperative part of quality advising. From their viewpoints, advisors needed to view their own roles as important and provide timely, individualized responses to inquiries, in order to be quality advisors.

Primary differences among the three groups were that online students were most likely to see advisors as their sole link to the university (Schroeder & Terras, 2015), whereas the other two groups viewed their classmates as part of their experience, due to their mode of learning. Students in the cohort group expressed a need for concise and clear instructions, which may be indicative of a preference for prescriptive advising. Students in the on-campus group were the only students who wanted their advisors to periodically check in without prompting.

In another study, doctoral students from a counseling psychology program were interviewed regarding their satisfaction with the advisement they had received from their faculty advisors (Schlosser et al., 2003). Students who were satisfied typically had been able to choose their advisors, while students who were dissatisfied had advisors assigned to them. Satisfied students also reported feeling comfortable with their advisors and developing a closer relationship over time, whereas dissatisfied students reported advising relationships that felt cold and distant and did not improve over time. Other aspects of positive advisement relationships included career guidance as part of the normal advising process, increased access to networking

and research opportunities, and learning from faculty who served as positive role models. Dissatisfied students felt inconvenienced in having to reach out to multiple people for mentorship when their advisors did not seem invested or knowledgable about their research interests (Scholesser et al., 2003).

A third study on the perspective of the graduate student focused on master's and doctoral students of color and their perceptions of the factors that affect retention. Although characteristics outside of advisement were identified as well, participants reported that advisors who were supportive and helped connect students to resources were a substantial reason they felt a sense of belonging and hope (Trent et al., 2021). Additionally, participants reported the need for advisors to not only be prompt in assisting others, but also demonstrate an investment in social justice and the ability to advocate for students who may more frequently experience discrimination and bias. The need for empathic advisors who can build bridges across a diverse array of perspectives, as well as serve as a safe space for students who need help, has been supported in other research not focusing specifically on minority populations as well (McConnell, 2018).

A final note on advisement from the graduate student's perspective is that their viewpoints may be influenced by their undergraduate advising experiences. In one qualitative study, the researcher interviewed newly-enrolled MSW students regarding their advisement preferences and needs, and some students linked their aspirations for their graduate advisor back to their experiences with undergraduate advisors (Naylor, 2007). Sometimes, positive experiences were recalled, in the sense that students hoped they would have a caring advisor who fostered a sense of connection; in other interviews, students lamented feeling like just a "number" during their time as an undergraduate student, and hoped that the graduate experience

would be more personalized, and advisors would possess greater knowledge about their specific field.

The Advisement Professional's Perspective

Following Schlosser's study (2003) on graduate students' preferences and satisfaction with advisement, the same researchers interviewed faculty who advised doctoral students regarding their perspectives (Knox et al., 2006). Participants generally reported advisement to be a rewarding experience because they felt that they were helping others, but several reported on the unrealistic time commitment required to be an effective advisor. Their views were holistic, as they saw themselves as professional mentors, rather than advising on academic requirements alone. In order for advisement to be successful, advisors reported that students ideally had a positive outlook and disposition about their academic program and career aspirations, and were willing to take initiative (Knox et al., 2006).

Research on professional staff advisors, who more often work with undergraduate students, has demonstrated that advising professionals view themselves as a one-stop-shop for student needs (Johnson et al., 2018; Spratley, 2020). Meetings are often about topics that extend beyond academic issues, and competent advisors need to be able to refer students to appropriate resources on- and off-campus. Professional staff advisors also report the need to utilize reflective discourse, in which they repeat a students' concerns back to them within the advisement session, both to ensure clarity and help students know that they have been understood (Spratley, 2020). Like faculty advisors, who find students who take initiative to be more successful, professional staff advisors report having longer, more thorough meetings with students who are considered high-achieving (Johnson et al., 2018). Although the advisor/advisee relationship may organically flourish if high-achieving students are seeking more out of their advisement appointments, this

finding may also highlight a discrepancy as to whether at-risk students are experiencing the level of guidance and outreach they need to be successful.

Like students, academic advisors tend to prefer individual advising sessions to group advisement (Smith & Alston, 2019). Advisors recognize that each student is unique, and one-on-one sessions allow them to offer guidance more tailored to the student's personal needs. Face-to-face sessions are also generally preferred by academic advisors over virtual advising, although the utility of virtual advising for distance students, or those who have schedules that conflict with normal business hours, is recognized (Smith & Alston, 2019). Additionally, future research may demonstrate whether these preferences have changed since virtual advising became normalized during the COVID-19 pandemic.

Another theme that has emerged in the research is the lack of standardization and training for advisors. Content analyses of university websites often yielded no information regarding advising syllabi, rubrics, assessments, or general advising information (Spratley, 2020). Other advisors reported that there were no official guidelines or instructions given on advising style (whether voluntary or required), with the majority agreeing that some form of continuing education or professional development for advisors would be useful (Smith & Alston, 2019).

Instrumentation in Academic Advisement Assessment

General Assessment Practices

As mentioned in the previous section, academic advising assessment is still not incredibly common among institutions. Less than half of those surveyed in one study utilized any kind of assessment tools, whether internally created or otherwise (Spratley, 2020). In the studies that could be located, in which institutions surveyed their students on advisement satisfaction and recommendations, several distributed questionnaires that were created by the university or

department for that particular occasion (Akers et al., 2021; Lynch, 2004). Researchers who did make use of a standardized instrument were most likely to utilize the AAI (Alvarado & Olson, 2020).

The Academic Advising Inventory. Developed and first piloted in 1984 by Drs. Roger Winston and Janet Sandor, the *Academic Advising Inventory* (Appendix A) is a five-part instrument that aims to assess the following areas: whether a student's advisor practices developmental or prescriptive advisement (Part I); the frequency with which certain aspects of advisement (e.g., problem-solving, career discussions) are practiced in advisement sessions (Part II); student satisfaction with the academic advisement they have received (Part III); demographic information (Part IV); and finally, student preferences for developmental or prescriptive advisement (Part V). This survey is intended to be distributed to students, so all responses are from the advisee's perspective (Winston & Sandor, 1984).

The AAI assumes that developmental and prescriptive advisement are measured on a continuum; the two forms of advisement sit at opposite ends of a spectrum. Part I and Part V are composed of the same either/or statements. The instructions for filling out the survey differ as to whether a) students circle the statement that better represents the form of advisement they experience with their academic advisor, or b) students circle the statement that better represents the form of advisement they would prefer to experience with their academic advisor.

The AAI was designed based on the assertion that developmental advisement is superior to prescriptive advisement, as informed by Crookston (Crookston, 1972; Winston & Sandor, 1984). The first version of the AAI to be distributed to a group of undergraduate students was composed of 22 paired statements. Results indicated that students did, in fact, prefer statements that were reflective of developmental advisement to prescriptive advisement, with being able to

choose their own classes and decide on their own majors rated as most important (Winston & Sandor, 1984).

The AAI was then distributed to students at multiple subsequent institutions and then refined, after item and factorial analyses indicated that multiple paired items did not contribute enough to the instrument to warrant inclusion (Winston & Sandor, 2002). The final result was the 14-paired-item instrument that is still used today (Winston & Sandor, 2002). The manual for scoring the AAI, developed by the researchers, reports that that internal consistency reliability in the Developmental-Prescriptive Advising Scale (Parts I & V) is estimated to have an overall alpha of .78 (Winston & Sandor, 2002). The construct validity of the scale was established both in the development of the scale, via the panel of experts, and by comparing student responses and finding that students, whose advisement the researchers had observed and labeled as developmental in nature, consistently reported receiving developmental advisement. In other words, the researchers' and the participants' estimation of what developmental advisement looked like, were consistent (Winston & Sandor, 1984).

Research Modeled after the AAI. The AAI is still commonly utilized in academic advisement research in its present form. However, challenges have been made to its validity by researchers who sought to examine if measuring developmental and prescriptive advisement on a continuum were appropriate. Weir et al. (2005), argued that prescriptive and developmental advisement may alternate as the preferred form of advisement, depending on the context of the situation and the student's development. As such, the two forms should be viewed as complementary and exchangeable, rather than mutually exclusive, as they are treated in the AAI (Weir et al., 2005). To test this theory, the researchers modified the instrument from 14 paired statements to 28 standalone statements. Students were still instructed to rate the degree of

importance of each statement, but they could theoretically rate a prescriptive statement as just as important as a developmental statement, rather than having to choose between the two.

Findings indicated that not only did the two scales behave as two independent constructs, with less than five percent common variance, but results were not always consistent with previous studies that had used the AAI in its original form (Weir et al., 2005). For example, there were no statistically significant differences in advisement preferences between men and women, or among students of different class levels. These results may have just been reflective of the study's sample, but researchers nonetheless suggested that the way the advisement preference is measured may affect how the student responds.

The Prescriptive/Developmental Preference Scale. A researcher who executed a similar methodology to Weir et al. (2005), was Yarbrough (2010), who developed a novel instrument entitled the *Prescriptive/Developmental Preference Scale* (Appendix B). The statements in the PDPS are similar to those in the AAI, but the wording varies slightly (e.g, "My advisor tells me what would be the best schedule for me [AAI]," versus "My ideal advisor would plan my schedules for me [PDPS],"). This instrument instructs students to respond to the degree to which they agreed with statements on a five-point Likert scale. The statements are reflective of either developmental or prescriptive advisement. Statements appear on an individual basis, rather than on a continuum. Yarbrough posited that the PDPS would measure different constructs than the AAI.

Results showed that responses for the developmental portion of the PDPS were correlated with responses to the AAI; however, the prescriptive measures on the study's instrument were not correlated with responses to the AAI. Reliability analyses yielded acceptable results for all scales (Developmental Scale: $\alpha = .724$; Prescriptive Scale: $\alpha = .641$; AAI: $\alpha = .641$). The

researcher concluded that the two instruments measured different constructs, and that offering students the opportunity to express preferences for both developmental and prescriptive advisement may yield different responses than an instrument which requires an either/or response.

To test the validity of the PDPS, a confirmatory factor analysis was performed to assess the items that belonged to the Prescriptive and Developmental subscales (eight items per subscale). Four of the assigned items (1, 2, 7, and 11) did not load on the Prescriptive subscale, but all eight assigned items loaded on the Developmental subscale. Upon removing the four items with low factor loadings from the Prescriptive subscale, the fit indices of the model were improved, but one item (9) originally assigned to the Developmental subscale loaded onto both factors.

The researcher concluded that a two-factor solution was not a good fit for the PDPS. Due to the results of the confirmatory factor analysis, an exploratory factor analysis was conducted. Results indicated a five-factor solution. The researcher labeled these factors as follows:

- *Rules*, i.e., an advisor who provides information about policies
- *Directive*, i.e., an advisor who provides the student with direct instructions on what to do
- *Skill development,* i.e., an advisor who teaches the student how to study and manage time
- *Holistic,* i.e., an advisor who expresses an interest in the student's life outside of school
- *Career,* i.e., an advisor who focus on future goals and life after graduation

Based on the results of the exploratory factor analysis, Yarbrough suggested that advisement function, rather than advisement style, may be a better explanation for predicting student advisement preferences. In other words, the five-factor solution hones in on the purpose of the advisement session, or different advisement situations. Yarbrough argued that a student may

prefer a prescriptive approach in a situation that would fall under the *Rules* factor, such as when being provided with information about institutional policies. The same student may prefer a developmental approach when meeting with an advisor about setting goals or exploring career options.

A limitation of the PDPS and the conclusions drawn may be the numbers of items the researcher had to work with. With the two-factor solution, the PDPS needed to be reduced to 12 items, with one item loading onto both factors. With 16 items and a five-factor solution, two to three items loaded onto each factor. For an exploratory factor analysis, at least four to six items per factor are recommended (Fabrigar et al., 1999). As previously stated, Weir et al. (2005) separated the 14 items from the AAI into 28 individual items, and their study's analysis yielded two main factors, supporting the instrument's intent to measure preferences among two styles of advising. If items were added to the PDPS and additional items loaded onto each factor, future analyses may yield results that are more supportive of the two-factor model.

Other Assessment Tools. The AAI and PDPS specifically measure academic advising preferences, but there are other validated tools that are commonly used to gather data on student satisfaction and perceived importance and values. The *Ruffalo Noel Levitz Student Satisfaction Survey (RNLSS)* is a collection of instruments for higher education institutions to utilize to measure student satisfaction and priorities (RNL, n.d.). There are options specifically for undergraduates at four-year institutions, those enrolled at community colleges, adult/graduate learners, and those in online-only learning environments. Students rate their satisfaction and rank their perceived importance on an array of experiences, from advisement and faculty involvement, to financial aid, housing, and campus safety.

Another tool that is nationally recognized and widely-used is the *National Survey of Student Engagement (NSSE).* The NSSE is used to assess the quality of undergraduate education, as reported by first-year and senior students. Comparing the two points of data offers a cross-sectional report on the changes that occur between the beginning and end of the college experience. The survey measures student demographic information, perceptions of academic enrichment and personal growth since the start of the college experience, impressions of the campus/college environment, the extent to which the student's coursework is challenging and topically relevant to their goals, and the student's participation in activities (including extracurricular activities, e.g., student clubs; and student behaviors, e.g., purposefully setting aside time to study). According to the website, the NSSE is utilized by hundreds of institutions every year (NSSE, n.d.).

One distinction of the RNL and NSSE is that institutions incur a cost to gain access to and distribute these surveys to their students. The AAI is a publicly-available, no-cost instrument. Institutions that intend to gather data from a large sample of students about an array of experiences may find the RNL and NSSE to be worth the expense. For academic programs and smaller studies that seek to assess advisement experiences and preferences within an academic program, the lack of cost associated with the AAI may help explain its popularity and utility.

Master's Students: A Distinct Population

In 1998, Baxter Magolda began following a group of recent college graduates who had enrolled in master's programs, as her work showed that most students did not develop *self-authorship* during their undergraduate programs. Self-authorship means that a student has been able to develop their own sense of identity, and understands that choosing a perspective requires

evaluating information based on both the evidence at hand and the context of the situation. In order to reach self-authorship, individuals have to view themselves as capable of this evaluation, and must be able to expose themselves to others' viewpoints without being too easily swayed in any direction (Baxter Magolda, 1998).

Although individual characteristics, and the student's stage of development, helped determine the degree to which self-authorship was developed during the years that she followed these students, their interviews demonstrated that they experienced exponential growth beyond that which had taken place in their undergraduate programs. Their levels of confidence and ability to construct meaning had evolved, as had their self-efficacy to find alternate learning experiences when their programs were not supportive of their learning to critically evaluate information and develop their own perspectives (Baxter Magolda, 1998).

Master's programs are unique, in that they are considered advanced degrees, but generally require less time to completion than the four-year undergraduate degree (Soriano, 2019). Because master's programs are shorter than doctoral programs as well, the master's curriculum may not have as much room for tailoring a student's program to more specific interests. A shorter curriculum may mean fewer electives and a greater proportion of prescribed courses that cannot be substituted or changed (Barclay et al., 2007). Additionally, students in master's programs are often enrolled in degrees that are considered to be professional in nature, with the goal of working in an applied setting after the credential is earned, as opposed to academia or research, as is often the case when earning a doctoral degree (Theodosiou et al., 2012).

