

## Article

# Rx to Lead—Examining Pharm.D. Leadership Development Commencing during Pharmacy School through Co-Curricular Engagement

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**Abstract:** Leadership development in college is frequently cited as developing during undergraduate years. Nevertheless, some graduate and professional students develop further as leaders through involvement at the graduate level. This paper explores a case study examining the ways Doctor of Pharmacy (Pharm.D.) students commenced leadership development during pharmacy school through their co-curricular involvement.

**Keywords:** co-curricular; graduate students; professional students; pharmacy education; leadership development



**Citation:** Smith, M.J.; Wallace, J.K. Rx to Lead—Examining Pharm.D. Leadership Development Commencing during Pharmacy School through Co-Curricular Engagement. *Educ. Sci.* **2024**, *14*, 386. <https://doi.org/10.3390/educsci14040386>

Academic Editors: Annie M. Wofford and Tamara Bertrand Jones

Received: 15 January 2024

Revised: 26 March 2024

Accepted: 4 April 2024

Published: 6 April 2024



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The first Pharm.D. program was established about 75 years ago, with the Pharm.D. becoming the standard of practice in the United States in the early 2000s [1]. Pharmacists are seen as one of the most ethical and trustworthy professions in the United States [2,3]. With this public perception, they are aptly placed to be leaders, necessitating their development as leaders. Leadership development is already a mandatory component of pharmacy education [4,5]. While there has been research conducted on leadership development in pharmacy students [6,7], there has been limited examination into how students make meaning of their leadership development through their co-curricular involvement during pharmacy school. During an exploratory qualitative study using narrative inquiry to gain insight and understanding into the leadership development of Pharm.D. students through these engagements during pharmacy school, an unexpected finding emerged: that a subset of students noted that all leadership development and growth occurred only during their time in pharmacy school. This paper highlights this unexpected finding, while also stimulating conversation and dialogue in light of this discovery.

## 1. Literature Review

Several entities have input into the direction of pharmacy education, including accrediting bodies (specifically the Accreditation Council for Pharmacy Education (ACPE)) and pharmacy education organizations (specifically the American Association of Colleges of Pharmacy (AACP)). ACPE is recognized by the United States Department of Education as the entity charged with accrediting schools of pharmacy within the United States [8]. For schools of pharmacy accredited by ACPE, the AACP has a “special responsibility to provide leadership in advancing and enhancing the quality of education and training in its member institutions while respecting the diversity inherent among them” [9].

One might ask why pharmacy students are of interest for research regarding leadership development through co-curricular engagement. Pharmacy education is particularly intriguing to explore this connection and phenomenon in that for accreditation purposes schools must identify, track, and assess not only their curricular learning, but their co-curricular learning while in pharmacy school [10]. Due to this direct mandate linking

co-curricular learning to their accreditation, schools of pharmacy are highly motivated to highlight the effectiveness of their efforts to provide development of their students across a range of areas (including leadership) via their co-curricular activities. As terms frequently have a range of meanings across different audiences, the researchers have operationalized various terms for the purpose of this paper.

## 2. Co-Curriculars

Co-curricular engagements are defined as structured activities that take place outside of the formal classroom that simultaneously complement the formal curriculum of an educational program [11,12]. Additionally, co-curriculars in pharmacy school are activities happening at or through the institution [13,14]. For pharmacy schools, these co-curricular activities typically include but are not limited to such things as: participating in student government, professional organizations (including student chapters of national professional organizations), or being part of a committee (be it school, program, local/state/region/national professional organization, specialized area of education/training, etc.) [10].

## 3. Leadership

A succinct definition of leadership is that it is “a process of social influence, which maximizes the efforts of others, towards the achievement of a goal” [15] (paragraph 11). It has also been defined as “a way [a] person uses to lead other people” [16] (p. 51). Leadership development commonly occurs during postsecondary pursuits [17,18], and has been associated with engagement in co-curricular activities [19]. Frequently cited traits that are often desired of effective leaders include: honesty, cognitive ability, self-confidence, drive, and integrity [20]. In examination of leadership, researchers have noted a collection of different styles of leadership [21–26]. These include transactional leadership [21,23,25], transformational leadership [24,25], laissez-faire leadership [22,26], and servant leadership [27,28]. A brief discussion of the similarities and differences between these leadership styles are articulated below.

