Understanding the Supplemental Instruction Leader

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Abstract

This article explored the learning styles and leadership styles of Supplemental Instruction (SI) leaders at Texas A&M University, and the impact of those preferences on recurring attendance to their sessions. The Learning Style Inventory, the Multifactor Leadership Questionnaire, and a demographic instrument were administered to SI leaders employed in the fall 2013 semester. This study is of significance to practitioners and researchers by identifying characteristics of SI leaders, one of the key personnel of a higher education learning program.

Keywords: supplemental instruction leader, learning style, experiential learning theory, leadership style, transformational leadership.

In an effort to support the learning needs of students in higher education, institutions have implemented academic support programs (Martin & Arendale, 1993). One successful program being implemented in colleges and universities across the globe is Supplemental Instruction (SI) (Martin & Arendale, 1993). One of the elements central to the success of the SI program lies in the leadership of currently enrolled students, known as SI leaders, to facilitate group study sessions for courses that have been identified as high risk (Arendale, 1994).

Despite the fact that SI leaders are key to the success of the SI program, few researchers have explored their characteristics (Arendale, 1997). One characteristic that warrants further investigation is the learning style of the SI leader. Even though

SI sessions follow a set of guidelines provided by the program, session design and implementation can differ by individual SI leader. Adams (2011) found that SI session designs exhibited characteristics of the SI leader's learning style identified by D. A. Kolb's (1984) Learning Style Inventory (LSI). This is supported by the assertion that instructors teach based on their own learning style preferences (Hawk & Shah, 2007; Marshall, 1991; Wolfe, Bates, Manikowske, & Amundsen, 2005). The LSI identifies learning styles suggested by D. A. Kolb's (1984) experiential learning theory (ELT). As with SI, ELT proposes a framework for learner-centered education with foundations in constructivism (Kolb, & Kolb, 2005).

The leadership style of the SI leader should not be overlooked. The title alone suggests that further investigation of behavior preferences for approaching the leadership of group study sessions is necessary. The SI model asserts that SI leaders are supposed to create a collaborative learning environment in which student attendees feel bonded by a common purpose and motivated to learn (Martin, Arendale & Associates, 1992; McGuire, 2006). As Northouse (2007) asserted, this ability to motivate and create a common bond and purpose is encompassing of a transformational leader. Thus, the argument can be made that SI leaders are, or at least should be, transformational leaders.

Additional responsibilities of the SI leader also appear to overlap with transformational leadership behaviors identified by Bass (1988), a well-known scholar of transformational leadership. However, empirical research about the leadership of SI leaders is generally limited to the skills that they gain in the role (Congos & Stout, 2003; Etter, Burmeister, & Elder, 2000; Lockie & Van Lanen, 2008; Stout & McDaniel, 2006; Zaritsky & Toce, 2006). This study explores the leadership behaviors of SI leaders to determine if there is, in fact, an overlap with their responsibilities and transformational leadership behaviors.

Literature Review

The SI Leader

SI is an academic support program developed in 1973 by Deanna Martin at the University of Missouri, Kansas City (Arendale,

1997). The program is implemented in higher education institutions and utilizes currently enrolled students, called SI leaders, to facilitate group study sessions for select, high-risk, courses. The creation of the program was an effort to improve on traditional one-on-one peer tutoring, which labels students as at high risk (Martin & Arendale, 1993). Instead of labeling the student, the SI program identifies and targets high-risk courses (Blanc, DeBuhr, & Martin, 1983; Martin et al., 1992), that is, entry-level courses in which at least 30% of the students commonly receive a grade of D or F or withdraw from the course (Blanc et al., 1983).