Master's students are generally older than undergraduate students and more likely to have families to support, which also makes them more likely to be employed while they are attending

school (Chen, 2010). Students with outside responsibilities, particularly adult learners with dependents, typically do not have as much time for extracurricular and campus networking actitivites (Ely, 1997). Master's students are also less likely than doctoral students to be employed in fellowships or receive other sources of funding for their tuition and fees (Cataldi & Ho, 2010). As such, master's students may spend the least amount of time at their institution, both because their time to completion is shorter than other degree programs, and because they are not participating in campus activities outside of class or working at on-campus jobs. These distinctive characteristics may pose a challenge for advisors who refer to best practices as reported in the academic advisement literature, when the current body of research largely focuses on students who are enrolled for four or more years in their degree programs.

Summary

Academic advising is as old as the institution of higher education itself. Advisement began with faculty members who guided students in their moral and academic endeavors, and over the years, became its own academic field and area of research. Today, both faculty and professional staff advisors comprise the advisement landscape, although faculty members are more likely to advise at smaller institutions and degree programs.

Advisement styles are typically categorized as either prescriptive or developmental, although offshoots of developmental advisement (such as appreciative and intrusive advisement) exist as well. Prescriptive advisement has been referred at the doctor-patient model, where students are recipients of the knowledge bestowed by their advisors, and advisement sessions are limited to academic matters. Developmental advisement is a more collaborative approach, where advisors and students work together to examine the student's interests and future goals for purposes of selecting a relevant major, elective courses, and even extracurricular activities.

Advisors and students alike agree in the overall value of academic advisement, both in its implications for a positive college experience, as well as timely degree attainment. Undergraduate and graduate students both reporting valuing advisors who are accessible, personable, knowledgeable about student degree programs, and who exude a warm and caring nature. The preference for advisors who provide a personalized and caring experience for their students has led some researchers to determine that developmental advisement is superior to prescriptive advisement. Most research on advisement preferences, however, has focused on undergraduate students, so there are still gaps in the literature regarding advisement preferences among graduate students.

Validated quantitative instruments for measuring advisement preferences are sparse. The most commonly-utilized instrument is the *Academic Advising Inventory*. The AAI measures student preferences for either prescriptive or developmental advisement on a continuum. Some researchers have explored the idea that prescriptive and development advisement are two separate constructs, rather than concepts that sit on opposite ends of a spectrum. Yarbrough (2010) developed an instrument called the *Prescriptive/Developmental Preference Scale* (PDPS). The researcher compared results from the AAI and the PDPS to determine if participants responded similarly to each instrument. The Prescriptive subscale within the PDPS did not correlate with the prescriptive items from the AAI, which may indicate that separating items from a continuum into individual statements may change how participants respond to the instrument. Yarbrough's analysis indicated that several items from the PDPS contributed significantly to either the Prescriptive or Developmental subscales, while half of the prescriptive items did not load onto the Prescriptive subscale.

Although research on advisement preferences among graduate students is already limited, master's students are distinct and warrant their own focus in the literature. The existing body of research on undergraduate students' advisement preferences is not necessarily translatable, as master's students are typically older, more likely to be employed full-time, and have families or other dependents to care for. Master's students cannot necessarily be compared to doctoral students either, as their programs require fewer hours to completion and may offer fewer electives and room for tailoring one's program. They are also less likely to be funded by a university fellowship or assistantship, which may necessitate more time away from campus. For these reasons, advisement preferences among master's students may be different from that of other student populations.

Chapter III: Methodology

Research on academic advising preferences is very limited. Most published studies on academic advising preferences have focused on undergraduate students. There are few studies on graduate students, and even fewer on master's students in particular (Holland et al., 2020; Walker et al., 2017). Advisement professionals who advise master's students must draw from the literature on undergraduate students when attempting to employ evidence-based advisement practices. Validated, psychometrically tested instruments to assess academic advising preferences are few and far between. The most commonly-used is the *Academic Advising Inventory*, which was validated, and has since been tested with undergraduate students only (Winston & Sandor, 1984). The AAI measures preferences for two primary types of academic advisement: prescriptive advisement and developmental advisement.

In 2010, Yarbrough developed the *Prescriptive/Developmental Preference Scale* in an attempt to address concerns regarding how the AAI measured prescriptive and developmental advisement on opposite ends of a spectrum, rather than as two separate constructs. Yarbrough utilized the AAI when developing items for the PDPS and created statements similar to items from the AAI. Items were written as standalone statements rather than paired statements on a continuum. The researcher then distributed the PDPS to a sample of undergraduate students. A confirmatory factor analysis was conducted to see if the instrument performed as expected. The analysis showed poor factor loadings for several items, particularly items that were intended to be assigned to the Prescriptive subscale.

The purpose of this study was to expand upon the PDPS to develop valid scales for measuring prescriptive and developmental advisement preferences as two separate constructs, particularly for use with master's students. All PDPS items were retained in the first draft of the

Modified PDPS, although the beginning of each statement was modified. Additional items were developed using the characteristics of prescriptive and developmental advisement as described in the literature.

Research Design

This study utilized a mixed methods approach, as survey design and validation generally require both qualitative input from a panel of experts, as well as quantitative data collected from a sample of participants who complete the modified survey to establish reliability and validity (Elangovan & Sundaravel, 2021). This research design is the best approach when instruments measure latent constructs, or those that cannot be directly observed (Bollen, 2002). Multiple subject matter experts review the content of the instrument so that the researcher has an established consensus about how constructs are operationalized before the instrument is tested (Elangovan & Sundaravel, 2021). The research design can further be labeled a confirmatory analysis, as the researcher sought to establish whether a modified version of the *Prescriptive/Developmental Preference Scale* was a valid instrument, both for accurately measuring prescriptive and developmental advisement preferences, and for assessing advisement preferences among master's students.

Studies that have examined academic advisement preferences have often used qualitative methods via focus groups or individual interviews (Naylor, 2007; Smith, 2002). Interviews allow participants to provide dynamic feedback, while allowing the researcher to ask specific follow-up questions, but sample sizes tend to be relatively small because analysis is time-consuming (Rothweiler, 2021). Having a validated, quantitative instrument that can more efficiently gather data from larger samples can help gauge whether results are similar to qualitative data, as well as

identify potential trends (e.g., differences in responses among students from different socioeconomic backgrounds, enrolled in different academic programs, etc.).

The PDPS was modeled after the AAI. The primary difference is that the PDPS measures prescriptive and developmental advisement preferences as two separate constructs. Because prescriptive and developmental advisement are the most empirically-established advisement styles in the literature, developing an instrument for master's students that assesses preferences for these advisement styles makes sense. Rather than creating a novel instrument for these purposes, the researcher sought to build upon a previously-developed instrument that addresses the concerns of measuring prescriptive and developmental advisement preferences on a continuum.

Role of the Researcher

The researcher's responsibilities included instrumentation modification, qualitative and quantitative data collection, data analysis, and providing a comprehensive analysis of results to inform future studies on academic advisement preferences among master's students. The researcher previously served as an academic advisor for master's students for nearly eight years. The researcher did not advise students at the time of this research study or otherwise work at the study institution.

The researcher sought to avoid bias by utilizing the published literature when developing new items, rather than personal experience as an academic advisor. However, the reality is that biases can be difficult to fully remove when the researcher has years of experience as a professional advisor. The expert panel review helped further ensure that the modified instrument avoided inadvertent confirmation bias on the researcher's part. Further, the subject matter experts

who comprised the expert panel did not have any pre-existing personal or professional relationships with the researcher that could confound their judgment.

Participants

Phase 1

The first set of participants were five academic advisors who were employed at a southeastern, four-year public university. The university offered degrees from the associate- to doctoral-level and enrolled approximately 8,300 students, on average. These advisement professionals represented three different colleges at the university, and all actively served as advisors for master's students at the time of this study. Their participation included taking part in a focus group as a panel of subject matter experts. While three focus groups were held, each advisement professional attended just one focus group. The goal of the focus groups was to gather feedback about the Modified PDPS, both as to how well the instrument accurately assessed prescriptive and developmental advising, and the appropriateness of the instrument for assessing advisement preferences among master's students.

Phase 2

The second set of participants were master's students from a suburban southeastern university who opted to complete the survey, after suggestions from the focus groups had been implemented. Master's students from all available programs and disciplines (see Table 1) were contacted to promote diversity among the group. All students who completed the survey were considered valid participants unless they indicated that they were not part of the target population. Inclusion criteria included current enrollment as an active master's student. The length of the program did not affect participant eligibility (e.g., accelerated one-year programs versus traditional two-year programs). Alumni, students in programs other than master's

programs (including undergraduate, graduate certificate, non-degree graduate, and doctoral programs), and inactive students (defined, institutionally, as not having enrolled in courses in three or more consecutive semesters) were not eligible to participate.

Table 1

List of Programs and Disciplines for Student Participant Recruitment

Degree	Focus	Number of Programs
MA	History	1
MAT	Teaching	7
MBA	Business Administration	1
MED	Education	16
MM	Music Performance	1
MPA	Public Administration	2
MPSA	Public Safety Administration	2
MS	Clinical Mental Health Counseling	1
MS	Computer Science	5
MS	Organizational Leadership	4
MSN	Nursing	1

Instrumentation

The instrument for this study was adapted from the *Prescriptive/Developmental Preference Scale* (see Appendix A). The original PDPS was developed by Yarbrough (2010) for purposes of a research dissertation. Using the *Academic Advising Inventory* as a reference, Yarbrough sought to create an instrument that could assess preferences for prescriptive and developmental advisement when not measured on a continuum. A total of 16 items were

developed; eight items belonged to the Prescriptive subscale, and eight items belonged to the Developmental subscale. Each item response was measured on a five-point Likert-type scale, with options from *Strongly Disagree* (1) to *Strongly Agree* (5).

A total of 119 undergraduate students completed the PDPS. Participant responses were loaded into SPSS. A confirmatory factor analysis was run on the two subscales to measure whether items reflected their respective constructs as designed. Four items (specifically, Questions 1, 2, 7, and 11) did not load onto the prescriptive advising construct as expected. All eight developmental items loaded onto the developmental advising construct as expected.

Because the two-structure model did not seem to be a good fit according to the CFA results, Yarbrough conducted an exploratory factor analysis. The EFA yielded a five-factor solution, which the researcher labeled as Rules, Directive, Skill Development, Holistic, and Career. The researcher proposed that assessing advisement function, rather than advisement style, may be more appropriate for measuring and predicting student advisement preferences (Yarbrough, 2010). Despite the findings of the EFA, the current study focused on the original two constructs of prescriptive advisement and developmental advisement. Because the majority of the literature on advisement preferences focuses on some variation of these two advisement styles, the researcher sought to modify the PDPS to improve the original two subscales.

No items were immediately discarded from the original PDPS, including items with poor factor loadings via Yarbrough's original analysis. Each original item statement in the PDPS begins, "My ideal advisor…" (Yarbrough, 2010). Some research suggests that advisement styles are not necessarily reflective of an advisor's personality. In other words, an advisor who practices prescriptive advisement, a style typically seen as direct and detached, can also possess character traits like warmth and empathy (Weir et al., 2005). Because of this distinction, each

original statement from the PDPS was modified so that mentions of the academic advisor were removed, except for items that specifically discuss the student-advisor relationship. Items were instead written so that participants rate their preferences for what happens in the advisement session, rather than what an ideal academic advisor would do.

In addition to modifying the wording in the existing statements, new items were generated using published literature that defined and operationalized prescriptive and developmental advisement. Two eight-item subscales comprised the original PDPS, which totaled 16 items. A minimum of three items per construct are recommended for establishing convergent validity (Marsh et al., 1998), although some researchers recommend at least five (Knekta et al., 2019). Although some items in the original PDPS had adequate factor loadings, particularly for the Developmental subscale, the researcher added seven new items per construct to increase the likelihood that both scales would have a sufficient number of valid items. Five questions regarding demographics, including master's program modality, gender identity, employment status, age range, and race/ethnicity, were also added to determine if there were differences among groups in terms of advisement preferences (see Appendix F). The panel of experts were provided the first draft of the modified version of the instrument (see Appendix G) at least one week ahead of the scheduled focus groups. The final modified PDPS that was distributed to students incorporated the suggested edits from the panel of experts.

Data Collection

Prior to contacting potential participants, the researcher submitted a Human Research Application to the university's Institutional Review Board. The IRB approved the researcher's plans for recruitment, including the informed consent process and incentives for participation, as

well as the first draft of the modified PDPS. No major modifications to the methodology were requested by the IRB.

Phase 1

Once IRB approval was acquired, the researcher moved forward with Phase 1 of the study's data collection. The researcher worked to recruit advisement professionals, who either actively advised master's students or had done so in the last five years, to serve on a panel of experts for a focus group. The researcher contacted these professionals directly by email with a request to participate in a research study regarding validation of an instrument to measure master's students' advisement preferences (see Appendix D). At least five advisement professionals were sought to comprise the focus group in order to provide adequate feedback (Krueger, 2002). Further, the researcher sought to recruit an odd number of experts, in the event that a tie-breaker was needed for a particular suggested edit.

In total, 13 advisement professionals were contacted. Two professionals responded that they were unable to participate, while six did not respond to initial or follow-up emails. This phase of recruitment spanned three weeks to secure affirmative responses from five individuals. Three of the five experts were contacted twice before an affirmative response was received. Upon receiving confirmation from the final participant, the experts were emailed a Qualtrics link to the electronic informed consent (see Appendix H), the first draft of the Modified PDPS, as well as an option to input their availability for the focus group session via Zoom.

Due to scheduling conflicts, three total Zoom sessions were held. All three sessions took plan in the span of one week. Two experts were present for the first session. The researcher reiterated the purpose of the study and provided additional background on prescriptive and developmental advisement, the *Academic Advising Inventory,* and the original

Prescriptive/Developmental Preference Scale. The researcher and the experts went through each statement individually, with the researcher making notes on each statement for which the experts had feedback via shared screen. In the second session, the researcher met with one expert. The process was the same as the first session, although the feedback from the previous two experts was shared for the expert's consideration. In the final session, the researcher met with two experts; the process was the same and the first and second sessions, although feedback from the previous two sessions were shared for the experts' consideration.

The second draft of the Modified PDPS was emailed to the expert panel two days after the final focus group. Within one week, all experts had responded affirmatively with their approval, with the exception of one panelist, who did not reply to the original email regarding the second draft, or a follow-up email sent one week later. After 10 days, Phase 1 of the study was considered to have concluded, and all focus group participants were emailed a $25 electronic gift card for their time.

Phase 2

Once the second draft of the Modified PDPS was approved, the instrument was prepared for electronic distribution via Qualtrics. The informed consent for student participants was loaded into the survey (see Appendix E); followed by the demographic questionnaire (see Appendix F); followed by the statements that were approved by the focus group (see Appendix J); and finally, a link to a separate Qualtrics page where participants could submit their email addresses for a gift card raffle. The survey was designed so that students who did not agree to the informed consent would not be able to proceed to the remainder of the survey. All of the prescriptive/developmental statements required a response to ensure that participants could not

submit their email addresses for the raffle without completing at least the advisement preferences portion of the survey.