### 3.1. Transactional Leadership

Key to transactional leadership is that the leader utilizes a system to establish expectations within the group [19,21]. The leader ties some form of reward that is given to those that are following the leaders should they achieve or even exceed those expectations [16,21]. These rewards frequently include things like: benefits, monetary remuneration, praise from the leader, and/or public recognition [19,23]. Should the followers fail to achieve the goals established by the leader, the leader may choose some form of punishment as a consequence for failure to meet their expectations [16]. As these rewards and punishments are offered as transactions between the leader and their followers, control and power must remain with the leader in order for their leadership to continue to be effective [23].

### 3.2. Transformational Leadership

Transformational leadership is rooted in mutual collaboration between the leader and their followers [19,24]. Typically, the leader and their followers forge this collaboration through mutually agreed upon goals to address the task at hand [24]. When engaging in transformational leadership, leaders inspire their followers through their example and their interactions with their followers rather than through a system of rewards and punishments [26]. Transformational leaders frequently are charismatic, and use this trait to inspire those they are leading [25]. There are some within pharmacy education that feel that transformational leadership is ideal for pharmacy students to learn and develop during pharmacy school and beyond [27].

### 3.3. Laissez-Faire Leadership

In laissez-faire leadership, the leaders are frequently less engaged in their leadership duties when compared with the leadership of those drawing on transactional or transformational leadership [22]. Instead, laissez-faire leaders are quick to delegate key duties, responsibilities, and/or tasks to those that are following them [26]. In doing this, these leaders encourage and support their followers to complete these tasks as they (the followers) see fit [26]. While some might perceive this leadership style as lazy [25], laissez-faire leaders make it known to their followers that they are available to assist them should they require their help and/or guidance [26].

### 3.4. Servant Leadership

Servant leadership connects well with the mission and values of pharmacy, especially through student-focused teaching during pharmacy school [27]. Servant leaders draw on a collection of 10 different traits as they strive to effectively lead their followers. These traits include: listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment to growth of the people, and building community [28]. Like transformational leadership, servant leadership is another style of leadership that pharmacy educators feel is important for pharmacy students to learn and develop while they are in pharmacy school [27].

## 4. Importance of Leadership for Pharmacists

The American Council for Pharmacy Education (ACPE) has articulated an extensive list of activities that meet their current requirements for leadership development, including [10] (p. 2):

*Active participation in local, state, or national pharmacy of scientific organization meetings, holding office in student government bodies or professional organizations, serving on school/college or university committees, roundtable discussions with local pharmacy leaders, shadowing opportunities with state pharmacy association executives, participation on Phi Lambda Sigma national leadership challenge program, demonstrating service leadership by working “behind the scenes” to advance important initiatives within the school, university or community.*

Pharmacists are positioned to be leaders for a plethora of reasons. The public perceives pharmacists as highly ethical [2], even more so than individuals in professions such as police officers, psychiatrists, clergy, journalists, lawyers, and politicians [2]. It is noted that if someone is ethical, they are trusted by those that work for/with them [29]. Pharmacists are considered as ethical and trustworthy as other health care professionals who also hold professional doctorates such as physicians and dentists [2,3]. Furthermore, pharmacists already recognize the need to develop as leaders to be effective in their professional endeavors [30]. Leadership development is a desired quality to hone for pharmacists in order to live up to these perceptions by the public.

Leadership development has been highlighted by various pharmacy education and accrediting bodies as a skill to be developed by Pharm.D. students during their time in pharmacy school [4,5]. Likewise, engagement and learning through co-curricular involvement is noted by these same groups as an effective and necessary means of facilitating growth and development for these students [4]. Intentional leadership development programs in pharmacy schools yield notable improvement in students' leadership development through curricular and co-curricular engagements [6]. Much of the existing literature on leadership development in pharmacy education has focused on curricular efforts to address leadership development [31–36]; leadership development is noted to occur through professional experiences such as conferences [37,38] and educational retreats [39]. Other researchers have noted a range of ways that students explore leadership characteristics and behaviors while in pharmacy school [7]. While the scholarship on leadership in pharmacy education journals is growing, there is a need to research and determine how Pharm.D. students are making meaning of their leadership development through their co-curricular engagements.

