Trying to Lead My Life: Preservice Teacher's Connection between Leader Identity and Self-authorship

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Abstract

College is a major critical juncture for students in which they learn to author their lives. For students who are pre-service teachers, college provides an opportunity for them to develop their leader identity, a skill critical to their professional success. We posited there is a relationship between leader identity and self-authorship, such that those students with a high level of self-authorship are likely to have a high level of leader identity. To test our hypothesis, we use a cross-sections design surveying a sample of preservice teachers to assess their leader identity and self-authorship. Our survey garnered quantitative and qualitative data. Our analysis revealed traits associated with levels of leader identity and self-authorship. We found a strong positive correlation between the two variables, indicating a potential relationship. We explored the findings in our discussion and implications, recognized our study limitations, and suggested directions for future research.

Keywords: preservice teachers, leader identity, self-authorship

1. Introduction

We posited there is a relationship between self-authorship, a willingness and eagerness to lead one's life (Magolda, 2014), and leader identity, the extent to which an individual identifies as a leader (Day et al., 2009). It was reasonable to speculate that individuals must hold a leader identity to lead effective lives. We argue that the relationship is significant for teachers because they lead students in learning and frequently work nearly independently in their professional engagement in the classroom. Thus, teachers are responsible for leading their own life and for leading their students' educational journey. Further, teachers act as role models as they demonstrate how to lead one's life to their students. Therefore, we maintain a high need to understand and empirically document the relationship between preservice teachers' leader identity and their levels of self-authorship. Our search of the literature failed to expose any extant empirical studies of the relationship between self-authorship and leader identity in preservice teachers. Therefore, our study addresses this gap in the research.

2. Review of Literature

2.1 Identity and Identity Development

Most individuals hold multiple identities (Phinney, 2008; Ramarajan, 2014). Personal identity can be defined as the sets of traits, thoughts, and characteristics used to understand and explain who we are as individuals (Hitlin, 2003; Stets & Burke, 2000). Identity is formed through personal experiences and social interactions (Stets & Burke, 2000). Thus, an individual's identity is claimed by the individual and granted by others (Cerulo, 1997; DeRue & Ashford, 2010; Erez & Gati, 2004; Phinney, 2008). It is possible to claim an identity without having it recognized or granted by others. Similarly, it is also possible to have others grant an individual identity without the individual claiming the identity (DeRue & Ashford, 2010; Howieson et al., 2023). In the cases of not being granted an identity that is being claimed or not claiming an identity that is being granted, the individual may experience having a weak, incomplete, or fractured identity (Luhtanen & Crocker, 1992; Zucker, 2004).

Identity develops through increased knowledge, social interactions, successes and failures, and personal reflection (Bilodeau & Renn, 2005; McLean & Pasupathi, 2012; Waterman, 1982). As people assume different roles, take on new responsibilities, and achieve success in their endeavors, they are likely to perceive or identify

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themselves in new ways, developing new identities (Lannegrand-Willems & Bosma, 2006; Steensma et al., 2013; Waterman, 1982). Typically, identity development is temporal, evolving over time (Waterman, 1982). Some people may struggle with developing an identity even with a clearly defined role or expectations, which is commonly the case with imposter syndrome (Chapman, 2017; Russell, 2017). Regardless, identity development is a process of evolution with internal and external influences as one internalizes and is perceived as having certain characteristics or identities.

2.2 Leader Identity

Since identity is multifaceted and heavily influenced by self-perception and social interactions, there is justification for considering perceptions of self as a leader through a lens of identity. Leader identity is the extent to which an individual identifies as a leader and considers the role of a leader and influential aspect of who he/she is (Day et al., 2009). Being a leader has to be a part of the student's identity to engage fully in leader identity. Leader identity is a motivational force critical for acting, thinking, and believing like a leader (Day & Harrison, 2007). Developing purpose and a desire to establish relationships with others could provide the impetus to develop and support one's leader identity (Chickering & Reisser, 1993). If students establish their purpose and desire to be a leader, they are more likely to embrace a leader identity.