A listserv of master's students, which included 1,273 email addresses, was obtained through the institution's office of institutional research. Every student who was on the list was coded as an actively-enrolled master's student; to corroborate this information, the informed consent included a statement that students who signed the form were confirming their active enrollment in a master's program at the institution.

The students on the listserv received an email describing the purpose of the study and the general overview of what completing the survey would entail (see Appendix E). Students were informed that participation was voluntary and anonymous. The email included the Qualtrics link to the survey and noted that the survey would remain open for two weeks. After 10 days, a follow-up email was sent again to the student listserv, encouraging students who had not yet participated to complete the survey. The minimum target number of participants was 121, based on the rule that the sample size should be greater than 10 times the maximum number of items per construct (Boateng et al., 2018; Hair et al., 2011), with 24 items comprising the final version of the Modified PDPS (12 items per construct). 176 valid responses were collected for a response rate of 13.8%. All participants who completed the survey were eligible to win one of two $50 electronic gift cards, the drawing for which occurred after data collection had concluded.

Survey data were initially stored in Qualtrics, which is a secure platform for collecting survey data. Any data that were downloaded and exported from Qualtrics were saved in a private DropBox folder, to which only the researchers listed on the approved IRB application had access. Data will be stored for three years after collection, per federal guidelines (HHS, 2018).

Data Analysis

Once data collection concluded, survey data were downloaded from Qualtrics into an Excel spreadsheet. The researcher transformed the Likert-type scale, via Qualtrics, into numerical values, where *Strongly Agree*=4, *Agree*=3, *Disagree*=2, *Strongly Disagree*=1, and *N/A*=blank, or missing. The data were then imported into SmartPLS 4, a form of statistical analysis software that specializes in partial least squares structural equation modeling, or PLS-SEM. PLS-SEM is a form of structural equation modeling appropriate for analyzing smaller sample sizes (Willaby et al., 2015). PLS-SEM generally makes use of two different types of measurement models: reflective and formative (Henseler et al., 2009). In reflective models, the construct is theoretically assumed to cause its indicators, rather than the other way around. In this case, the items (i.e., indicators) that load on the prescriptive and developmental advisement preferences constructs were theoretically assumed to be a reflection, or measurement, of the construct.

A consistent PLS-SEM algorithm, utilized for reflective models, was used to run a confirmatory factor analysis to determine if survey items loaded on their respective subscales as expected. Confirmatory factor analyses are commonly used in instrument validation to establish if the researcher's conceptualization of constructs are accurate (Lance & Vandenberg, 2002). To establish whether the resulting model was psychometrically sound, the researcher followed the four steps to evaluate reflective measurement models, as described by Hair et al. (2017), including assessing indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. Indicator reliability is established by analyzing the size of the outer loadings. Generally, an outer loading of .70 is suggested when evaluating indicators, although for new scales, outer loadings of .40 to .69 may be acceptable, as those items should be discarded

only when doing so increases the internal consistency reliability or convergent validity (Hair et al., 2017).

Internal consistency reliability refers to whether items that are designed to measure the same construct are consistent in terms of participant responses, supporting the idea that those items are interrelated. In PLS-SEM, internal consistency reliability is measured via composite reliability, rather than the often-utilized Cronbach's alpha (Hair et al., 2017). Cronbach's alpha assumes that indicators have outer loadings that are all the same, which can undervalue internal consistency reliability. Composite reliability is able to account for indicators with different outer loadings. When developing and piloting an instrument, values between .60 and .70 are acceptable indicators of internal consistency reliability.

Convergent validity establishes whether or not items converge to collectively measure their intended construct (Hair et al., 2017). In PLS-SEM, the average variance extracted (AVE) is often used, which is found by calculating the mean of the squared loadings of the items that load on a particular construct. AVE values of .50 and above are preferred, as the value indicates that the construct is responsible for at least half of the variance of the item's outer loadings (Hair et al., 2017).

Lastly, discriminant validity must be determined, meaning that the researcher must establish whether or not constructs are truly unique and not too highly correlated with other constructs (Hair et al., 2017). There are three main techniques for determining discriminant validity in PLS-SEM. First, the Fornell-Larcker criterion helps establish discriminant validity by comparing whether the square root of the AVE values are greater than the construct's correlation with other constructs. Second, cross-loadings are compared to confirm that items do not load onto other constructs as well or better than they load onto their assigned constructs. Finally, the

heterotrait-monotrait ratio (HTMT) is found by reviewing the average of all correlations of items across constructs in relation to the average of item correlations that measure the same construct. HTMT values should be below .90 to for discriminant validity to be established (Hair et al., 2017).

Once the final model was established, the researcher removed the necessary items from the raw data and then loaded the data into IBM SPSS Statistics 27.0 for Windows. Mean scores for the Prescriptive and Developmental scales were created for each participant. The researcher reviewed the overall mean scores for each scale for all participants, followed by the mean scores for each scale among demographic subgroups, in order to identify advisement preferences among and between groups. A one-way ANOVA was then run for each demographic factor to determine if there were statistically significant differences in the Prescriptive and Developmental scale mean scores between demographic subgroups.

Summary

This study sought to establish a validated instrument for assessing academic advising preferences among master's students. The researcher modified a previously-developed instrument, entitled the *Prescriptive/Developmental Preference Scale.* The PDPS had been developed by another researcher in response to concerns about how the *Academic Advising Inventory* assessed prescriptive and developmental advising on a continuum, rather than two separate constructs. The PDPS was originally distributed to undergraduate students only.

The researcher for the current study updated the PDPS to include additional items for the Prescriptive and Developmental subscales. The instrument was then sent to a panel of experts who provided feedback via three focus groups regarding how well the statements in the Modified PDPS reflected their intended construct, and how applicable the statements were for master's

students. After the focus groups concluded and the researcher incorporated the feedback from the panel of experts, the final draft of the Modified PDPS was sent out to master's students in an array of academic programs at the study institution. Students had two weeks to respond to the survey. The panel of experts were compensated for their time, and survey participants had the opportunity to win one of two gift cards in a raffle. After data collection concluded, the researcher conducted a confirmatory factor analysis on the results in SmartPLS to determine if items from the Modified PDPS loaded onto their respective subscales as expected. Reliability and validity analyses were examined to determine if the instrument was psychometrically sound for assessing prescriptive versus developmental advisement preferences.

Chapter IV: Results

Participants

In Phase 1 of data collection for this study, five academic advisement professionals participated in three focus groups; each professional participated in just one focus group. All five participants currently advised master's students at the time of their participation in the focus groups. To ensure anonymity, programs for which the advisement professionals were not identified; however, all participants on the expert panel advised for different programs and represented three different colleges at the study institution.

Of the 1,273 master's students who were contacted, 195 students completed the survey. Some participants had selected "N/A" for all statements, rendering their survey results blank. When those participants' responses were removed from the dataset, 176 participants' responses remained, for a response rate of 13.8%. The majority of participants identified as female (66.5%), and most participants were 25-34 years old (42%). While the sample was racially diverse, most participants identified as White/Caucasian (44.9%), followed by Black/African American (30.7%). Most students attended classes fully online (51.7%) and worked 30 or more hours per week (55.7%). See Table 2 below for more detail on study participants.

Table 2

Descriptive Statistics for Study Sample

	Frequency(n)	Percent(%)
Gender		
Female	117	66.5
Male	54	30.7
Non-binary	2	1.1
Prefer not to say	2	1.1
Age group		
18-24 years	37	21
25-34 years	74	42
35-44 years	37	21
45+ years	27	15.3
Race/Ethnicity		
American Indian or Alaskan Native	1	.6
Asian/Pacific Islander	25	14.2
Black or African African	54	30.7
Hispanic	9	5.1
White/Caucasian	79	44.9
Two or more races	5	2.8
Prefer not to say	2	1.1
Master's Program Modality		
All classes on campus	25	14.2
All classes online	91	51.7
Some classes on campus, some classes online	56	31.8
Employment status (on- or off-campus)		
Not currently employed	21	11.9
Employed and work < 30 hours a week	56	31.8
Employed and work 30 or more hours a week	98	55.7

Findings

This research study focused on two primary research questions. The researcher sought to address the first research question in Phase 1 of the study. The second research question was addressed via analysis of data collected during Phase 2 of the study.

R1: What modifications need to be made to the Prescriptive/Developmental Preference Scale to reliably assess master's students' academic advisement preferences?

Due to scheduling conflicts that precluded one meeting, the researcher held three focus groups. Each focus group resulted in modifications to some statements, although expert panelists were in overall agreement with each other's suggested changes. None of the modified statements from the original PDPS were eliminated. Four items from the PDPS Prescriptive construct were altered for clarity. For example, items regarding being told how to be successful in an academic program and being informed of graduation requirements had examples added to each statement, as experts thought the concepts may be too broad. Items regarding being informed of policies and deadlines that affect students were modified to demonstrate alternative outcomes, i.e., being informed of policies and deadlines that affect students even if they can access the information themselves, as opposed to being informed of policies and deadlines that do not affect students. Six items from the PDPS Developmental construct were altered for clarity, largely due to missing context that may have confounded a participant's interpretation of a word or concept. For example, "I prefer to discuss my goals," was altered to read, "I prefer to discuss my goals for my degree program." Two items from the Developmental construct were altered for appropriateness for master's students:

- The statement, "I prefer to discuss study skills and time management," was perceived as more appropriate for undergraduate students, particularly regarding study skills. Expert panelists viewed "capacity" as more appropriate for master's students, specifically as the concept relates to a student's ability to balance graduate courses with outside obligations.
- The statement, "I prefer to discuss organizations and activities I may be interested in," was also perceived as more appropriate for undergraduate students, who may have more

time and interest in extracurricular activities and student clubs. The statement was altered to include language about professional organizations and networking opportunities, which were viewed as more pertinent to master's students.

Regarding the statements authored by the researcher, three from each construct were removed due to redundancy with other statements. For example, "I prefer to discuss just my immediate academic needs and concerns," was removed due to its perceived overlap with, "I prefer for the discussion to be limited to academics." Of the remaining four statements from each construct that were authored by the researcher, one of the Prescriptive statements was altered to provide more context. "I prefer advisement sessions in which I learn general information," was perceived as too vague and ultimately transformed into, "I prefer to be provided general information that is relevant to my program progression." Two Developmental statements were altered for succintness. For example, "I prefer an advisement relationship that feels personalized to my experience," became, "I prefer an advisement relationship that feels personalized." One Developmental statement was altered to provide additional context: "I prefer advisement sessions that are collaborative," was transformed into, "I prefer a discussion that feels collaborative (i.e., my input affects my advior's recommendations)." See Table 3 for additional details on the process of developing the final survey items.

Table 3

Focus Group Feedback on Survey Statements

Original Version of Statement	Focus Group Feedback	Final Version of Statement
PDPS modified prescriptive		
I prefer to be told what to do to be successful in my academic program.	Missing context; clarify with example	I prefer to be told what to do to be successful in my academic program (e.g., how to perform well in my courses).
I prefer to be told which classes I should take.	Not all programs allow (add N/A option)	I prefer to be told which classes I should take.
I prefer to be told what my graduation requirements are.	Missing context; clarify with example	I prefer to be told what my graduation requirements are (e.g., applying for graduation, remaining coursework).
I prefer to have my schedule planned for me.	Program may require (add N/A option)	I prefer to have my schedule planned for me.
I prefer to be told what electives are best for me.	No modifications	I prefer to be told what electives are best for me.
I prefer for the discussion to be limited to academics.	No modifications	I prefer for the discussion to be limited to academics.
I prefer to be told about policies that may affect me.	Need clarification on alternative	I prefer to be informed about policies that may affect me, even if I have access to that information.
I prefer to be told about important deadlines.	Need clarification on alternative	I prefer to be informed about important deadlines, even if I have access to that information.
PDPS modified developmental		
I prefer to discuss career opportunities.	Add "career planning"	I prefer to discuss career opportunities and career planning.
I prefer to discuss my life outside of school in addition to academics.	No modifications	I prefer to discuss my life outside of school in addition to academics.
I prefer to discuss my goals.	Missing context	I prefer to discuss my goals for my degree program.
I prefer to learn how to find information for myself.	Remove "learn how"	I prefer to find information for myself.
I prefer to discuss my interests and abilities when deciding which classes are right for me.	No modifications	I prefer to discuss my interests and abilities when deciding which classes are right for me.
I prefer to discuss study skills and time management.	Replace "study skills" with "my availability"	I prefer to discuss my availability and time management when deciding which classes are right for me.
I prefer to learn how to make decisions for myself.	Remove "learn how"	I prefer to make decisions for myself
I prefer to discuss organizations and activities I may be interested in.	More career-oriented for master's students	I prefer to discuss professional organizations and networking opportunities relevant to my field.
Prescriptive, authored by researcher		
I prefer advisement sessions that are quick and efficient.	No modifications	I prefer advisement sessions that are quick and efficient.
I prefer an advisement relationship that is similar to what I might experience with a course instructor.	Vague; remove	N/A
I prefer advisement sessions that are instructional.	Redundant; remove	N/A
I prefer to discuss just my immediate academic needs and concerns.	Redundant; remove	N/A
I prefer a more passive role in the discussion.	No modifications	I prefer a more passive role in the discussion.
I prefer advisement sessions in which I learn general information.	Replace "learn" with "provided"	I prefer to be provided general information that is relevant to my program progression.
I prefer an advisement relationship that feels general and applicable to all students in my program/cohort.	No modifications	I prefer an advisement relationship that feels general and applicable to all students in my program/cohort.
Developmental, authored by researcher		
I prefer advisement sessions with a lot of discussion.	No modifications	I prefer advisement sessions with a lot of discussion.
I prefer advisement sessions that include topics beyond just academics.	Redundant; remove	N/A
I prefer advisement sessions that are collaborative.	Missing context	I prefer a discussion that feels collaborative (i.e., my input affects my advisor's recommendations).
I prefer an advisement relationship that is similar to what I might experience with a mentor.	Vague; remove	N/A
I prefer to discuss long-range planning for my academic career.	Redundant; remove	N/A
I prefer an advisement relationship that feels personalized to my experience.	Remove "to my experience"	I prefer an advisement relationship that feels personalized.
I prefer to have an active part in the discussion during an advisement session.	Remove "during an advisement session"	I prefer to have an active part in the discussion.

One other point that was made clear through the focus group sessions was the need for a *Not Applicable* option for student responses. Originally, the researcher planned to have participants rate their agreement on a four-point Likert-type scale, ranging from *Strongly Agree*, to *Strongly Disagree*. Some of the professionals who served on the expert panel explained that the programs for which they advised required advisors to develop schedules for their students, and that students did not have the option to choose their classes. Students who responded to the survey may have still indicated a preference, but for the sake of not forcing an inaccurate response, the *Not Applicable* option was added.

Overall, the majority of the feedback on the survey statements regarded adding words to clarify and provide context to statements, or removing redundant statements. Only the two aforementioned statements in the PDPS Developmental construct elicited feedback regarding appropriateness for master's students. Given these results, there were very few modifications that needed to be made to adapt the PDPS for use with master's students.