The purpose of the larger study [40] was to examine how Pharm.D. students make meaning of their leadership development through their co-curricular engagement. Historically, scholars have experienced challenges in defining meaning making as a concept [41]. Nevertheless, Park's [41] proposed model notes that meaning making is a connection of both global meaning and situational meaning. Because of this difficulty in defining this concept, we intentionally engaged in qualitative research for this study to capture the definitional complexity of meaning making.

In spite of the existing literature, the unexpected finding during a larger study [40] of multiple participants noting their leadership development only began once they were enrolled in their Pharm.D. program caught the eye of the researchers. Given this was found serendipitously, the researchers examined these specific students further in order to gain greater understanding of their experience.

## 5. Methodology

A qualitative approach allowed us to discover "(1) how people interpret their experiences, (2) how they construct their worlds, and (3) what meaning they attribute to their experiences" [42] (p. 23). Exploratory qualitative studies, specifically, are helpful to gain genuine insights into the experiences of the participants [43]. Exploratory studies contribute to expanding knowledge on a topic where there is limited research [44]. We employed a case study research design to allow us, as the researchers, the opportunity to take a deep dive into the experiences of a particular unit of analysis, in this case, 3 participants who had minimal experience as leaders prior to entering pharmacy school. Yin's [45] definition of case study states that case studies "investigate[s] a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (p. 13). Prior to engaging in recruitment and data collection, the researchers obtained Institutional Review Board (IRB) approval from The University of Georgia.

We employed a multi-method approach by selecting two different methods in the initial data collection: (1) a questionnaire containing demographic questions as well as questions regarding the participant's leadership activities in co-curricular activities as Pharm.D. students; and (2) a single 60–90 min, one-on-one, semi-structured, qualitative interview with each participant. The survey confirmed that the prospective participants had engaged in co-curricular leadership opportunities during their Pharm.D. program. For the larger study [40], a sample size of 6 to 10 participants was desired, with 10 participants ultimately being obtained. The researchers conducted semi-structured interviews via Zoom—a video conferencing platform. The researchers audio recorded interviews to help with the transcription and eventual analysis of each interview. Prior to all interviews, informed consent was obtained from each participant by the researchers. Participants received a gift card as compensation for their time participating in the interview portion of the study.

After verbatim transcription of the interviews was completed, each participant was able to review their transcript. This allowed for the participants to verify the accuracy of the transcripts, and to provide additional clarity if they felt it was needed. After this had been completed, multiple rounds of qualitative coding were performed. This included opening coding of the transcripts, to identify initial codes [46]. A second round of coding was completed next, grouping together initial codes that appeared to be thematically similar [47]. After the emerging themes were identified, more in-depth axial coding of these themes was undertaken to complete the thematic analysis [46,47]. As the larger study [40] was an exploratory qualitative study, there was no theoretical framework. Previous work in education drawing on narrative inquiry has allowed for this, in order to gain greater understanding of each participant's unique story [48]. During the analysis of the larger study [40], there was an unexpected finding of 3 of the 10 participants self-identifying as having minimal leadership experiences prior to pharmacy school as noted by the researchers. The researchers delved further in light of this unexpected finding to explore the cases of these 3 participants.

To employ a case study design, we investigated the undergraduate institutions of the 3 participants to conduct an audit (website analysis) on co-curricular opportunities. This data assisted us in understanding the full context of the research participants. Given the nature of the study, it was important for us to understand the co-curricular opportunities available to participants as undergraduates to better understand the reason(s) why they did not engage in co-curricular opportunities. We then conducted a website and document analysis of the participants' pharmacy school to assess the co-curricular offerings. The website analysis assisted us in understanding the co-curricular offerings within the pharmacy school, while the document analysis assisted us in learning about policies that support and/or hinder co-curricular learning. Finally, we gathered data from interviews to complete the case study. Braun and Clarke's [49] theoretical thematic analysis guided our analysis for this study. Triangulation and member checking ensured trustworthiness within the study. This qualitative, narrative approach is key to examining the following research questions for this study:

RQ<sub>1</sub>: How are Pharm.D. students experiencing leadership development through their engagement in co-curricular activities while in pharmacy school?

RQ<sub>2</sub>: How do current Pharm.D. students make meaning of their own leadership development through their engagement in co-curricular activities while in pharmacy school?