A preservice teacher has the responsibility of being a student and educator. A student must be able to lead their own life before being responsible for leading the education of others. However, a leader's identity must be established with an individual before enhancing leader identity development.

2.3 Leader Identity Development

According to Lord and Hall (2005), leader identity development occurs through experiences that influence self-awareness and the self-defined notion of being a leader. Individuals who identify as leaders are more likely to take advantage of opportunities to develop their identity through engagement in leadership roles. However, one must identify as a leader to develop their leader identity (Lord & Hall, 2005); leader identity development and self-perceptions of being a leader work in parallel. The stronger the leader's self-perception, the more likely the continued development of the leader's identity (Day & Harrison, 2007).

A preservice teacher who develops a leader identity and pursues experiences that enhance leader identity is more likely to develop as a leader. For instance, a preservice teacher with a leader identity can engage in leader identity development by leading the students and the environment in the classroom. These experiences can further develop the student's leader identity development.

2.4 Self-Authorship

According to Magolda (2014), "Today's college students are challenged to think critically in order to weigh relevant evidence to make sound decisions, craft a sense of identity that honors and balances their own and others' needs, and develop intercultural maturity to work interdependently with diverse others" (p. 25). The work of Magolda (2014) emphasizes creating a self-defined life away from the influences of external factors such as home life, family, and peers to being able to lead one's own life.

Magolda (2014) identified four stages that help guide the movement towards self-authorship: following external formulas, crossroads, self-authorship, and personal foundation. Following external formulas is when the individual still relies heavily on external formulas for their beliefs. Within stage one, the individuals are working to construct their own identities and develop social relationships (Magolda, 2014). Progressing to stage two consists of a transitional period where a student may be between relying on external factors and self-authorship. According to Magolda (2014), the challenge or crossroad a student faces within this stage is the development of their values and the pressures they face in their relationships with others. These two are usually not in alignment, which causes a challenge for students. Stage three is the stage where internal change occurs, and the navigation of one's own life becomes vital. Kegan (1994) first defined self-authorship as "the individual's shift of meaning-making capacity from outside the self to inside the self" (p. 270). Within the self-authorship stage, one can recognize their personal responsibility for expressing their beliefs and values if they wish to do so. Students who reach stage three become confident in who they are and what they believe in, and they are not afraid to stand alone in their journey because they take accountability for their own life. In stage four, personal foundation, individuals become grounded in who they are (Magolda, 2014).

The significance of these constructs in preservice teachers is the influence they can or cannot have on students. The learning partnership model (LPM) was created on the work of Baxter Magolda (2004) to support self-authorship. The LPM is connecting thoughts about themselves so they see themselves as learners. If students identify as learners, they are more likely to excel and grow in their journey. We posit that based on the work of

Magolda (2008), if students do not have an identity as a leader, they are less likely to engage in the stages of self-authorship, which contributes to learning partnerships. This lack of engagement can significantly limit the ability to learn and grow.

3. Method

Using a cross-sectional methodology, we distributed an invitation to complete a survey to undergraduate preservice teachers with a junior or senior classification at two similar universities in the south-central region of the United States. We designed our survey to gather quantitative and qualitative data to answer our research question: What is the relationship between self-authorship and the leader identity of preservice teachers?

We generated the following five guiding research questions to frame our investigation:

- 1. What are preservice teachers' levels of self-authorship?
- 2. What are preservice teachers' levels of leader identity?
- 3. What is the relationship between leader identity and self-authorship?

3.1 Participants

Our research participants were undergraduate preservice teachers with a junior or senior classification at two similar-sized, regional, and professional doctorate-ranked state universities in the United States south-central region. In the spring of 2022, we distributed an invitation to the students asking them to participate in our research. The email invitation included a link to our survey. Our sample was students enrolled in a preservice teacher program and at the junior or senior level at two universities. The survey was distributed to 1,046 juniors and seniors, and we had 41 fully complete our survey, with a nearly equal representation of participants from each university.