The final draft of the Modified PDPS included 12 items per construct, compared to 15 items per construct at the starting point (see Appendix J), for a 24-item instrument. This version included four more items per construct than Yarbrough's original instrument. No further modifications were requested by the panel of experts after the focus groups. As such, the second draft of the Modified PDPS was the final instrument that was distributed to master's students.

R2: What modifications need to be made to the Prescriptive/Developmental Preference Scale to improve construct validity for measuring prescriptive and developmental advisement preferences?

PLS-SEM Results

The researcher generated the first set of results in SmartPLS 4 by loading the 12 Prescriptive items onto one latent variable and the 12 Developmental items onto another latent variable. The visual model can be viewed in Figure 1. As recommended by Hair et al. (2017), the researcher examined outer loadings, specifically for values less than .4. The Prescriptive construct had four indicators with low outer loadings:

- Q4. "I prefer to have my schedule planned for me."
    - Outer loading: .325
- Q6. "I prefer for the discussion to be limited to academics."
    - Outer loading: -.078
- Q10. "I prefer a more passive role in the discussion."
    - Outer loading: .094
- Q12. "I prefer an advisement relationship that feels generic and applicable to all students in my program/cohort."
    - Outer loading: .212

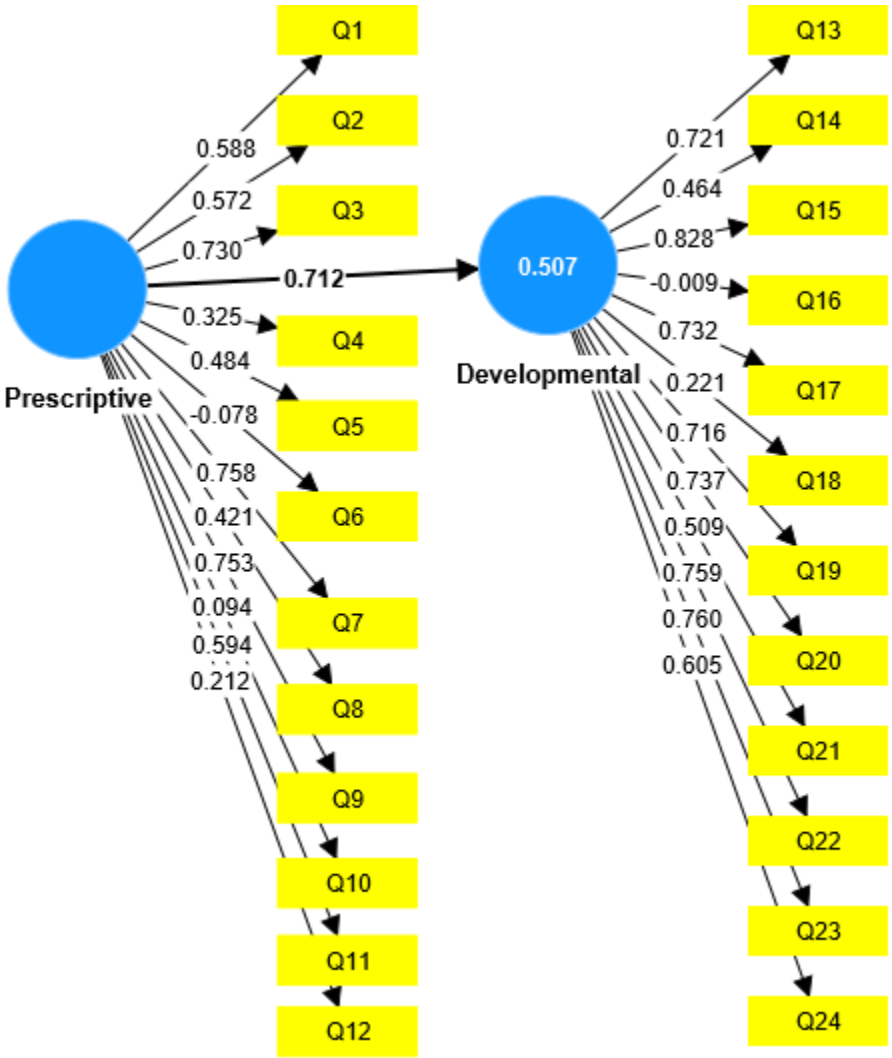
The Developmental construct had two indicators with low outer loadings:

- Q16. "I prefer to find information for myself."
    - Outer loading: -.007
- Q18. "I prefer to make informed decisions for myself."
    - Outer loading: .157

The composite reliability values for both constructs were high in the first model (.85 for Prescriptive and .91 for Developmental). However, the average variance extracted, or AVE, values were below the .5 threshold (.27 for Prescriptive and .40 for Developmental).

Figure 1

First PLS-SEM Model, All Indicators

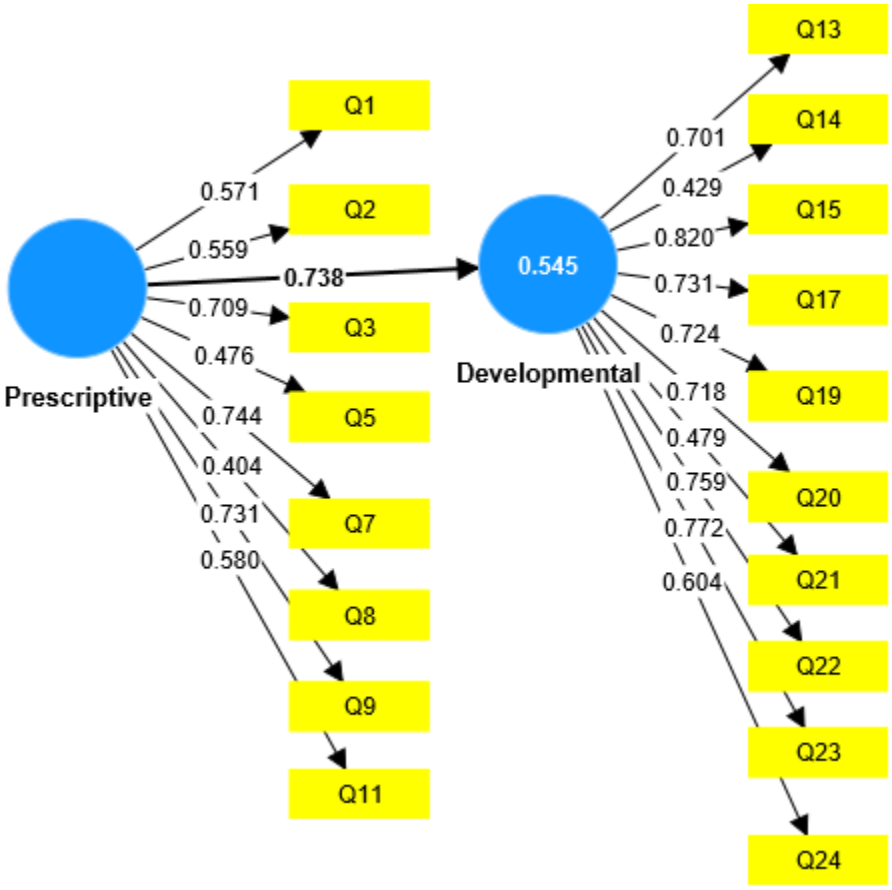


At this point, the researcher moved forward with removing all indicators with outer loadings less than .4 and repeated the analysis, generating the second model, seen in Figure 2.

Although the outer loadings could all be deemed as acceptable at this point, convergent validity could not be established. While composite reliability values were still high (.82 for Prescriptive and .90 for Developmental), AVE values still did not meet the minimum threshold of .5 (.37 for Prescriptive and .47 for Developmental).

Figure 2

Second PLS-SEM Model, Indicators with > .4 Outer Loadings



The researcher continued to remove one item at a time from each construct and repeated the analysis until construct reliability and validity values were in the preferred ranges (see Table 4). Indicators were removed individually based on the lowest remaining outer loading. The order of removal for the Prescriptive construct was Q8, Q5, Q2, Q1, and finally, Q11. The order of

removal for the Developmental construct was Q14 and then Q21. Three remaining indicators comprised the Prescriptive construct, and eight remaining indicators comprised the Developmental construct in the model in which both constructs reached AVE values of .5 or higher (see Figure 3).

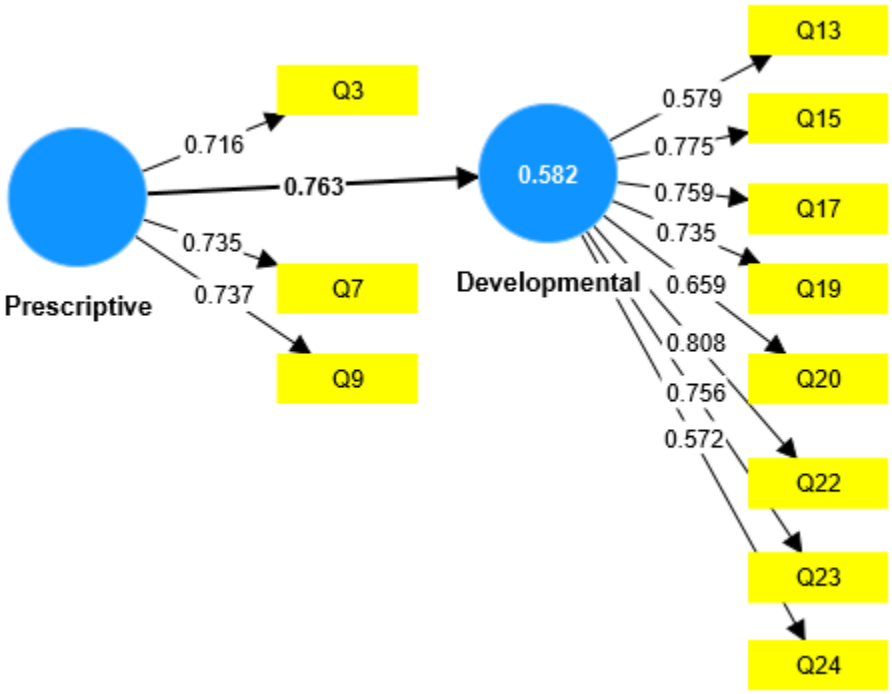
Table 4

Construct Reliability and Validity Values of PLS-SEM Models

Indicators Loaded on Construct	Composite Reliability	AVE Value
Prescriptive		
Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12	**.85**	.27
Q1, Q2, Q3, Q5, Q7, Q8, Q9, Q11	**.83**	.37
Q1, Q2, Q3, Q5, Q7, Q9, Q11	**.83**	.40
Q1, Q2, Q3, Q7, Q9, Q11	**.81**	.41
Q1, Q3, Q7, Q9, Q11	**.79**	.42
Q3, Q7, Q9, Q11	**.77**	.44
Q3, Q7, Q9	**.77**	**.53**
Developmental		
Q13, Q14, Q15, Q16, Q17, Q18, Q19, Q20, Q21, Q22, Q23, Q24	**.91**	.40
Q13, Q14, Q15, Q17, Q19, Q20, Q21, Q22, Q23, Q24	**.91**	.47
Q13, Q15, Q17, Q19, Q20, Q21, Q22, Q23, Q24	**.90**	.48
Q13, Q15, Q17, Q19, Q20, Q22, Q23, Q24	**.90**	**.51**

Figure 3

PLS-SEM Model with AVE Values > .5



A minimum of three items per construct is recommended for establishing convergent validity (Marsh et al., 1998), so both constructs technically met the minimum number of indicators at this point in the analysis. However, some researchers recommend at least five items per construct (Knekta et al., 2019). While the common minimum standard for an acceptable AVE value is .5, some researchers have stated that AVE values above .4 are also acceptable (Psailla & Wagner, 2007). Further, Fornell and Larcker (1981) state that AVE values less than .5 are acceptable if composite reliability values are over .6, and specifically, researchers should consider if eliminating items to increase AVE values has a deleterious effect on composite reliability values. In the case of the Prescriptive construct, the AVE value reached .4 with the seven-indicator construct. Composite reliability values decreased when the model went from a seven-indicator construct to a six-indicator construct. Because of this effect, the final

recommended model for the Prescriptive construct is the seven-indicator construct, as seen in Figure 4.

Recommending a final model for the Developmental construct is more complex. With each item deletion, composite reliability values decreased very slightly, while AVE values increased from .40 to .51 through repeated analyses. Given the theory applied to the Prescriptive construct, the initial 12-indicator construct could be deemed acceptable as-is. However, in addition to convergent validity, constructs must have discriminant validity. While Heterotrait-monotrait values (see Table 5) and indicator cross-loadings were acceptable in all models (see Table 6), the Fornell-Larcker criterion, which is the most stringent measure of discriminant validity, did not meet criteria in any of the models (see Table 7). While this finding does not negate the instrument's discriminant validity, due to the other two measures, the researcher assessed the effect of item deletion on the Fornell-Larcker criterion in each model. With the seven-indicator Prescriptive construct and eight-indicator Developmental construct model, the Fornell-Larcker criterion was considerably closer to meeting criteria than the seven-indicator Prescriptive construct and 12-indicator Developmental construct model. Finally, a Developmental construct with eight indicators makes for a more equitable distribution of items per construct than a Developmental construct with 12 indicators. As such, the final recommended model for the Developmental construct is composed of eight indicators, as seen in Figure 4. A list of the statements included in each construct for the final Modified PDPS can be reviewed in Table 8.