## 6. Findings

During the analysis of the larger study [40], it was noted that 3 of the 10 study participants (specifically the participants Lizzy, Nancy, and Zeus (pseudonyms)) highlighted that they had little to no experience as a leader prior to entering pharmacy school, and that all (or almost all) of their development as a leader occurred during pharmacy school and through their engagement in various co-curricular activities. In order to be true to the unique narrative of each student, brief first-person narratives constructed from their interviews were constructed. First-person narratives constructed by the researcher are an established method within narrative inquiry which allow for the narrative to be concisely yet effectively conveyed while simultaneously maintaining the essence of the participants' lived experiences [50].

### 6.1. Lizzy

My name is Lizzy. I am wrapping up my third year in the Pharm.D. program. I grew up in a beautiful suburb just outside of Atlanta. I am a White female as well as a follower of Christ. Right now, I am both a full-time pharmacy student as well as a full-time worker as a Pharmacy Intern at a local CVS pharmacy.

Before pharmacy school, I actually didn't feel like I had ever really been a big leader. I had been in charge of a few organizations in high school and college, but I really had not had to be a leader all that much. It has been a lot of growth for me to become and be the leader that I hope is the best that I can be for myself, my classmates, for the school, and for the pharmacy profession as a whole. During pharmacy school, I have had the honor of representing my class throughout pharmacy school. In addition to leading in this way at the pharmacy school, I am also a mentor for high school girls here in the local community, lead worship at the church I am a member of here in the local community, and also sing in a campus-wide acapella group. It was important for me to connect and be a leader not just in school, but in my faith and in the school as a whole during my time as a pharmacy student.

Being a servant leader is critical for me to be an effective leader. This means being willing and able to do the things that you ask of those that you are leading. Sometimes this can mean sacrificing your own tasks and ideas for the sake of the people you are a leader over. At the same time, a leader needs to be able to do the work without worrying too much about what others will think of them. I did not always feel that way, but I have definitely learned that while in pharmacy school. I feel and hope that the growth and learning I have had as a leader in pharmacy school will translate to me becoming and

being an impactful and effective servant leader in the profession. I can already see how my growth and development as a leader will benefit me as a pharmacist.

### 6.2. *Nancy*

My name is Nancy, and I am completing my fourth year of pharmacy school. I am so excited to be graduating soon! I was originally born and raised outside of the United States, but now consider my hometown to be a small town in Virginia. I am a hard-working, innovative person that is driven to help others as part of a team. I am a bit different than many of my pharmacy school peers in a few ways, such as being an Asian woman, being a bit older than most of my peers, and being married. While in pharmacy school, I've been able to be a leader in several different organizations, including an officer in our pediatric pharmacy group, as well as several positions in the Student National Pharmaceutical Association and Phi Lambda Sigma. Being a leader in each of these different groups has helped me to grow in my confidence and ability to be a more effective leader in all kinds of situations and with all types of people.

I see leadership as multifaceted, but the crux of it is working together with others as part of a team, leading them by example, and lifting up those around you to help them be successful. Sometimes this means as a leader you have to take a leap of faith and put yourself out of your comfort zone, which isn't always easy [at least for me]. Traits like being an effective communicator, being empathetic to your team members and patients, and being able to effectively delegate responsibilities/tasks to others are all key to have and hone as a leader, no matter where you are. There is a 'dark side' to leadership too: the conflict, the uncertainty, the toll it can take personally as well as your relationship with others. But in the end being a leader is important to me, and worth all the effort to make a real, positive impact in the world!

### 6.3. *Zeus*

I am Zeus, and I am wrapping up my fourth year of pharmacy school and will be graduating soon. Really excited to be finishing up soon! I am a proud Southerner from a small town in eastern Georgia. I am a White male, and I am currently 29 years old, making me a bit older than most of my contemporaries in the Pharm.D. program here. After finishing my undergraduate degree, I worked for a few years in an unrelated field. The money was ok, but eventually I found out about pharmacy and felt like this is the career for me. Becoming a pharmacist has helped me to find my purpose in life, and I am so glad to have done it!

Even though I had worked a bit before coming to pharmacy school, I didn't see myself as a leader at all before pharmacy school. In fact, I would call myself a non-leader before starting pharmacy school. I didn't have confidence; I didn't have experiences, and my words and actions would be at odds with each other. In pharmacy school, I've been able to grow by leaps and bounds as a leader. I've been a representative of my class throughout pharmacy school, had different positions within the American Pharmacist Association (APhA) group, part of the Senior Legacy Committee, and a member of the assessment committee at the campus I've been at during my last two years of pharmacy school.