The participants of our research study had an average age of 22.37 years (SD = 4.4). Of the 41 participants, 31 identified as female, ten identified as male, and zero identified as a different gender. The majority of the participants, 82%, identified as Caucasian, followed by 4.9%, who identified as African American, 2.4% identified as Asian, and 2.4% identified as Native American. In addition, over half of the participants, 24, were pursuing an elementary education degree, four were pursuing a middle-level education degree, five were pursuing a secondary-level education degree, four were pursuing a physical education degree, and one was pursuing a music education degree.

3.2 Study Design

For our research, we selected a cross-section survey design (Connelly, 2016). We sought to collect data at a certain period of time from a large sample of undergraduate education majors. Therefore, we determined to use a survey design. The survey design allowed us to collect a combination of quantitative and qualitative data from the participants. The design also provided flexibility for engagement, as we distributed the instrument online, allowing the participants to complete the survey in a location of their choice and at a convenient time.

Our survey had a total of 28 items, 22 were selected responses, and six were open-ended responses. The selected response items were all structured on a five-point Likert scale ranging "1," representing "strongly disagree," to "5," representing "strongly agree." We designed the items to explore our two primary constructs - leader identity and self-authorship. Our final survey contained eight selected-response items and three free-response items aligned with leader identity. The selected examples are, "When a group member is not doing their part, I will just do it for them," and "I encourage others to do their best." In addition, we created 14 selected responses and two free-response prompts aligned with self-authorship. Some self-authorship-aligned items are, "I feel comfortable talking to my professors about a bad grade" and "I work to please others."

We established the construct validity of our survey design by seeking feedback from university faculty members with whom we shared our survey. These faculty members teach leadership courses and are knowledgeable of both leader identity and self-authorship research. According to their feedback, our survey would effectively gather the data we sought to answer our research questions. In addition, the internal consistency test revealed a Cronbach's Alpha of .76 for the leadership subscale and .73 for the self-authorship subscale. The analysis results for internal consistency indicate an acceptable level of reliability of our subscales. Given our established validity and reliability, we determined that our data were likely consistent and aligned with our study constructs.

3.3 Data Collection

Our communication was conducted through email, and our survey was distributed only online. We focused on

junior and senior College of Education preservice teachers from two similar regional, professional doctorate-ranked state universities. The survey invitation was sent to the students who were junior or senior-level preservice teachers within the Colleges of Education, asking for participation in our research by completing the survey. The survey link was provided in the invitation email. We sent the email to 490 students at one university, and the same email was sent to 554 students at university two. We had 41 students complete the survey, with approximately the same number of students from each institution. We collected data for two weeks in the spring of 2022.

3.4 Institutional Data Consistency

We chose the two public regional universities for data collection because they were similar in size and classification, and both had college success programming for first-year students. We have collected and pooled data from these two institutions in the past and have found the data to be consistent (e.g., no significant differences) with multiple different research foci. Thus, we assumed we had data consistency.

3.5 Data Analysis

3.5.1 Quantitative Data

Prior to analyzing our quantitative data, we eliminated the few substantially incomplete survey responses. We found those we retained complete, with no missing selected response items. Following the initial data set conditioning, we calculated the means, standard deviations, and medians of the responses to the selected response items. Next, we reverse-coded the responses to our negatively stated items to create the composite scores for our two subscales, summing the response and calculating the averages. Lastly, we evaluated the data for the subscales for normality and equality of variances to ensure we met the assumptions for parametric analysis.

3.5.2 Qualitative Data

Before analyzing our qualitative data, we developed a priori codes representing our survey prompts. We created these codes for the anticipated responses by the students based on our work and research on leadership and self-authorship. We also included emergent codes as we reviewed the responses. Our focus was to ensure that the trends of our data were represented.

4. Results

4.1 Levels of Self-authorship

Our first research question was, "What are preservice teachers' levels of self-authorship?" To answer this question, we analyzed our selected response items to average and mean values (see Table 1). We found that the students tend to respond to external cues and seek to align their life choices with compliance with the expectations of others. For example, they tend to seek approval from others to know they are doing the right thing. Our data suggest that the students' likely transition between following formulas and crossroads reflects early self-authorship development.