Figure 4

Final Recommended PLS-SEM Model for Modified PDPS

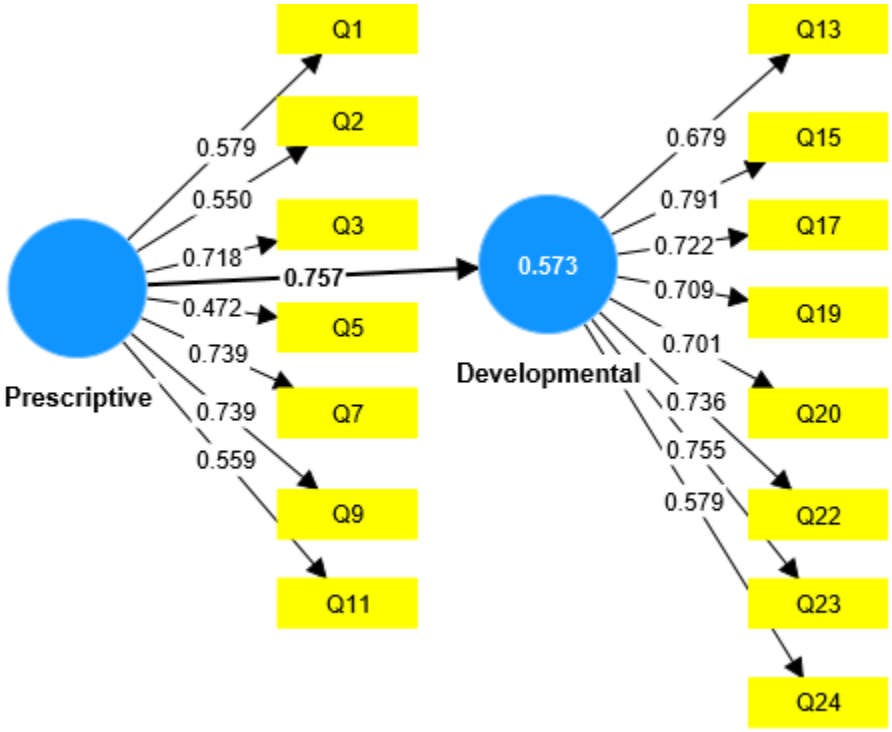


Table 5

Heterotrait-mono Trait Ratio (HTMT) Values for Various PLS-SEM Models

	Heterotrait-monotrait ratio (HTMT)
Prescriptive <-> Developmental	
First Model (All Indicators)	.65
Second Model (Indicators >.4)	.72
Model with AVE Values >.5	.76
Final Recommended Model	.74

Table 6

Cross-loadings for Various PLS-SEM Models

	All Indicators		Outer Loadings > .4		AVE Values > .5		Final Recommended Model	
	Prescriptive	Developmental	Prescriptive	Developmental	Prescriptive	Developmental	Prescriptive	Developmental
Q1	.588	.418	.571	.422			.579	.438
Q2	.572	.407	.559	.412			.550	.416
Q3	.73	.52	.709	.524	.716	.546	.718	.544
Q4	.325	.231						
Q5	.484	.345	.476	.351			.472	.357
Q6	-.078	-.055						
Q7	.758	.54	.744	.549	.735	.561	.739	.559
Q8	.421	.3	.404	.298				
Q9	.753	.536	.731	.539	.737	.562	.739	.56
Q10	.094	.067						
Q11	.594	.423	.58	.428			.559	.423
Q12	.212	.151						
Q13	.513	.721	.517	.701	.442	.579	.514	.679
Q14	.331	.464	.317	.429				
Q15	.59	.828	.605	.82	.591	.775	.598	.791
Q16	-.007	-.009						
Q17	.521	.732	.54	.731	.579	.759	.547	.722
Q18	.157	.221						
Q19	.509	.716	.535	.724	.561	.735	.537	.709
Q20	.524	.737	.53	.718	.503	.659	.531	.701
Q21	.362	.509	.354	.479				
Q22	.54	.759	.56	.759	.616	.808	.557	.736
Q23	.541	.76	.57	.772	.577	.756	.571	.755
Q24	.431	.605	.446	.604	.436	.572	.438	.579

Table 7

Fornell-Larcker Criterion for Various PLS-SEM Models

	All Indicators		Outer Loadings > .4		AVE Values > .5		Seven-Item Prescr. & 12-Item Dev. Model		Final Recommended Model	
	Dev.	Prescr.	Dev.	Prescr.	Dev.	Prescr.	Dev.	Prescr.	Dev.	Prescr.
Dev.	.635		.685		.710		.632		.711	
Prescr.	.712	.523	.738	.608	.763	.729	.736	.630	.757	.630

Note. Dev. stands for Developmental, while Prescrip. stands for Prescriptive.

Table 8

Constructs and Corresponding Statements in Final Modified PDPS

Prescriptive	Developmental
Q1. I prefer to be told what to do to be successful in my academic program (e.g., how to perform well in my courses).	Q13. I prefer to discuss career opportunities and career planning.
Q2. I prefer to be told which classes I should take.	Q15. I prefer to discuss my goals for my degree program.
Q3. I prefer to be told what my graduation requirements are (e.g., applying for graduation, remaining coursework).	Q17. I prefer to discuss my interests and abilities when deciding which classes are right for me.
Q5. I prefer to be told what electives are best for me.	Q19. I prefer to discuss my availability and time management when deciding which classes are right for me.
Q7. I prefer to be informed about policies that may affect me, even if I have access to that information.	Q20. I prefer to discuss professional organizations and networking opportunities relevant to my field.
Q9. I prefer to be informed about important deadlines, even if I have access to that information.	Q22. I prefer a discussion that feels collaborative (i.e., my input affects my advisor's recommendations).
Q11. I prefer to be provided general information that is relevant to my program progression.	Q23. I prefer an advisement relationship that feels personalized.
	Q24. I prefer to have an active part in the discussion.

Comparison of Item Loadings between PDPS and Modified PDPS

The results of the original *Prescriptive/Developmental Preference Scale* (Yarbrough, 2010) were compared to the results of this study for the Modified PDPS, although doing so has its limitations. Because there was not a final recommended model for the Prescriptive and Developmental subscales in Yarbrough's study due to poor fit, the initial loadings for each construct in the original PDPS are compared to the final recommended model for the Modified PDPS, with an outer loading threshold of .4 for each instrument. Additionally, statements in the PDPS were changed for purposes of this study. Some statements were altered only in terms of the beginning of the statement, i.e., "My ideal advisor would…" versus "I prefer…" Other statements had significant alterations for clarity or relevance to master's students.

The Prescriptive construct within the PDPS contained five statements with outer loadings that were less than .4:

- "My ideal advisor would tell me what to do."
    - Modified PDPS corresponding statement: Q1. "I prefer to be told what to do to be successful in my academic program (e.g., how to perform well in my courses)."
- "My ideal advisor would tell me which classes I should take."
    - Modified PDPS corresponding statement: Q2. "I prefer to be told which classes I should take."
- "My ideal advisor would plan my schedule for me."
    - Modified PDPS corresponding statement: Q4. "I prefer to have my schedule planned for me."
- "My ideal advisor would tell me what electives are best for me."

    - Modified PDPS corresponding statement: Q5. “I prefer to be told what electives are best for me.”
- “My ideal advisor would talk only about academics.”
    - Modified PDPS corresponding statement: Q6. “I prefer for the discussion to be limited to academics.”

Three of the above corresponding statements are included in the final recommended model of the Modified PDPS (Q1, Q2, Q5). The other two corresponding statements (Q4, Q6) are not included in the final recommended model of the Modified PDPS due to insufficient outer loadings. The Developmental construct within the PDPS contained two statements with outer loadings that were less than .4:

- “My ideal advisor would talk to me about career opportunities.”
    - Modified PDPS corresponding statement: Q13. “I prefer to discuss career opportunities and career planning.”
- “My ideal advisor would talk with me about my goals.”
    - Modified PDPS corresponding statement: Q15. “I prefer to discuss my goals for my degree program.”

Both of the above Modified PDPS corresponding statements had adequate outer loadings and are included in the final recommended model for the Modified PDPS. The Prescriptive construct within the PDPS contained three statements with outer loadings that were .4 or above:

- “My ideal advisor would make sure I know graduation requirements.”
    - Modified PDPS corresponding statement: Q3. “I prefer to be told what my graduation requirements are (e.g., applying for graduation, remaining coursework).”

- "My ideal advisor would tell me about policies that may affect me."
    - Modified PDPS corresponding statement: Q7. "I prefer to be informed about policies that may affect me, even if I have access to that information."
- "My idea advisor would tell me about important deadlines."
    - Modified PDPS corresponding statement: Q9. "I prefer to be informed about important deadlines, even if I have access to that information."

All three of the above Modified PDPS corresponding statements had adequate outer loadings and are included in the final recommended model for the Modified PDPS. Finally, the Developmental construct within the PDPS contained six statements with outer loadings that were .4 or above:

- "My ideal advisor would be interested in my life outside of school."
    - Modified PDPS corresponding statement: Q14. "I prefer to discuss my life outside of school in addition to academics."
- "My ideal advisor would help me learn to find information for myself."
    - Modified PDPS corresponding statement: Q16. "I prefer to find information for myself."
- "My ideal advisor would talk to me about my interests and abilities to help me plan classes."
    - Modified PDPS corresponding statement: Q17. "I prefer to discuss my interests and abilities when deciding which classes are right for me."
- "My ideal advisor would teach me how to make decisions for myself."
    - Modified PDPS corresponding statement: Q18. "I prefer to make informed decisions for myself."

- "My ideal advisor would help me with study skills and time management."
    - Modified PDPS corresponding statement: Q19. "I prefer to discuss my availability and time management when deciding which classes are right for me."
- "My ideal advisor would recommend activities and organizations I might enjoy."
    - Modified PDPS corresponding statement: Q20. "I prefer to discuss professional organizations and networking opportunities relevant to my field."

Of the above statements, three of the corresponding statements within the Modified PDPS are included in the final recommended model (Q17, Q19, and Q20). The remaining three statements within the Modified PDPS are not included in the final recommended model due to insufficient outer loadings.

Advisement Preferences among Participants and Subgroups

The survey data were loaded into SPSS 27.0 for Windows to examine advisement preferences among participants and subgroups identified by the demographic questionnaire. Only the construct indicators included in the final recommended model of the Modified PDPS were included in the analysis. The seven indicators for the Prescriptive construct were averaged to create an overall mean Prescriptive score for each participant, and the eight indicators for the Developmental construct were averaged to create an overall mean Developmental score for each participant. Within the possible response options for each statement, *Strongly Agree* was coded as a "1," while *Strongly Disagree* was coded as a "4." Because *Strongly Agree* indicates higher preference for the statement, a lower score indicate higher preference for the statement. As statements converge to reflect their respective constructs, the researcher inferred that whichever scale had the lower mean score indicated the style of advisement that the participant preferred.

The overall mean score for all participants on the Prescriptive scale was 1.60, while the overall mean score for all partcipants on the Developmental scale was 1.65. Thus, this study's sample of master's students indicated an overall preference for prescriptive advisement. See Table 9 for a list of mean scores for each scale for participants and all demographic subgroups.

Next, preferences by gender identity were examined. Females showed an overall preference for prescriptive advisement, with an average Prescriptive score of 1.57 versus an average Developmental score of 1.66. Males showed nearly equal preference for each advisement style, reporting a very slight preference for developmental advisement, with an average Prescriptive score of 1.65 and average Developmental score of 1.64. The remaining participants who either identified as non-binary or preferred not to say were grouped together due to small sample size. This combined group's average Prescriptive score was 1.97 and average Developmental score was 1.65, indicating preference for developmental advisement. A one-way ANOVA showed no statistically significant differences between gender groups for either the Prescriptive or Developmental scales.

Third, age groups were reviewed. Scores on both scales trended upward as age increased, indicating lower preference for both styles of advisement. All age groups had lower scores and therefore higher preference for prescriptive advisement, with the exception of the 18-24 years group, who reported a slight preference for developmental advisement, with a Prescriptive score of 1.55 versus a Developmental score of 1.53. The differences in scores became more pronounced as age increased as well. The mean difference in score was .02 for the 18-24 years age group, followed by a .06 mean score difference for the 25-34 years age group, a .09 mean score difference for the 35-44 years age group, and finally, a .10 mean score difference for the

45+ years age group. A one-way ANOVA showed no statistically significant differences in Prescriptive and Developmental scale scores between any of the age groups.

Fourth, preferences by reported race/ethnicity were examined. Due to low sample sizes, participants who identified as *American Indian or Alaskan Native*, *Two or more races*, or preferred not to say, were grouped together. The *Asian/Pacific Islander* group preferred developmental advisement and had a mean score difference of .04. All remaining race/ethnicity groups preferred prescriptive advisement. The *Black or African American* group had a mean score difference of .06; the *Hispanic* group had a mean score difference of .07; and the *White/Caucasian* group had a mean score difference of .08. The mean scores for the combined group with low sample sizes showed nearly equal preferences, with a slight preference for prescriptive advisement, mean score difference of .02. A one-way ANOVA showed no statistically significant differences in Prescriptive and Developmental scale scores between any of the race/ethnicity groups.

Master's program modalities were reviewed next. Students whose classes were either completely on-campus or hybrid (a mixture of on-campus and online) tended to prefer developmental advisement. Although the mean score on the Developmental scale indicated higher preference for the hybrid group (1.57 versus the on-campus group's mean score of 1.68), the mean score differences between the Prescriptive and Developmental scales were more pronounced for the on-campus group than the hybrid group (.09 versus .05, respectively). Students enrolled in fully-online programs preferred prescriptive advisement, with the largest mean score difference (.16) between the Prescriptive and Developmental scales of any demographic subgroup in the study. A one-way ANOVA did not show statistically significant differences between modality groups for the Prescriptive scale. There was a statistically

significant difference in Developmental scale scores, specifically between the fully-online and hybrid groups, $F(2, 169) = 3.408$, $p = .035$, $\eta^2 = .04$.

Finally, preferences among students with different employment statuses were explored. Students who were unemployed, as well as those who worked 30 or more hours a week, preferred prescriptive advisement. The mean score difference between the Prescriptive and Developmental scales was greater among the employed group (.08) than the unemployed group (.05). Students who were employed less than 30 hours a week showed nearly equal preference between the two advisement styles, with a very slight preference for developmental advisement, mean score difference of .01. ANOVA results showed statistically significant differences between groups for both Prescriptive and Developmental scale scores, $F(2, 172) = 3.859$, $p = .023$, $\eta^2 = .04$ and $F(2, 172) = 4.048$, $p = .019$, $\eta^2 = .05$, respectively. In particular, mean scores on the Prescriptive scale were significantly different between students who were unemployed and students employed less than 30 hours a week ($F(2, 172) = 3.859$, $p = .024$), as well as students who were unemployed and students employed 30 or more hours a week ($F(2, 172) = 3.859$, $p = .029$). Mean scores on the Developmental scale were significantly different between students who were unemployed and students employed 30 or more hours a week ($F(2, 172) = 4.048$, $p = .014$).

Table 9

Advisement Preferences by Demographic Subgroups

		Prescriptive Scale			Developmental Scale		
	n	*M*	*SD*	η^2	*M*	*SD*	η^2
All Participants	176	1.60	.48		1.65	.50	
Gender				.02			.04
Female	117	1.57	.42		1.66	.45	
Male	54	1.65	.56		1.64	.57	
Combined Group (Non-binary and Prefer not to answer)	4	1.96	.88		1.60	.91	
Age				.01			.03
18-24 years	37	1.55	.37		1.53	.39	
25-34 years	74	1.58	.51		1.64	.56	
35-44 years	37	1.65	.50		1.74	.46	
45 years+	27	1.65	.55		1.75	.48	
Race/Ethnicity				.05			.06
Asian/Pacific Islander	25	1.51	.39		1.47	.45	
Black or African American	54	1.56	.48		1.62	.45	
Hispanic	9	1.40	.29		1.47	.57	
White or Caucasian	79	1.68	.50		1.76	.50	
Combined Group (American Indian or Alaskan Native, Two or more races, Prefer not to say)	8	1.64	.73		1.66	.68	
Modality				.02			.04
On-campus	25	1.77	.37		1.68	.49	
Hybrid	56	1.57	.39		1.52	.41	
Online	91	1.58	.56		1.74	.54	
Employment Status				.04			.05
Not employed	21	1.33	.35		1.38	.46	
Employed < 30 hours	56	1.66	.41		1.65	.39	
Employed 30+ hours	98	1.63	.53		1.72	.54	

Summary

The focus group in Phase 1 of this study resulted in a 24-item instrument, with 12 items per construct. Six items were deleted from the first draft of the Modified PDPS, and two

statements were altered to be appropriate for master's students. In Phase 2, the focus group-approved version of the Modified PDPS was disseminated to over 1,200 currently-enrolled master's students at a southeastern university. The 176 responses that were received met the minimum sample size threshold for PLS-SEM analysis. Survey responses were analyzed via SmartPLS 4 to determine if items successfully loaded on the Prescriptive and Developmental constructs as expected. The researcher generated seven models for the Prescriptive construct and four models for the Developmental construct before composite reliability and AVE values were both in the desired range. Ultimately, the researcher opted to compromise on a lower AVE value for the Prescriptive construct in order to have seven indicators, rather than three. The final Developmental construct contained eight indicators.