Part of leadership certainly is being in a formal position in a group or entity. But to me, real leadership does not require a formal title. Part of leadership is taking ownership of responsibilities, even stepping in and taking charge of a situation if need be to make sure the task at hand gets done. Leadership is a constant balance of being humble and not being too egocentric. It also means taking ownership of the outcomes, even if you were not directly responsible for the outcome. To me this is really important as a pharmacist, since the actions we make or the directions we give [or don't give] can have powerful and even long-lasting impact on the lives of those who come to us.

One really big event really opened my eyes about what true leadership is to me. It happened when we had a screw up at one of our big events. It is a huge event that is a year in the making and really helps to highlight all that we can do as pharmacists. The



students do a vast majority of the work, but we do have a faculty advisor over the student group (APhA), and they help us out and support us. At one point, something went wrong. I can't remember exactly what it was. It might have been something not getting turned in correctly. Anyway, whatever it was fell through the cracks, and when it came to everyone's attention, she (the faculty advisor) took responsibility for it. It was not her fault in any way; she didn't even know it was missing or done wrong. Yet, she stood up and accepted the responsibility for the error. When she stepped up and not only took responsibility for the mistake, but followed up and corrected it, that really highlighted to me that a leader isn't just responsible for just themselves, but they are responsible for the actions or inactions of those that they are over. Taking that responsibility, owning up to it, and even providing cover for those under you when there is a mistake are lessons I will not forget in a long time thanks to that inspiring faculty member! I have already seen so much growth and change and development in myself as a leader during these last four years of pharmacy school, yet I hope to continue to grow and develop and change into an even better leader over time.

## 7. Connections between Participants

All 3 participants recognized from the commencement of their pharmacy school experience that they lacked leadership experience, skills, and traits. These were further highlighted when they each looked inward and compared themselves to their peers. For Nancy, she felt this lack of leadership was something for her to focus intentionally on as a Pharm.D. student and was something that she could address by getting involved in co-curricular activities such as student organizations. During her interview, Nancy stated:

*I went into pharmacy school with a mentality [to become a leader]. My goal was to get as involved as much as possible with student organizations. Because that's what I lacked going in. . . So, when I was a P1 (first year Pharm.D. student), I had applied to seven different organizations. I wanted to test the waters and see which orgs I meshed with and which ones I really enjoyed. And I just wanted to seek out every opportunity I could.*

Lizzy was quick to point out that for her she felt like her experience as a leader was lacking compared to her peers. She noted that:

*I have never been class president of...like I wasn't in high school. I wasn't in anything else. This is the first time where I was like, you know what? I'm going to try it and see how it goes. And then I really enjoyed leading the class [as a class representative] for the first two years. So, I was nominated for my third and fourth year by some classmates and was elected once again to continue until we graduate. And so, I think what it is to me, is I truly want to be their voice.*

Both Nancy and Lizzy came into pharmacy school knowing they were lacking experience as leaders, but also recognizing that leadership was something they desired to develop, hone, and grow into during their time in pharmacy school.

Zeus had a trajectory quite unlike any of his peers, even compared to Lizzy and Nancy, who also came into pharmacy school feeling like they were lacking any leadership experience or abilities. Coming into pharmacy school, he felt that he was a non-leader, where he noted that "It feels like I just accidentally stumbled into these [co-curricular] positions in many ways", and that:

*I had no ambitions to run for class [representative] whatsoever. I was not interested. Didn't even consider it or think anyone wanted me to, but I had some classmates ask me to. . . [this] was not something I had any ambition for, but was requested of me, so I tried to step in and do the best job I can at it.*

Encouraged by his peers, he began to seek out and engage in more leadership opportunities, growing rapidly as a leader over his time in pharmacy school while also building his own confidence as a leader. Reflecting on his leadership development now, Zeus declared that "It's building up to the point where I feel that now I don't need to always run things by people. That I can trust myself, that I can make an appropriate judgment. . . That's kind

of where I am at currently in my leadership evolution". The prior lack of confidence had melted away, replaced by an increasing faith and assurance in himself and his abilities as a leader.