Table 1. Self-Authorship Focused Survey Prompts. Means, Standard Deviations, Medians, and Range

Survey Prompt	Mean	SD	Median	Range
Over time I have become more comfortable talking to professors.	4.46	.87	5	5
I can see many different perspectives to problems.	4.07	.79	4	4
I feel comfortable talking to my professors about a bad grade.	3.93	1.13	4	4
If my friends are doing something I do not want to do,	3.9	1.05	4	5
I often do my own thing without them.				
I work hard to please others. (-)	3.88	1.12	2	5
I am comfortable resolving conflicts I experience in my group work.	3.73	1.05	4	5
I tend to focus on finding the one right answer to questions. (-)	3.66	1.06	2	5
I tend to make decisions based on what people I admire think is best. (-)	3.37	1.07	2	5
I seek approval from others to know I am doing the right thing. (-)		1.16	2	5
I seek to have conversations with those I have had a negative experience with.		.99	3	5
When I have an argument with someone, I avoid them. (-)		1.19	3	5
It is extremely important for me to fit in. (-)		1.15	3	5
I struggle with speaking up in class. (-)		1.40	3	5
I am easily influenced by my peers. (-)		1.02	4	5

We continued our analysis of the student's levels of self-authorship by examining their responses to our free response items focusing on engaging in situations that would reflect their level of self-authorship. The first set of data we examined where their responses to our item, asking them to share two things they do to maintain control of their life. In Table 2, we have included our codes, the level of frequency for each code, and the representative responses from our participants. We found that the students indicated they tend to maintain control of their life by being organized, maintaining some amount of self-time, praying, and connecting with family and friends. At a lower frequency, the responses tended to align with a theme of more self-regulation, such as staying motivated, maintaining boundaries, remaining positive, and engaging in happiness. These data also indicate following formulas or engaging in self-authorship as the stage of crossroads.

Table 2. Code, Frequency, and Representative Of Responses Two Things You Do To Maintain Life Control

Code	N	Representative Responses
Organization	20	I set schedules for myself ahead of time to have a plan to work from.
Self-time (reading, exercise, music)	10	Make time for me when I can.
Prayer	8	Pray and read the Bible.
Family/Friend/	8	Lean on friends/family.
Colleague Support		
Motivated	5	Stay positive and always keep pushing.
Boundaries	4	One thing I do to maintain control over my life is to define my personal
		boundaries to myself and know how to respect those boundaries and
		push them so I don't get too comfortable.
Positivity	3	Stay positive.
Happiness	1	Do what makes me happy.

We continued our analysis by examining the preservice teachers' responses to our item, asking them to share how they would discuss a problem with a class with the course professor. In Table 3, we have included our codes, the level of frequency for each code, and representative responses from our participants. We found that the students indicated that if they were having a problem in a class, they would discuss the situation with the faculty member by having a face-to-face conversation or emailing the professor. However, representative responses also included the participant would not discuss the situation with their faculty member. Overall, the responses indicated that many students would address the potential conflict situation in ways that would reflect them effectively leading their lives.

Table 3. Code, Frequency, and Representative Responses To Approaching An Instructor To Discuss A Class Problem

Code	N	Representative Responses
Face-to-face	23	If the problem is my fault, I don't discuss it; I figure out how to fix it on my own. If the
Conversation		problem is their fault, I'll schedule an office hours appointment to explain my perspective
		and ask for theirs, but that's only happened with a few professors. When the problem with
		one of those professors is that she is not holding office hours, then I send an email.
Email /LMS	17	I just email them and ask a question.
I don't	5	I don't.
Maybe	1	Yes, if I cannot resolve it myself.

4.2 Levels of Leader Identity

Our second guiding research question was, "What are preservice teachers' levels of leader identity?" To answer this question, we analyzed our selected response items' mean and median values (see Table 4). We found that the students tended to agree that they engaged in some activities aligned with leadership roles, such as encouraging others and taking charge. However, they trended toward neutral in avoiding confrontation, doing work for a non-participating group member, and avoiding making presentations to groups. Our results indicate that students' self-reported responses indicate a moderate level of leader identity.