A comparison of which items had loaded on constructs within the original *Prescriptive/Developmental Preference Scale* versus the Modified PDPS showed both similarities and differences, which is not surprising, given that all original PDPS items were altered to some extent for this study. Regarding advisement preferences, the sample of master's students in this study overall preferred prescriptive advisement. A series of one-way ANOVAs demonstrated that there were statistically significant differences within the master's program modality and employment status groups. In particular, fully-online students reported a significantly lower preference for developmental advisement than hybrid students; unemployed students reported a significantly lower preference for prescriptive advisement than both groups of employed students; and students who were employed 30 or more hours a week reported a significantly lower preference for developmental advisement than unemployed students. Overall, this study produced a 15-item instrument that is statistically reliable and valid, the results of

which indicate that master's students may prefer prescriptive advisement, particularly if they are enrolled in an online program or working more than 30 hours a week.

Chapter V: Discussion

Summary of the Study

This research study aimed to validate a quantitative instrument for use in assessing academic advising preferences among master's students. The dearth of available, validated instruments for assessing advisement preferences, particularly among students outside an undergraduate population, demonstrated a need for further research. A focus group of academic advising professionals reviewed a 30-item survey, which was a modified version of the *Prescriptive/Developmental Preference Scale* (Yarbrough, 2010), for its appropriateness in assessing prescriptive and developmental advisement preferences among master's students. Edits and adjustments that were made by the panel of experts yielded a 24-item instrument that was distributed to over 1,200 master's students at a mid-sized university in the Southeast. An analysis of responses from the 176 participants produced a 15-item instrument that was statistically reliable and valid.

Regarding the first research question, "What modifications need to be made to the *Prescriptive/Developmental Preference Scale* to reliably assess master's students' academic advisement preferences?" two statements were modified to be more relevant for a master's student population. Both statements were included in the final recommended model of the Modified PDPS, indicating that expert panelists' recommendations were supported. Gathering feedback from master's students as well may shed light as to whether additional modifications could be made for statements to be a better fit for a master's student population.

For the second research question, "What modifications need to be made to the *Prescriptive/Developmental Preference Scale* to improve construct validity for measuring prescriptive and developmental advisement preferences?" there are several important points to

consider. Within the final recommended model, there were seven items that comprise the Prescriptive scale and eight items that comprise the Developmental scale. Consistent with Yarbrough's findings (2010), the Prescriptive construct was more difficult to capture, as fewer items had adequate outer loadings in the initial analysis. The final recommended Prescriptive scale was reliable and valid but could be considered less so than the Developmental scale, as the researcher compromised on lower AVE values in exchange for a Prescriptive construct with a greater number of items. This decision was the most appropriate, as three items yield far less data on a student's advisement preferences than seven items, but the concept of prescriptive advisement continues to be somewhat elusive. Additionally, multiple statements that did not have adequate outer loadings on the Prescriptive construct were judged, by the researcher and the expert panelists, to be considered "classic" prescriptive advisement, based on literature published by the researchers who originally coined the term, e.g.:

- Q4. "I prefer to have my schedule planned for me."
    - Outer loading: .325
- Q6. "I prefer the discussion to be limited to academics."
    - Outer loading: -.078
- Q10. "I prefer to have a more passive role in the discussion."
    - Outer loading: .094

Q6, in particular, encapsulated the literature's description of prescriptive advisement most succinctly, as this form of advisement specifically did not venture outside of academics. However, this statement had the lowest outer loading of all the statements and was even slightly inversely correlated to the Modified PDPS's Prescriptive construct. This outcome may indicate that the construct may represent a concept that is not actually prescriptive advisement at all.

Another explanation may be that prescriptive advisement is conceptually different for master's students versus undergraduate students.

Interestingly, the statement, "I prefer advisement sessions that are quick and efficient," did not load onto the Prescriptive construct in the final recommended model for the Modified PDPS. This statement was newly developed for this study due to the busy nature of master's students' lives, given their higher likelihood to work full-time and have dependents to care for than undergraduate students. The outer loading was sufficient in the original analysis for a new instrument (.421), but the item was removed as the researcher sought to achieve an adequate AVE value for the Prescriptive construct. Future studies might show that this or a similar statement is, in fact, relevant. An alternative explanation is that master's students are less concerned about the time spent in advisement sessions than the content covered. The word *quick* may indicate flippancy or a sense of detachment, which may have given the statement a negative connotation.

This study also made use of the theory that prescriptive and developmental advising are best measured as two separate constructs, rather than opposites measured on a continuum. The researchers who developed and honed the concepts of prescriptive and developmental advisement approached their work with a predetermination that developmental advisement was superior (Crookston, 1972; Winston & Sandor, 1984). They corroborated their conceptualizations by having undergraduate students inventory characteristics of their current advisement experiences and comparing those inventories to the researchers' observations. The reality, however, is that implicit bias may still have been present in the way the two forms of advisement were originally measured. That is, the original concept of prescriptive advisement may be inherently negative, in that its characteristics connote a lack of care. The literature is

clear that students want an advisor who exhibits empathy (Naylor, 2007; Grites, 2013), but advisor disposition is not necessarily a reflection of advisement style (Weir et al., 2005). This study attempted to separate the two by reframing statements to reflect a student's preferred type of advisement experience, rather than a student's preferred disposition for their academic advisor, but more research may need to be conducted to further disentangle advising styles from an advisor's personality. Although comparing results from this study to one that utilized the AAI is not possible due to the Modified PDPS's altered statements and different target population, multiple demographic subgroups expressed nearly equal preferences for both prescriptive and developmental preferences. These outcomes would not have been possible if participants were forced to choose between one advisement style or the other when measured on a continuum. As such, treating the two advisement styles as separate constructs, rather than opposites of one another, may be the best method of measurement.

Another observation was that some items loaded onto constructs in Yarbrough's study that did not load onto constructs in this research study, and vice versa. As previously mentioned, each original statement from the PDPS was modified so that mentions of the academic advisor were removed, except for items that specifically discuss the student-advisor relationship. Items were instead written so that participants rate their preferences for what happens in the advisement session, rather than what an ideal academic advisor would do. Additionally, multiple items were modified during the focus group, which may have changed the way participants interpreted and responded to statements. For example, the statements regarding a student's finding information for themselves and making decisions for themselves loaded onto the Developmental constructs in the original PDPS but did not load onto the Developmental constructs in the Modified PDPS. The expert panel opted to remove the words "learn how" from

each statement, so the original statement, “My ideal advisor would teach me how to find information for myself,” was first transformed into, “I prefer to learn how to find information for myself,” and finally, “I prefer to find information for myself.” The original statement, “My ideal advisor would teach me how to make decisions for myself,” was first transformed into, “I prefer to learn how to make decisions for myself,” and finally, “I prefer to make decisions for myself.” Developmental advisement was originally compared to a form of teaching (Crookston, 1972). Removing the words “learn how” from the final Modified PDPS may have changed the statements’ relevance to the construct altogether.

Regarding advisement preferences, a notable outcome was the overall preference for prescriptive advisement. For advisors who have been taught that developmental advisement is inherently superior to prescriptive advisement, these findings are impactful. Further, unlike previous research, females reported a preference for prescriptive advisement over males, although the result was not statistically significant. While there were no statistically significant results between age or race/ethnicity groups, there were statistically significant findings for the program modality and employment status groups. In particular, mean scores on the Developmental scale were significantly lower for the hybrid group than the online group, indicated higher preference among the hybrid group. While employment status did seem to have an impact on advisement preferences, the differences between groups may not be particularly meaningful. Students who were unemployed reported significantly higher preference on *both* scales than students who were employed 30 or more hours a week. In other words, results would seem to indicate that unemployed students were more likely to choose response options on the Modified PDPS that indicated higher agreement regardless of the construct. However, the overall preference for prescriptive advisement among students who work at least 30 hours a week may

still be important, specifically as to how this factor intersects with being enrolled in an online program. Of the 91 students who were enrolled in a fully-online program, 68 of them (75%) worked 30 or more hours a week. This commonality may have implications for perceptions of prescriptive advisement and its utility. Rather than an advisement style that does not make room for student input and goals, prescriptive advisement may be preferred among students who do not necessarily need as much advisor input and are already aware of how their academic program relates to their goals.

Limitations of the Study

One limitation of this study was that results are confined to one institution. While the sample size met its minimum threshold for the required analysis, master's students at the study institution may not be reflective of master's students at a larger or smaller university, or universities in other parts of the United States. Further, the researcher did not have participants self-identify their programs of study; academic advising preferences may be influenced by the type of master's program in which a participant is enrolled. This study also did not have participants identify their stage in their master's program (e.g., first year versus second year). Some research on undergraduate students has demonstrated that advisement preferences may shift over time (Smith, 2002). Perhaps a first-year student would report different advisement preferences than a second-year student. Although every currently-enrolled master's student at the study institution received an invitation to complete the survey, the researcher was unaware of where the participants who responded to the survey were in their degree program progression.

This study also made no assessment of participants' previous experiences with academic advising. Participants who had positive experiences with undergraduate advisors, for example, may have expressed different preferences than master's students who had a poor experience in

their undergraduate program (or even are currently having an unsatisfactory experience with their graduate advisor). Although the literature purports that students overall value academic advisement as an important factor in degree progression and attainment, assessing a students' overall attitudes toward advisement and comparing those results to their advisement preferences may help yield additional insights.

Finally, the institution in this research study had very few programs which utilized professional staff advisors. According to the central advising office, only two master's programs had staff advisement coordinators; the remaining graduate advisors were program faculty. Although the intent of the Modified PDPS is to be of use to professional staff advisors and faculty advisors alike, experiences and preferences may differ among students who are advised by faculty versus staff. The results of this study may not be generalizable to a sample of students who are largely advised by professional staff advisors.

Recommendations for Future Research

Research on master's students' academic advisement preferences may further benefit from qualitative input from master's students. This study relied on a focus group composed of academic advisors to develop an instrument. While advisors are subject matter experts in forms of academic advisement that are delivered, master's students are experts in their advisement preferences. Further, there may be differences in interpretation of concepts between advisors and students. Advisors who contributed to this study (including the researcher) attempted to operationalize two latent constructs. While the target population of master's students was at the forefront as instrument statements were being developed, the reality is that master's students may interpret the Modified PDPS differently than the expert panel intended. Hosting a focus group

with master's students from various disciplines may elicit additional feedback that would help researchers further refine the items within the Modified PDPS.

One of the original catalysts for this study was the history of the *Academic Advising Inventory* being utilized for undergraduate students only (as far as is indicated in published research). The Modified PDPS was altered from the original *Prescriptive/Developmental Preference Scale* to be appropriate for master's students, but those alterations were fairly minor and included rewording of only two statements. Additional research may benefit from distributing the Modified PDPS to students at other stages in their educational careers to see if those students respond to the two aforementioned statements differently than master's students. Further, this study intentionally focused on master's students because they have been largely overlooked in advisement preferences literature, and because master's students and doctoral students are not necessarily similar just because both groups are at the graduate level. However, there is not a wealth of information about doctoral students' advisement preferences, either. Including doctoral students in the sample may help determine whether the Modified PDPS is also appropriate for use with graduate students who are not enrolled in master's programs.

Finally, the complexity of building a reliable and valid construct that reflects prescriptive advisement demonstrates a need for greater insight into this advisement style. As previously mentioned, statements that were considered to be classic characteristics of prescriptive advisement did not load onto the Prescriptive construct in this study. Additionally, the overall preference for prescriptive advisement among this sample of master's students, and the pronounced preference for prescriptive advisement among fully-online master's students (the majority of whom are employed at least 30 hours a week) challenges the idea of an advisor-centric method, in which students are not prepared to make decisions for themselves. Rather,

students who have the self-discipline to complete a graduate program in an online format, many while working full-time, may view the straightforward nature of prescriptive advisement as preferable *because* they are capable of making decisions without much advisor input.

Implications of the Study

With few exceptions, previous research on academic advisement preferences has demonstrated that undergraduate students prefer developmental advisement (Byrd & Kerns, 2019; Grites, 2013; Winston & Sandor, 1984). These findings have largely been extrapolated to all students because research on academic advisement preferences among non-undergraduate students is limited. Results from this study indicated that master's students expressed an overall preference for prescriptive advisement, with exceptions for a few demographic subgroups. Further, students enrolled in 100% online master's programs (the majority of whom were employed at least 30 hours a week) had the largest difference in Prescriptive and Developmental mean scores of any demographic subgroup, indicating that master's program modality may be a predictor of a preference for prescriptive advisement. Since the start of the COVID-19 pandemic in 2020, the demand for online degree programs has increased, particularly at the graduate level (McKenzie, 2021). As institutions of higher education continue to expand online degree offerings to meet market demand, professionals who advise master's students may need to consider whether an adjustment to their advisement styles is in order, as students enrolled in online master's programs (or online programs, period) may have different advisement preferences and needs.

The other major implication of this research study is the resulting product of a statistically reliable and valid instrument for assessing academic advisement preferences among master's students. Academic advisement professionals who wish to survey their master's

students to inform their own advisement, or researchers who wish to further research on master's students' advisement preferences, could utilize this quantitative instrument to do so. The Modified PDPS may have identified characteristics of prescriptive advisement that are different for master's students than undergraduate students; if the construct truly does differ across degree levels (and particularly because master's students may prefer prescriptive advisement over developmental advisement), that information is valuable for understanding what master's students want and need from their academic advisors.

Conclusion

Academic advisement plays a critical role in student success. The process of completing a college degree is not necessarily intuitive, and students need empathetic, invested advisors to guide them. While advisors may adhere to a certain style of advisement, student development theories have demonstrated that even students in the same degree program can be at different stages of development and have different needs. A one-size-fits-all-approach to advisement may exclude some students whose preferences are different from what their advisors offer. Even more problematic is how academic advisement research has focused nearly exclusively on undergraduate students, the experiences of whom cannot necessarily be extrapolated to non-graduate students.

One way to gather data efficiently on student advisement preferences is by means of a standardized instrument. Instrument validation is an arduous undertaking. The process to ensure that surveys are reliable and valid requires a considerable investment of time and effort. The alternative, however, is an instrument that may include items that are interpreted differently than the author intended. Items may also converge to reflect a different construct than the author intended. This study demonstrated that multiple iterations, as well as input from multiple

stakeholders, were required in order to develop an instrument that is psychometrically sound. Even then, additional research may be necessary to validate use with other groups, as well as continuing to edit items based on feedback from the target audience.