Once a course has been identified as high risk, a student, known as the SI leader, is assigned to the course. To be hired as an SI leader, a student must meet the following minimum requirements: (a) at least a 3.0 grade point average (GPA) on a 4.0 scale, (b) demonstrated interpersonal communication skills, (c) a recorded A or B in the targeted course, and (d) availability to attend training (Peer Academic Services, 2014). In addition, the SI leader must be available to attend the class lectures of the targeted class, take notes, and do the homework and readings (Congos, 1998). Doing so allows the leader to be aware of what concepts were presented in class and how those concepts were presented, which is useful in planning sessions (Etter et al., 2000). This requirement also allows the leader to interact with the students in the course and to encourage them to attend SI sessions (Hurley, Jacobs, & Gilbert, 2006).

The SI leader facilitates group study sessions to help students to learn and apply effective study strategies to achieve the higher levels of learning that are required at the collegiate level (Hurley et al., 2006). The group study sessions are open to all students who are enrolled in the course, and attendance is voluntary (Arendale, 1994; Blanc et al., 1983). SI sessions are held three or four times a week, each lasting 50 minutes (Blanc et al., 1983). During the sessions, the SI leader helps participants to learn effective strategies to succeed in the course (Blanc et al., 1983; Hurley et al., 2006).

Substantial research spanning various course subjects has shown that students who attended at least one SI session had higher course performance than those who did not attend (Arendale, 1997; Blanc et al., 1983; Blanc & Martin, 1994; Congos & Schoeps, 1993;

Hensen & Shelley, 2003; Kochenour, Jolley, Kaup, Patrick, Roach & Wenzler, 1997). Further, there is evidence that attending SI sessions on a regular basis has a greater impact on course performance (Arendale, 1997; Kochenour et al., 1997; McGuire, 2006). Data reported by Peer Academic Services (PAS) at Texas A&M University spanning 10 semesters support this claim (PAS, 2006-2011).

Even with an awareness of its demonstrated effectiveness and ongoing marketing strategies, many students choose not to attend SI sessions (McGuire, 2006). To understand this, researchers have investigated characteristics of students who attend SI sessions (McGee, 2005; Visor, Johnson & Cole, 1992; Warren, 1997). However, research on the impact of the SI leader is limited.

The SI leader is one of the three key personnel of the SI program (Martin et al., 1992). The SI leader is a currently enrolled college student who has excelled in the identified high-risk course (Martin & Arendale, 1994). Before being allowed to facilitate a group study session, the SI leader must attend training provided by the program's supervisor, who is also one of the key personnel for SI (Hurley et al., 2006). During this training, the SI leader is given information on learning strategies, facilitation methods, and techniques to engage students with each other and with the material (Martin et al., 1992).

Learning Styles

As a result of hereditary factors, past experiences, and present environment, people develop preferences about how they prefer to grasp and transform knowledge (Kolb, D. A., 1981, 1984), known as learning styles. D. A. Kolb (1984) identified four learning styles based on his Experiential Learning Theory (ELT): converging, diverging, assimilating, and accommodating. The four styles are identified by assessing a person's preference for modes in the experiential learning cycle (Kolb & Kolb, 2005).

People with a converging learning style have strong problem-solving and decision-making abilities. In formal learning situations, they prefer experimenting with new ideas (Kolb & Kolb, 2005; Kolb, D. A., 1984). People with a diverging style excel at brainstorming and creating new ideas and implications. They prefer to work in groups to gather information and they desire individualized feedback (Kolb & Kolb, 2005; Kolb, D. A., 1984).

People with an assimilating style have strengths that lie in taking a wide range of information and putting it into logical form. In formal learning situations, they prefer readings and lectures and having time to think things through (Kolb & Kolb, 2005; Kolb, D. A., 1984). People with an accommodating learning style have strengths in completing tasks and getting involved in new and challenging experiences. They prefer learning situations in which they can set goals, work with others, and test various approaches to task completion (Kolb & Kolb, 2005; Kolb, D. A., 1984).

To help people to understand their unique approach to the process of learning from experience, D. A. Kolb developed the Learning Style Inventory (LSI) (Kolb & Kolb, 2005) which identifies a preference for one of the four styles. Administration of the instrument has allowed for exploration of demographics. Gender and its relationship to learning is perhaps the most reported demographic characteristic in research using the LSI.