Table 4. Leader Identity Survey Prompts, Means, Standard Deviations, Medians, and Range

Survey Prompt	Mean	SD	Median	Range
I encourage others.	4.71	.56	5.0	2
I discuss with all group members how all will need to	4.05	1.02	4.0	4
contribute to group projects.				
I tend to take charge.	3.90	1.11	4.0	4
I frequently volunteer for leadership roles.		1.27	4.0	4
I prefer to work alone. (-)		1.10	3.0	4
When a group member is not doing their part, I will just do it for them. (-)		1.07	3.0	3
I avoid confrontation. (-)	3.27	1.38	3.0	4
I avoid situations where I have to present to a group. (-)	2.53	1.27	2.0	4

We continued our analysis by examining the participants' responses to our free-response prompts. The first prompt asked them to share why they may think others see them as leaders. In Table 5, we have included our codes, the level of frequency for each code, and the representative responses from our participants. We found that participants believe others see them as leaders because they take the initiative, demonstrate motivation, solve problems, and listen to others. These qualities likely reflect a self-perception of being a leader and potentially others recognizing the student as a leader. However, the top three highest frequency codes were unmotivated, indicating that others are not likely to perceive these participants as leaders, and the participant unlikely to perceive themselves as leaders; not being motivated demonstrates a lack of leader identity. Overall, the responses indicated a slight demonstration of leader identity.

Table 5. Code, Frequency, and Representative Responses for Others See Me as A Leader

	•	
Code	N	Representative Responses
Take Action/	18	I like to take charge and plan/collaborate.
Initiative/ Motivated		
Problem Solver	6	I am good at solving problems and using critical thinking when it is called upon.
Listens to Others	6	I take charge, but I listen to my subordinates.
Unmotivated	6	No because I have never stepped up and shown leadership.
Leader Demeanor	5	I do think others see me as a leader because of my social characteristics and
		decision-making in situations.
Low Priority	5	I wouldn't really say either or. I love learning new things every day, but I also live off
		campus and raise a family, so it is a little harder for me to get out all of the time.
Good Communicator	4	Sometimes -
		I am naturally good at problem-solving and communicating, so I can be good at
		leading in some situations.
Reliable/	4	I am able to take on tasks and collaborate with others well. I usually am one to form
Dependable		groups in class and get projects rolling. I am not a procrastinator.
Inspire Others	4	I believe so because of my positive outlook on life and my willingness to always
		encourage.
Timid/Quiet	4	It's hard for me to talk to people I don't know.
Have Good Ideas	3	Others turn to me for advice and come to me when they have issues that might need a second opinion.
Organized	2	Yes, I would say that they do. I have a very Type A personality. I like to see things
		being completed and progressing, and usually, to see this, I must be the one to initiate such actions.
Respected by Others	2	I am responsible for a large number of students in the classroom and gym. I have to
•		be able to lead them through instruction and be a positive role model.
No Leadership Skills	2	Sometimes, I do not like to put myself first, so I would not say I am a leader.
No Good Ideas	1	I would say yes & no because it depends on the situation. If I know what I am talking
		about or have done before, then I will take charge, but if I do not, then I have a
		tendency to hesitate.
Introvert	1	Others do not generally see me as a leader because I tend to be reserved. I come
		across as unassertive and usually participate remotely or behind the scenes rather
		than playing an obvious active part in what is going on.

We continued answering our leader identity question by examining the outcomes of the analysis of the responses to our prompts which asked participants to share why they may see themselves as leaders. In Table 6, we have included our codes, the level of frequency for each code, and the participants' representative responses that resulted from our analysis. We found that most participants perceived themselves as leaders due to their perceptions of taking action, having initiative, demonstrating motivation, inspiring others, and assuming responsibility. These responses indicate the self-claiming of leadership identity. However, among the top four highest frequency codes were no leadership skills, which indicates a lack of claiming a leadership identity. The responses indicated that most students tended to claim a leader identity.