This study produced a quantitative instrument for assessing master's students' academic advisement preferences. The Modified PDPS may benefit from additional refinement, but the instrument could reliably be used in its current state. While the outcome and utility of a survey that did not previously exist is in itself a success, results also highlighted possible differences between master's students' advisement preferences and previous research on undergraduate students' advisement preferences, most notably being the overall preference for prescriptive advisement. While the differences in mean scores in the two advisement scales were by no means vast, the results of this study challenge the idea that prescriptive advisement is an extension of high school guidance counseling. Rather, master's students may be a different type of student who do not need as much guidance, and for whom prescriptive advisement serves a different purpose. Further, prescriptive advisement at the master's or graduate level may be a different construct than prescriptive advisement at the undergraduate level. These results may be particularly relevant for master's students who are enrolled in online programs, and maybe even more so if those students also work 30 or more hours per week.

While master's students have largely been overlooked as a study population, at the very least, this study demonstrates the need for a narrower focus on students at their specific degree levels. Higher education, as a whole, faces new challenges regarding enrollment, modality, and return on investment, and those issues will continue to mount. Institutions will be confronted with the reality of innovating or closing their doors. Understanding the diverse needs of students

on a more granular level will be a key factor in a university's ability to adapt during these uncertain times and continue to serve their primary constituents and purpose.

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Appendix A
Academic Advising Inventory

ACADEMIC ADVISING INVENTORY

Roger B. Winston, Jr. and Janet A. Sandor

PART I

Part I of this Inventory concerns how you and your advisor approach academic advising. Even if you have had more than one advisor or have been in more than one type of advising situation this year, please respond to the statements in terms of your **current situation.**

There are 14 pairs of statements in Part I. You must make two decisions about each pair in order to respond: (1) decide which one of the two statements most accurately describes the academic advising you received this year, and then (2) decide how accurate or true that statement is (from *very true* to *slightly true*).

Mark your answers to all questions in the *Inventory* on the separate optical scan answer sheet provided. Use a number 2 pencil. If you need to change an answer, erase it completely and then mark the desired response.

EXAMPLE

80. My advisor plans my schedule. **OR** My advisor and I plan my schedule together.

A----------B----------C----------D **E----------F----------G----------H**
very slightly slightly very
true true true true

RESPONSE ON ANSWER SHEET:

EXPLANATION: *In this example, the student has chosen the statement on the right as more descriptive of his or her academic advising this year, and determined that the statement is toward the slightly true end (response F).*

---

1. My advisor is interested in helping me learn how to find out about courses and programs for myself.
   A----------B----------C----------D
   very slightly
   true true

OR

My advisor tells me what I need to know about academic courses and programs.
E----------F----------G----------H
slightly very
true true

OR

2. My advisor tells me what would be the best schedule for me.
   A----------B----------C----------D
   very slightly
   true true

OR

My advisor suggests important considerations in planning a schedule and then gives me responsibility for the final decision.
E----------F----------G----------H
slightly very
true true

3. My advisor and I talk about vocational opportunities in conjunction with advising.
   A----------B----------C----------D
   very slightly
   true true

OR

My advisor and I do not talk about vocational opportunities in conjunction with advising.
E----------F----------G----------H
slightly very
true true

4. My advisor shows an interest in my outside-of-class activities and sometimes suggests activities.
A----------B----------C----------D
very true — slightly true

OR

My advisor does not know what I do outside of class.
E----------F----------G----------H
slightly true — very true

5. My advisor assists me in identifying realistic academic goals based on what I know about myself, as well as about my test scores and grades.
A----------B----------C----------D
very true — slightly true

OR

My advisor identifies realistic academic goals for me based on my test scores and grades.
E----------F----------G----------H
slightly true — very true

6. My advisor registers me for my classes.
A----------B----------C----------D
very true — slightly true

OR

My advisor teaches me how to register myself for classes.
E----------F----------G----------H
slightly true — very true

7. When I'm faced with difficult decisions my advisor tells me my alternatives and which one is the best choice.
A----------B----------C----------D
very true — slightly true

OR

When I'm faced with difficult decisions, my advisor assists me in identifying alternatives and in considering the consequences of choosing each alternative.
E----------F----------G----------H
slightly true — very true

8. My advisor does not know who to contact about other-than-academic problems.
A----------B----------C----------D
very true — slightly true

OR

My advisor knows who to contact about other-than-academic problems.
E----------F----------G----------H
slightly true — very true

9. My advisor gives me tips on managing my time better or on studying more effectively when I seem to need them.
A----------B----------C----------D
very true — slightly true

OR

My advisor does not spend time giving me tips on managing my time better or on studying more effectively.
E----------F----------G----------H
slightly true — very true

10. My advisor tells me what I must do in order to be advised.
A----------B----------C----------D
very true — slightly true

OR

My advisor and I discuss our expectations of advising and of each other.
E----------F----------G----------H
slightly true — very true

11. My advisor suggests what I should major in.
A----------B----------C----------D
very true — slightly true

OR

My advisor suggests steps I can take to help me decide on a major.
E----------F----------G----------H
slightly true — very true

12. My advisor uses test scores and grades to let him or her know what courses are most appropriate for me to take.
A----------B----------C----------D
very true — slightly true

OR

My advisor and I use information, such as test scores, grades, interests, and abilities, to determine what courses are most appropriate for me to take.
E----------F----------G----------H
slightly true — very true

13. My advisor talks with me about my other-than-academic interests and plans.

A----------B----------C----------D
very true ... slightly true

OR

My advisor does not talk with me about interests and plans other than academic ones.

E----------F----------G----------H
slightly true ... very true

14. My advisor keeps me informed of my academic progress by examining my files and grades *only*.

A----------B----------C----------D
very true ... slightly true

OR

My advisor keeps informed of my academic progress by examining my files and grades and by talking to me about my classes.

E----------F----------G----------H
slightly true ... very true

PART II

Directions-Consider the following activities that often take place during academic advising. During **this academic year,** how many times have you been involved in each activity? Use the code below to respond to questions 15-44 on the separate answer sheet.

A=None (0 times) **C=2 times** **E=4 times**
B=1 time **D=3 times** **F=5 or more times**

How frequently have you and your advisor spent time...

15. Discussing college policies
16. Signing registration forms
17. Dropping and/or adding course(s)
18. Discussing personal values
19. Discussing possible majors/academic concentrations
20. Discussing important social or political issues
21. Discussing content of courses
22. Selecting courses for the next term
23. Planning a class schedule for the next term
24. Discussing transfer credit and policies
25. Discussing advanced placement or exempting courses
26. Discussing career alternatives
27. Discussing probation and dismissal policies
28. Discussing financial aid
29. Identifying other campus offices that can provide assistance
30. Discussing study skills or study tips
31. Discussing degree or major/academic concentration requirements
32. Discussing personal concerns or problems
33. Discussing studies abroad or other special academic programs
34. Discussing internship or cooperative education opportunities
35. Talking about or setting personal goals
36. Evaluating academic progress
37. Getting to know each other
38. Discussing extracurricular activities
39. Discussing job placement opportunities
40. Discussing the purposes of a college education
41. Declaring or changing a major/academic concentration
42. Discussing time management
43. Talking about experiences in different classes
44. Talking about what you are doing besides taking classes

PART III

Considering the academic advising you have participated in at this college this year, respond to the following five statements on the answer sheet using the code below.

A = Strongly Disagree **C = Agree**
B = Disagree **D = Strongly Agree**

45. I am satisfied in general with the academic advising I have received.
46. I have received accurate information about courses, programs, and requirements through academic advising.
47. Sufficient prior notice has been provided about deadlines related to institutional policies and procedures.
48. Advising has been available when I needed it.
49. Sufficient time has been available during advising sessions.

PART IV

Please respond to the following questions. Continue marking your responses on the same answer sheet.

50. What is your sex?
    (a) male
    (b) female

51. What is your cultural/racial background?
    (a) African American/Black
    (b) Hispanic American/Latino/a
    (c) Asian American or Pacific Islander
    (d) Native American
    (e) White/Caucasian
    (f) Biracial/multiracial
    (g) Other
    (h) Decline to respond

52. What was your age at your last birthday?
    (a) 18 or younger
    (b) 19
    (c) 20
    (d) 21
    (e) 22
    (f) 23
    (g) 24
    (h) 25 - 30
    (i) 31 or older

53. What is your academic class standing?
    (a) Freshman (first year)
    (b) Sophomore (second year)
    (c) Junior (third year)
    (d) Senior (fourth or more years)
    (e) Irregular/Transient/Special Student
    (f) Other than any of the above

54. Which of the following **best describes** the majority of the academic advising you have received this academic year? *Select only one.*
    (a) Advised individually by assigned advisor at an advising center
    (b) Advised individually by any available advisor at an advising center
    (c) Advised individually, **not** through an advising center
    (d) Advised with a group of students
    (e) Advised by a peer (student) advisor
    (f) Advised in conjunction with a course in which I was enrolled
    (g) Advised in a manner other than the alternatives described above
    (h) No advising received

55. Approximately how much time was generally spent in each advising session?
    (a) less than 15 minutes
    (b) 15-30 minutes
    (c) 31-45 minutes
    (d) 46-60 minutes
    (e) more than 1 hour

56. How many academic advising sessions have you had this academic year in your **current** situation?
    (a) none
    (b) one
    (c) two
    (d) three
    (e) four
    (f) five
    (g) six
    (h) seven
    (i) eight
    (j) nine or more

57. How many academic advising sessions **in total** have you had this year?
    (a) none
    (b) one
    (c) two
    (d) three
    (e) four
    (f) five
    (g) six
    (h) seven
    (i) eight
    (j) nine or more

PART V

Part V of the *Inventory* concerns how you view the **IDEAL** academic advisor. You are to choose the one statement from each pair that best describes, in your opinion, the *ideal* academic advisor (that is, what you would want an advisor to be like). Then determine how important that statement is to you for an ideal advisor. This is *not* an evaluation of your present or past advisors at this college.

Record your answers on the same answer sheet used for Parts I through IV.

.....

59. My advisor is interested in helping me learn how to find out about courses and programs for myself.
A---------B---------C---------D
Very Important ... Slightly Important

OR My advisor tells me what I need to know about academic courses and programs.
E---------F---------G---------H
Slightly Important ... Very Important

60. My advisor tells me what would be the best schedule for me.
A---------B---------C---------D
Very Important ... Slightly Important

OR My advisor suggests important considerations in planning a schedule and then gives me responsibility for the final decision.
E---------F---------G---------H
Slightly Important ... Very Important

61. My advisor and I talk about vocational opportunities in conjunction with advising.
A---------B---------C---------D
Very Important ... Slightly Important

OR My advisor and I do *not* talk about vocational opportunities in conjunction with advising.
E---------F---------G---------H
Slightly Important ... Very Important

62. My advisor shows an interest in my outside-of-class activities and sometimes suggests activities.
A---------B---------C---------D
Very Important ... Slightly Important

OR My advisor does *not* know what I do outside of class.
E---------F---------G---------H
Slightly Important ... Very Important

63. My advisor assists me in identifying realistic academic goals based on what I know about myself, as well as about my test scores and grades.
A---------B---------C---------D
Slightly Important ... Very Important

OR My advisor identifies realistic academic goals for me based on my test scores and grades.
E---------F---------G---------H
Slightly Important ... Very Important

Continue on reverse side.

64. My advisor registers me for my classes.
A---------B---------C---------D
Very Important ... Slightly Important

OR My advisor teaches me how to register myself for classes.
E---------F---------G---------H
Slightly Important ... Very Important

65. When I'm faced with difficult decisions my advisor tells me my alternatives and which one is the best choice.
A---------B---------C---------D
Very Important ... Slightly Important

OR When I'm faced with difficult decisions, my advisor assists me in identifying alternatives and in considering the consequences of choosing each alternative.
E---------F---------G---------H
Slightly Important ... Very Important

66. My advisor does *not* know who to contact about other-than-academic problems.
A---------B---------C---------D
Very Important ... Slightly Important

OR My advisor knows who to contact about other-than-academic problems.
E---------F---------G---------H
Slightly Important ... Very Important

67. My advisor gives me tips on managing my my time better or on studying more effectively when I seem to need them.
A---------B---------C---------D
Very Important ... Slightly Important

OR My advisor does *not* spend time giving me tips on managing my time better or on studying more effectively.
E---------F---------G---------H
Slightly Important ... Very Important

68. My advisor tells me what I must do in order to be advised.
A---------B---------C---------D
Very Important ... Slightly Important

OR My advisor and I discuss our expectations of advising and of each other.
E---------F---------G---------H
Slightly Important ... Very Important

69. My advisor suggests what I should major in.
A---------B---------C---------D
Very Important ... Slightly Important

OR My advisor suggests steps I can take to help me decide on a major.
E---------F---------G---------H
Slightly Important ... Very Important

70. My advisor uses test scores and grades to let him or her know what courses are most appropriate for me to take.
A---------B---------C---------D
Very Important ... Slightly Important

OR My advisor and I use information, such as test scores, grades, interests, and abilities to determine what courses are most appropriate for me to take.
E---------F---------G---------H
Slightly Important ... Very Important

71. My advisor talks with me about my other-than-academic interests and plans.
A---------B---------C---------D
Very Important ... Slightly Important

OR My advisor does *not* talk with me about interests and plans other than academic ones.
E---------F---------G---------H
Slightly Important ... Very Important

72. My advisor keeps informed of my academic

OR My advisor keeps informed of my academic

progress by examining my files and grades *only*.

A---------B---------C---------D

Very Important — Slightly Important

progress by examining my files and grades and by talking to me about classes.

E---------F---------G---------H

Slightly Important — Very Important

Appendix B

Prescriptive/Developmental Preference Scale

Please consider how you view the **IDEAL** academic advisor. In other words, please think about what you would want an advisor to be like. Then determine how important that statement is to you for an ideal advisor. Remember, this is *not* an evaluation of your present or past advisors at this college. For each sentence, please darken the circle that indicates your level of agreement with the sentence.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
1. My ideal advisor would tell me what to do.	○	○	○	○	○
2. My ideal advisor would tell me which classes I should take.	○	○	○	○	○
3. My ideal advisor would talk to me about career opportunities.	○	○	○	○	○
4. My ideal advisor would be interested in my life outside of school.	○	○	○	○	○
5. My ideal advisor would talk with me about my goals.	○	○	○	○	○
6. My ideal advisor would make sure I know graduation requirements.	○	○	○	○	○
7. My ideal advisor would plan my schedules for me.	○	○	○	○	○
8. My ideal advisor would help me learn how to find information for myself.	○	○	○	○	○
9. My ideal advisor would talk to me about my interests and abilities to help me plan classes.	○	○	○	○	○
10. My ideal advisor would tell me what electives are best for me.	○	○	○	○	○
11. My ideal advisor and I would talk only about academics.	○	○	○	○	○
12. My ideal advisor would recommend activities and organizations I might enjoy.	○	○	○	○	○

13. My ideal advisor would tell me about policies that may affect me.	○	○	○	○	○
14. My ideal advisor would tell me about important deadlines.	○	○	○	○	○
15. My ideal advisor would help me with study skills and time management.	○	○	○	○	○
16. My ideal advisor would teach me how to make decisions for myself.	○	○	○	○	○

Appendix C

Prescriptive/Developmental Preference Scale Utilization Approval

From: Beth Yarbrough
To: Marian Sample [Student]
Subject: Re: [EXT] Request to utilize instrument from your dissertation
Date: Thursday, July 14, 2022 1:54:54 PM

Hi Gina,

Yes of course! I would be pleased for you to use it in any way you and your committee see fit.