While the nuances of both the desire of leadership development and the actual leadership development differed between the students, each of the students recognized the value of actively engaging in their leadership development during their time in pharmacy school. While they had yet to complete their Pharm.D. degree at the time of this study, each of the participants were able to reflect on a plethora of aspects about leadership development. Taking advantage of the range of co-curricular opportunities offered by the school of pharmacy, each of these students not only experienced leadership development, but were able to articulate how they perceived their development occurring. Furthermore, they all recognized the value of their development as leaders not only during their time in pharmacy school, but as a value asset for them as they transition to their respective professional endeavors upon the completion of pharmacy school.

## 8. Significance of Study and Limitations

As noted previously, pharmacy schools in the United States are required to identify, track, and assess the curricular and co-curricular learning of their students for accreditation purposes [10]. This study highlights that leadership development occurs in pharmacy students, even in those students who have limited to no leadership development prior to pharmacy school and feel that their development as leaders occurs only once they have enrolled in a Pharm.D. program. Furthermore, these students note that engagement in co-curricular activities through the pharmacy school facilitates this leadership development. This study highlights how critical it is to offer co-curricular experiences for students given that a subset of students (for various reasons) have had little or no experiences to engender leadership development for them.

Additionally, this study highlights the importance of offering co-curricular opportunities to graduate and professional school students. Engagement in co-curriculars has been found to be quite common in undergraduate students [17], and to enhance critical thinking in undergraduate students [51,52]. Even though up to 80% of undergraduate students engage in co-curriculars during their efforts to obtain a bachelor's degree [17], that still leaves a significant number of undergraduate students who are unable to engage in co-curriculars during their undergraduate endeavors. Continuing to provide and facilitate co-curricular engagements during graduate or professional school allows for equitable growth and development for students regardless of their prior co-curricular engagements.

While the impetus for the decision/desire to develop as a leader differed for the 3 students examined in this study (namely Lizzy, Nancy, and Zeus), they each noted how their engagement with co-curriculars in pharmacy school was critical for the opportunity for each of them to develop and hone the skills as a leader. While the magnitude and nature of the leadership development for the students differed from person to person, the fact that growth occurred in all 3 of these students through their co-curricular endeavors during their Pharm.D. program is readily noted. Furthermore, for some students (such as Zeus), the opportunity to engage in co-curriculars was critical given they had not gone directly to pharmacy school after completing their undergraduate degree. The co-curricular activities that each student engaged in varied, highlighting the importance of a wide range of opportunities being available to students to find the experiences that best suit students' individual needs and interest in order to allow for leadership opportunities to emerge organically.

As with any research study, limitations exist. First, this research emerged out of unexpected findings from a larger study [40]. Given the study was not organically designed to focus explicitly on the experiences of pharmacy student leadership development for students that had minimal leadership experiences prior to pharmacy school, there was no opportunity to recruit additional students that fully met this criterion. In light of the small sample size for this study, an additional larger study specifically focused on the experiences



of pharmacy students who had limited leadership development prior to pharmacy school would serve to validate these findings.

## 9. Conclusions

This study was initially exploring how Pharm.D. students made meaning of their leadership development while in pharmacy school. During the data collection and analysis, it was unexpectedly found that several students highlighted how their growth and development as a leader occurred (from their perspective) only after they commenced pharmacy school. The findings noted that each of these students in this subset were able to experience this leadership growth through their engagement in co-curricular activities during pharmacy school. Even with the relatively small sample size for this study, this highlights the impact of co-curricular engagement in a professional school setting as being helpful. Despite efforts during K-12 and undergraduate education to hone and refine leadership, some students feel they are not able to hone their leadership abilities until they are enrolled in graduate/professional education. In turn, this reinforces the importance of offering co-curricular opportunities to pharmacy students to provide for leadership development.

**Author Contributions:** Conceptualization, M.J.S.; methodology, M.J.S. and J.K.W.; formal analysis, M.J.S.; data curation, M.J.S.; writing—original draft preparation, M.J.S. and J.K.W.; writing—review and editing, M.J.S. and J.K.W.; visualization, M.J.S.; project administration, M.J.S. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** This study was conducted in accordance with the Declaration of Helsinki, and the protocol was approved by the Ethics Committee of the University of Georgia.

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** The data used and analyzed for the current study is available from the corresponding author on reasonable request.

**Conflicts of Interest:** The authors declare no conflict of interest.

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