Table 6. Code, Frequency, and Representative Responses For I See Myself As A Leader

Code	N	Representative Responses
Take action/	12	I do. I see myself as a leader because I always bring issues to light. I am not the type to clock
initiative/ Motivated		in and clock out. I want to create a better workspace, a more efficient environment, and
		collaborative energy amongst my peers.
Inspire Others	10	I see myself as a leader because, as a teacher, I have to be a positive role model for students.
		Many children will look to me for guidance.
Assumes	10	Yes, I want the best for everyone I come in contact with, and I am willing to sacrifice my
Responsibility		time to see it happen.
No Leadership	8	No, because I always let someone tell me what to do. Once I get into the swing of things, I
Skills		can do it by myself, but if I missed anything, I get a tad bit of anxiety thinking that an
		instructor is going to yell at me.
Good	5	Yes, I go above and beyond to help others and ensure they understand what is happening.
Communicator		
Problem Solver	4	Yes, because I feel like I can bridge the ideas of others, lead conversations, connect people,
		and am willing to help those who need assistance.
Leader Demeanor	4	Yes, because I see characteristics of a leader within myself, along with an extroverted
		personality that can bind well with those characteristics.
Organized/	3	I am organized, and I communicate well.
Prepared		
Collaborator	3	I strongly believe in agency for myself and others, so I'd rather collaborate with a group of
		people rather than lead them.
Unmotivated	3	I don't. I prefer to be a follower who is smart enough to offer feedback to her leader. I don't
		like having power over people, and even when I know what needs to be done, I struggle to
		motivate others to do it.
Lacks Confidence	3	I feel like a leader because it's difficult to let myself trust another peer to do something that
		I feel I could do more effectively. However, I also get very nervous about openly taking a
		leadership role because I'm afraid of messing it up.
Has Good Ideas	2	I do see myself as a leader. I think of myself as a leader because people in my organization
		come to me for advice when they come across a problem they do not have an answer to.
Reliable/	2	Yes, because I take charge. I make sure things get done when they are asked to be done. I
Dependable		make sure things are done correctly and make sure that everything is good.
Respected by	1	I do sometimes. I am very content following other people, but I do know that some people
Others		look to me for direction.
Timid/Quiet	1	I like to avoid confrontation, which is fine in many other aspects of life but can make
		leading difficult.
Low Priority	1	I don't see myself as a leader, not really. I can take charge when necessary but prefer to work
		as part of a collective under the authority of someone else/others. Though I can make
		decisions, I find that I succumb easily to the wishes of others and have trouble enforcing
		them.

Our last analysis focused on the terms the participants shared when prompted to provide their leadership qualities. Based on the coded data, we created a list of coded responses by frequency to generate a word cloud. We determined that creating a word cloud was the best approach to communicating the diversity of responses (see Figure 1). Thus, we found that the students tended to focus on aspects of leadership associated with more traditional definitions of leadership. For example, the most commonly shared terms were "strong" and [taking or being in] "charge," which reflects the qualities typically associated with authoritarian leadership styles.



Figure 1. The Participant's Self-Reported Leadership Qualities

4.3 Relationship between Leader Identity and Self-Authorship

Our third research question was, "What is the relationship between the preservice teachers' levels of leader identity and self-authorship?" To answer this question, we analyzed the relationship between the composite scores for leader identity and self-authorship. We found a significant positive correlation between leader identity and self-authorship (r = .48, p < .01), with the composite mean for leader identity being 3.30 and the composite mean for self-authorship being 3.44, both of which indicate a near-neutral level for the variables. The positive correlation suggests that as an increase is detected in either self-authorship or leader identity, there should also be a detectable increase in either leader identity or self-authorship. Again, this is a correlation and not a causation relationship.

5. Discussion, Implications, and Future Research

5.1 Levels of Self-authorship

Our analysis revealed moderate levels of self-authorship, with the participant's responses aligned with the following formulas or crossroads. Baxter-Magolda (2008) contends that progression through the phases of self-authorship is a temporal process dependent on the individual's propensity for independence and comfort with ambiguity, which are likely to develop over time with experimenting with making decisions about one's life. Thus, our results indicate that our participants may not have been encouraged or had to engage in authoring their lives at levels that would lead them to form their internal foundation. The lack of development progression could be due to cultural pressures outside of their formal education, such as conforming to the practices associated with family or community traditions. Additionally, their lack of progression may be due to being in an educational system that supports conforming and following formulas.