Good luck in your research and writing. Remember, it's just a really long paper. If I can help you in any way, please let me know!!

Beth

Sent from my iPhone

> On Jul 14, 2022, at 12:48 PM, Marian Sample [Student] <sample_marian@columbusstate.edu> wrote:
>
> **CAUTION: Email Originated Outside of Auburn.**
>
> Dear Dr. Yarbrough,
>
> I hope this message finds you well. My name is Gina Sample, and I am an EdD candidate at Columbus State University. I'm in the beginning stages of my dissertation, which will focus on master's students' advisement preferences. As a former graduate advisor, I was surprised at how little research there was in the area of graduating advising, much less for students who are not enrolled in doctoral programs.
>
> As you know, the Academic Advising Inventory is the gold standard for measuring advisement preferences, but NACADA stipulates that users include all items in the survey, which will prevent me from modifying it to pilot and validate it for use with master's students.
>
> In my research, I came across your 2010 dissertation and the Prescriptive/Developmental Preference Scale. I know that some of the items did not load and that you ran an EFA to develop your five-factor solution. I've spoken with my committee, and I'm interested in taking the items that did load successfully on the PDPS and expanding them to develop an instrument for assessing master's students' advisement preferences -- if, of course, you are okay with it!
>
> Would you be willing to grant me permission to utilize and modify your scale for the purposes of my dissertation? I will be happy to send you a copy of my paper when it is complete.
>
> If you have any questions for me, or if you would like to meet over Zoom to

discuss further, please let me know. Either way, thank you for your time and consideration!

Best regards,
Gina Sample

Appendix D

Recruitment Emails for Focus Group Participants

Initial Contact

Hello!

You are invited to take part in a research study that focuses on academic advisement preferences among master's students. As an advisement professional who has worked with master's students, your subject matter expertise is requested for a virtual focus group, in which advisors will review and give feedback on a survey. The survey has been developed to assess whether master's students prefer prescriptive or developmental advisement.

The virtual focus group will run up to 90 minutes. If you choose to participate, you will receive access to the instrument one week prior to the focus group via DropBox so that you have time to review and prepare feedback. The goal of the focus group will be for academic advisors who have advised master's students to critique the statements in the survey, both for how well the statements represent prescriptive or developmental advisement, as well as the applicability of the statements to a population of master's students.

Following the focus group, the researcher will update the instrument via DropBox as suggested, incorporating the edits from the focus group of advisors. You will be contacted within one week after the focus group to review the edited draft of the survey via DropBox and provide any final suggestions or feedback. The final version of the survey will be distributed to master's students to

Focus group participants will be compensated with a $25 online Visa gift card for their time and efforts.

Please let me know if you are interested in taking part in this study by Tuesday, February 28, 2023.

Thank you for your consideration!

Marian "Gina" Sample, MPH
Principal Investigator
EdD Candidate, Higher Education

Follow-up Contact

Hello!

Previously, you were contacted regarding a research study taking place for academic advisement preferences among master's students. Your subject matter expertise is requested for a 90-minute focus group to provide feedback on a survey that has been developed to assess whether master's students prefer prescriptive or developmental advisement. Following the focus group, you will be asked to review an edited draft of the survey and provide any final recommendations.

Focus group participants will be compensated with a $25 online Visa gift card for their time and efforts.

Please let me know if you are interested in taking part in this study by Monday, March 13, 2023.

Thank you for your consideration!

Marian “Gina” Sample, MPH
Principal Investigator
EdD Candidate, Higher Education

Appendix E

Recruitment Emails for Student Participation in Survey

Initial Contact

Hello!

You are invited to participate in a survey about academic advisement preferences. This survey is part of a research study for a dissertation for a Doctor of Education in Higher Education student at Columbus State University. Most research on academic advisement preferences has focused on undergraduate students. By participating in this survey, you will help contribute to the literature by providing valuable insight to academic advisement preferences among master's students.

This survey is anonymous and will take approximately 10 minutes to complete.

Participants will be entered into a raffle to win one of two $50 online Visa gift cards.

> Please follow the survey link here:
> **https://columbusstate.qualtrics.com/jfe/form/SV_aV0AWx1X3Nj0KWO**

The survey will remain open until April 27, 2023 at 11:59pm.

If you have any questions, please do not hesitate to contact the principal investigator, whose details are below.

Thank you!

Marian "Gina" Sample, MPH
Principal Investigator
EdD Candidate, Higher Education

Follow-up Contact

Hello!

Previously, you were contacted regarding a research study about academic advisement preferences. You are invited to participate in an anonymous survey that will take approximately 10 minutes to complete. Your participation will provide valuable insight into academic advisement preferences among master's students.

Participants will be entered into a raffle to win one of two $50 online Visa gift cards.

> Please follow the survey link here:
> **https://columbusstate.qualtrics.com/jfe/form/SV_aV0AWx1X3Nj0KWO**

The survey will remain open until April 27, 2023 at 11:59pm.

Thank you for your consideration!

Marian “Gina” Sample, MPH
Principal Investigator
EdD Candidate, Higher Education

Appendix F

Demographic Questionnaire for Student Participants

1) Is your master's program on-campus, online, or a mixture of the two?
    a. All of my classes take place on campus.
    b. All of my classes take place online.
    c. Some of my classes are on campus, and some of my classes are online.
2) What is your age?
    a. 18-24 years old
    b. 25-34 years old
    c. 35-44 years old
    d. 45 years old+
3) What race or ethnicity best describes you?
    a. American Indian or Alaskan Native
    b. Asian/Pacific Islander
    c. Black or African American
    d. Hispanic
    e. White/Caucasian
    f. Two or more races
    g. Other race/ethnicity not listed here (please specify):
    h. Prefer not to say
4) What gender best describes you?
    a. Female
    b. Male
    c. Non-Binary
    d. Prefer to self-describe:
    e. Prefer not to say
5) Are you currently employed, on- or off-campus?
    a. No, I am not employed.
    b. Yes, I am employed and work less than 30 hours a week.
    c. Yes, I am employed and work 30 or more hours a week.

Appendix G

Modified PDPS, First Draft

Please read each statement and think about your preferences regarding your academic advisement experience. Then determine how much you agree with the statement and choose the response that indicates your level of agreement with the sentence.

Prescriptive statements, as modified from the PDPS:

1. I prefer to be told what to do to be successful in my academic program.
2. I prefer to be told which classes I should take.
3. I prefer to be told what my graduation requirements are.
4. I prefer to have my schedule planned for me.
5. I prefer to be told what electives are best for me.
6. I prefer for the discussion to be limited to academics.
7. I prefer to be told about policies that may affect me.
8. I prefer to be told about important deadlines.

Developmental statements, as modified from the PDPS:

1. I prefer to discuss career opportunities.
2. I prefer to discuss my life outside of school in addition to academics.
3. I prefer to discuss my goals.
4. I prefer to learn how to find information for myself.
5. I prefer to discuss my interests and abilities when deciding which classes are right for me.
6. I prefer to discuss study skills and time management.
7. I prefer to learn how to make decisions for myself.
8. I prefer to discuss organizations and activities I may be interested in.

Prescriptive statements newly developed for this study:

1. I prefer advisement sessions that are quick and efficient.
2. I prefer an advisement relationship that is similar to what I might experience with a course instructor.
3. I prefer advisement sessions that are instructional.
4. I prefer to discuss just my immediate academic needs and concerns.
5. I prefer a more passive role in the discussion.
6. I prefer advisement sessions in which I learn general information.
7. I prefer an advisement relationship that feels general and applicable to all students in my program/cohort.

Developmental statements newly developed for this study:

1. I prefer advisement sessions with a lot of discussion.
2. I prefer advisement sessions that include topics beyond just academics.
3. I prefer advisement sessions that are collaborative.
4. I prefer an advisement relationship that is similar to what I might experience with a mentor.
5. I prefer to discuss long-range planning for my academic career.
6. I prefer an advisement relationship that feels personalized to my experience.
7. I prefer to have an active part in the discussion during an advisement session.

Appendix H

Informed Consent: Phase 1

INSTITUTIONAL REVIEW BOARD

Informed Consent Form

You are being asked to participate in a research project conducted by Marian "Gina" Sample, a student in the Department of Teaching Education, Leadership, and Counseling, at Columbus State University. This project is supervised by Dr. Jennifer Lovelace.

I. Purpose:

The purpose of this project is to pilot a survey that assesses academic advisement preferences for use among master's students. This survey has been modified from the Prescriptive/Developmental Preferences Survey, developed by Dr. Elizabeth Yarbrough.

II. Procedures:

You will be asked to review a first draft of the modified PDPS and then participate in a focus group with other subject matter experts. The instrument has been changed from its original form by the researcher, with permission from the original author of the PDPS. The goal of the focus group is to provide feedback on the statements within the instrument, regarding how well they reflect prescriptive and developmental advising, as well as their applicability to master's students. The focus group will run up to 90 minutes via Zoom and should not exceed 120 minutes. Following the focus group, you will be asked to review and approve a second draft of the modified PDPS that incorporates the feedback provided by you and other expert panelists. Once the second draft is agreed upon by all expert panelists (or a majority vote has been reached), your participation in the study will conclude. This portion of the study, from focus group to finalized second draft, is not expected to exceed two weeks. The data collected from this survey will not be used for future research projects.

III. Possible Risks or Discomforts:

There are no anticipated risks from participating in this study.

IV. Potential Benefits:

Your participation will help inform research regarding academic advisement preferences among master's students. This study aims to produce a valid instrument for assessing those preferences, which in turn can benefit advisement professionals and master's students.

V. Costs and Compensation:

You will be compensated for your time with an electronic $25 Visa gift card. A link to the gift card will be emailed to your CSU email address you have participated in the focus group and provided final feedback and/or approval to the second draft of the modified PDPS.

VI. Confidentiality:

Your identity will be kept confidential. References to any statements or suggestions you make in the researcher's manuscript will be coded (e.g., Expert A, Expert B, etc.). The focus group will be recorded in Zoom for ease of transcribing statements for the manuscript and referring to suggestions for modifications to the instrument. The recording will be kept in a secure, encrypted DropBox folder to which only the researchers will have access. Data will be retained for three years per federal requirements and then permanently deleted.

VII. Withdrawal:

Your participation in this research study is voluntary. You may withdraw from the study at any time, and your withdrawal will not involve penalty or loss of benefits.

For additional information about this research project, you may contact the Principal Investigator, Marian "Gina" Sample at (706) 339-0104 or sample_marian@columbusstate.edu. If you have questions about your rights as a research participant, you may contact Columbus State University Institutional Review Board at irb@columbusstate.edu.

I have read this informed consent form. If I had any questions, they have been answered. By selecting the *I agree* radial and *Submit*, I agree to participate in this research project. I confirm that I am at least 18 years of age.

○ I agree. ○ I do not agree.

Submit

Appendix I

Informed Consent: Phase 2

INSTITUTIONAL REVIEW BOARD

Informed Consent Form

You are being asked to participate in a research project conducted by Marian "Gina" Sample, a student in the Department of Teaching Education, Leadership, and Counseling, at Columbus State University. This project is supervised by Dr. Jennifer Lovelace.

I. Purpose:

The purpose of this project is to pilot a survey that assesses academic advisement preferences for use among master's students. This survey has been modified from the Prescriptive/Developmental Preferences Survey, developed by Dr. Elizabeth Yarbrough.

II. Procedures:

You will be asked to complete a survey regarding your preferences regarding academic advising. The survey consists of five demographic items and 30 items regarding academic advising preferences. The survey will take approximately 15 minutes to complete. The data collected from this survey will not be used for future research projects.

III. Possible Risks or Discomforts:

There are no anticipated risks from participating in this study.

IV. Potential Benefits:

Your participation will help inform research regarding academic advisement preferences among master's students. This study aims to produce a valid instrument for assessing those preferences, which in turn can benefit advisement professionals and master's students.

V. Costs and Compensation:

At the end of the survey, there will be a link that will take you to a page to enter your email address if you wish to be entered into a raffle to win one of two $50 Visa gift cards. Raffle winners will be notified by the email address provided. You must complete the entire survey to be eligible for the raffle.

VI. Confidentiality:

This survey is anonymous. This form and the survey are kept separate, so no identifying information will be associated with your survey responses. This survey is distributed through Qualtrics, which is a secure, encrypted platform. Survey data will be kept in a secure, encrypted DropBox folder to which only the researchers will have access. Data will be retained for three years per federal requirements and then permanently deleted.

VII. Withdrawal:

Your participation in this research study is voluntary. You may withdraw from the study at any time, and your withdrawal will not involve penalty or loss of benefits.

Revised 10/01/2017

For additional information about this research project, you may contact the Principal Investigator, Marian "Gina" Sample at (706) 339-0104 or sample_marian@columbusstate.edu. If you have questions about your rights as a research participant, you may contact Columbus State University Institutional Review Board at irb@columbusstate.edu.

I have read this informed consent form. If I had any questions, they have been answered. By selecting the *I agree* radial and *Submit*, I agree to participate in this research project. I confirm that I am at least 18 years of age and actively enrolled in a master's program at Columbus State University.

○ I agree. ○ I do not agree.

Submit

Appendix J

Final Modified PDPS for Participant Distribution

The statements below regard your preferences for academic advising. Please select the option that best represents your level of agreement with each statement as it pertains to a session or meeting with your academic advisor.

I prefer to be told what to do to be successful in my academic program (e.g., how to perform well in my courses).

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer to be told which classes I should take.

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer to be told what my graduation requirements are (e.g., applying for graduation, remaining coursework).

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer to have my schedule planned for me.

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer to be told what electives are best for me.

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer for the discussion to be limited to academics.

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer to be informed about policies that may affect me, even if I have access to that information.

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer advisement sessions that are quick and efficient.

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer to be informed about important deadlines, even if I have access to that information.

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer a more passive role in the discussion.

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer to be provided general information that is relevant to my program progression.

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer an advisement relationship that feels generic and applicable to all students in my program/cohort.

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer to discuss career opportunities and career planning.

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer to discuss my life outside of school in addition to academics.

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer to discuss my goals for my degree program.

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer to find information for myself.

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer to discuss my interests and abilities when deciding which classes are right for me.

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer to make informed decisions for myself.

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer to discuss my availability and time management when deciding which classes are right for me.

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer to discuss professional organizations and networking opportunities relevant to my field.

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer a lot of conversation.

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer a discussion that feels collaborative (i.e., my input affects my advisor's recommendations).

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer an advisement relationship that feels personalized.

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable

I prefer to have an active part in the discussion.

- ○ Strongly Agree
- ○ Agree
- ○ Disagree
- ○ Strongly Disagree
- ○ Not Applicable