There are studies that support differences in learning styles between males and females. In a study by Philbin, Meier, Huffman, and Boverie (1995) of 45 females and 25 males, a significant difference was found in learning style preferences using the LSI 2. It was reported that the assimilator style was most preferred by males and least preferred by females. Peters (2012) also reported a significant difference between male and female students. In Peters' (2012) study using the LSI 3.1, the difference was found in the accommodating style consisting of 70% females and 30% males.

While there is research to support significant learning style differences by gender, other studies have failed to document significant differences. Demirbas and Demirkan (2007) did not find a significant difference in learning styles in a 3-year sample of 140 female and 133 male freshmen students in an architecture and design department. Similarly, Healey, Kneale, and Bradbeer (2005) did not find a significant difference in learning styles by gender in a study of more than 900 students.

Adams (2011) investigated the relationship between the SI leader learning styles and SI session design. Overall, however, there is a paucity of research related to specific characteristics of SI leaders, including learning styles.

Leadership Styles

Leadership is a complex concept that has been conceptualized, described, and defined in many ways. One definition, which encompasses concepts central to this study is that "leadership is a process whereby an individual influences a group of individuals to achieve a common goal" (Northouse, 2007, p. 3). This process is an interactive event between the leader and the follower(s) and can be approached in various ways (Northouse, 2007). In early years, Burns (1978) asserted that this interaction takes two independent forms: transactional leadership and transforming leadership. Transactional leadership was said to have occurred when there was an exchange of valued things without a purpose that connected the leader and follower (Burns, 1978). In contrast, Burns (1978) said that transforming leadership occurred when people engaged with each other in such a way that they were bound together and higher levels of motivation were achieved.

Expanding on Burns' work, Bass (1985) proposed that transformational and transactional leadership occurred along a continuum and were not independent of each other. He identified the two as conceptually distinct but asserted that behaviors associated with them could be displayed by the same person, just in different intensities (Bass, 1985). This full range of leadership model was developed to explain leadership behaviors. The model identifies factors that help to identify transformational leadership, transactional leadership, and passive/avoidant leadership (Avolio & Bass, 2004).

Passive/avoidant leadership is essentially the lack of leadership and involves two factors: management-by-exception (passive), and laissez-faire leadership. Leaders displaying management-by-exception (passive) behaviors wait for problems to arise before taking corrective action in the form of job loss, reprimands, or information regarding what needs to be corrected. Laissez-faire leadership is demonstrated when decisions are avoided, the leader is absent when needed, and there is a delay responding to important issues (Avolio & Bass, 2004).

A transactional approach to leadership involves exchanges between the leader and group members. In interactions with followers, a transactional leader exchanges rewards for effort and is more concerned with processes than with ideas (Bass, 1985). Two factors are associated with transactional leadership: contingent reward

and management-by-exception (active; Avolio & Bass, 2004).

Contingent reward is a constructive transaction and is demonstrated when a leader rewards a member for his or her effort. The outline of task or goal is agreed on in advance and rewards are given only if the agreement is met. Management-by-exception (active) is a corrective transaction and is displayed when a leader intervenes to give negative reinforcement or corrective criticism. Active management-by-exception is demonstrated when a leader proactively seeks to identify mistakes made by members (Avolio & Bass, 2004).

The third approach, transformational leadership, is said to be the most effective approach to leadership (Avolio & Bass, 2004). A meta-analysis by Lowe, Kroeck, and Sivasubramaniam (1996) revealed stronger associations between transformational leadership and unit effectiveness than between transactional leadership and unit effectiveness. The full range of leadership model identifies five factors inclusive of transformational leadership: idealized influence (attributed), idealized influence (behavior), inspirational motivation, intellectual stimulation, and individualized consideration.