The implications for our findings in the participants were preservice teachers, soon graduating and leading groups of students in learning. However, if their levels of self-authorship are constrained, they may not be positioned to foster their students' self-authorship development. Further, the constrained levels of self-authorship may limit the level to which the students consider innovative educational approaches, which may further perpetuate a traditional educational model for their students. Exploring teachers' self-authorship levels in their first five years of teaching and the relationship with their engagement in innovative practices will likely be a fruitful direction for future research.

5.2 Levels of Leader Identity

Similar to our participants' level of self-authorship, our analysis revealed constrained levels of leader identity. We speculate that the students have had relatively limited opportunities to engage long-term in leadership activities that may enhance their abilities to be perceived as leaders and see themselves in formal roles leading others. Additionally, much of the participant's formal education up to their junior year in college likely has them in follower roles rather than leader roles. The constraint leader identity implies that our participants were

soon-to-be K-12 teachers leading their students' learning. The lower levels of leader identity may be correlated with lower levels of teacher efficacy.

We posit that if the teachers do not see themselves as leaders, they may perceive student success as not their responsibility but rather the students' responsibility. Further, with weak levels of leader identity, the participants may not be willing to take risks and lead their students as they engage in innovative instructional practices. Exploring the relationship between leader identity, teacher efficacy, and innovative instructional practices of new and experienced teachers may provide insight into explanations of teacher engagement in educational innovations.

5.3 Relationship between Leader Identity and Self-Authorship

We found a rather strong positive relationship between leader identity and self-authorship. The positive correlation between the variables suggests that the other variable will likely increase as one variable increases. We posit self-authorship, as a form of self-leadership, requires identifying as a leader to lead one's life effectively. Suppose an individual has a constrained leader identity. In that case, they are likely more comfortable in a follower role and, thus, would be more likely to be in the self-authorship phase of following formulas. On the other hand, if someone has a higher level of leader identity, they are more likely to feel comfortable in authoring (leading) their life.

The correlation has implications for teacher development; it may be necessary to explicitly attend to both constructs to foster teacher development as instructional leaders capable of making personal decisions that have implications for instructional practices. Given that our research is the first that we are aware of that has empirically documented the relationship between leader identity and self-authorship. Given that our participants were preservice teachers, the relationship may have important ramifications for preservice teacher preparation, including practices and curriculum. There may be related ramifications for other academic areas, such as business and healthcare; thus, exploring the relationship among students in this field is also a critical area of needed research.

5.4 Limitations and Delimitations

The first limitation of our research is the rather constrained level of potential participant engagement. We invited more than twenty times more potential participants than those who completed our survey. While our numbers are in alignment with current trends in survey research, it is possible that our sample may not be fully representative of the population. Working to get a larger sample is an important direction for future research.

Our second limitation is the potential for the students to over or underrepresent their actual engagement in situations that may have resulted in under-representation of their actual practices. Using a combination of surveys and interviews in future research may resolve this limitation.

Our first delimitation is the lack of the ability to triangulate the data to determine if the participants' responses were representative of their actions and perceptions. This delimitation is common to survey research. However, in survey research, participants are expected to respond accurately and honestly. Again, future research that includes survey and interview data may be important to resolve this delimitation.

Our second delimitation is that our participants were all recruited from teacher education programs at regional professional doctorate-granting public institutions in the south-central United States. Students in teacher preparation programs at different types of institutions (e.g., doctoral-granting, extensive research institutions) or in different geographical locations may respond differently. Thus, an important direction for future research is replicating our study at different institution classifications and locations beyond the south-central United States.

6. Conclusion

We achieved our goal of documenting self-authorship and leader identity levels among preservice teachers, a group of students soon to be in critically important leadership roles. We found constrained self-authorship and leader identity levels and a strong positive correlation between the two constructs. Our research has important implications for teacher preparation and undergraduate education. Given that our research is the first we are aware of that has explored the relationship between leader identity and self-authorship, there is a need to explore further how and why these two constructs may be related and how the relationship impacts professional practice and success.

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Authors contributions

All authors contributed to the research design, data collection, analysis, drafting the report, and finalizing the manuscript.

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The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

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