A transformational leader who possesses idealized influence has followers who idealize the leader and want to emulate the leader. Inspirational motivation is demonstrated by leaders when they provide a clear understanding of shared goals. The leaders' expectations are typically high; however, they provide visions of what is possible and promote the importance of their role within the team (Avolio & Bass, 2004; Northouse, 2007).

A leader who utilizes intellectual stimulation encourages members to think of problems in new and creative ways and even question assumptions of the leader if appropriate. (Avolio & Bass, 2004; Northouse, 2007). Individualized consideration is displayed when each individual is treated uniquely, and the leader strives to create a climate that supports individual growth (Avolio & Bass, 2004; Northouse, 2007).

In an effort to measure and identify transformational, transactional, and passive/avoidant styles quantitatively, Bass (1985) proposed a six-factor model of the Multifactor Leadership Questionnaire (MLQ; Avolio & Bass, 2004). The MLQ has undergone revision and refinement since 1985 (Avolio & Bass,

2004). The instrument has been used in numerous studies across the globe and is the most widely used measurement of transformational leadership (Avolio & Bass, 2004; Northouse, 2007).

Through measurement of transformational, transactional, and passive/ avoidant leadership, relationships between gender and leadership have emerged. As with learning style, results from the studies reveal both significant relationships and lack of relationships.

One variable that has received a great deal of attention in research conducted on leadership style is gender. Results indicating and denying gender as a correlate to leadership styles have been reported. These differences exist in both the self-rating of leadership behavior and ratings by followers or subordinates. In a meta-analysis, Eagly, Johannesen-Schmidt, and van Engen (2003) found significant differences in transformational and transactional leadership behaviors of men and women. Females scored significantly higher than males on idealized influence (attributed), inspirational motivation, intellectual stimulation, and individualized consideration. Females also scored higher on contingent reward. Males scored significantly higher on management-by-exception (passive and active) attributes and the laissez-faire style.

In a study of 74 hall directors employed at one of seven public universities, Komives (1991) found that men and women were similar in their leadership styles as measured by the MLQ self-rater form on all but one subscale: intellectual stimulation. Men scored significantly higher than women on this subscale.

In a study of 47 cooperative extension service leaders, Moore (2003) reported that females had a higher mean score than males for the three leadership styles and eight of the nine leadership scales identified by the MLQ. Management-by-exception (active) was the only scale on which males scored higher than females. However, the only scale with significant difference by gender was idealized influence (attributed).

A key element to the effectiveness of the SI program is the SI leader. This student leads group study sessions that engage attendees with the material and with each other. When exploring responsibilities of their role, comparisons can be made with ELT learning styles and transformational leadership behaviors.

Purpose

The purpose of this study was to explore the learning styles and leadership styles of SI leaders. In addition, the relationship between learning and leadership styles and recurring attendance to SI sessions was investigated. The study was designed to meet four specific objectives:

1. Explore the SI leader's learning style.
2. Explore the SI leader's leadership style.
3. Explore the relationship between SI leader learning styles and recurring attendance to SI.
4. Explore the relationship between SI leader leadership styles and recurring attendance to SI.

Methods

Participants

There were 40 SI leaders who agreed to participate in the study. The participants were undergraduate students employed as SI leaders by PAS at Texas A&M University in the fall 2013 semester. SI leaders were emailed links to the MLQ and LSI which included gender as a demographic. The director at PAS provided the researcher the attendance data for the courses associated with the respondent SI leaders.

Data Analysis

The response rate was 87.50% ($N = 35$) and the usable response rate was 85% (N = 34) for the LSI and 80% ($N = 32$) for the MLQ. Of the 34 participants, 64.71% ($n = 22$) were female and 35.29% ($n = 12$) were male.

Missing data were addressed for the MLQ but not needed for the LSI 3.1 or demographic instrument because all items were completed. If a participant failed to complete a statement on the MLQ, the mean score for the associated scale was calculated based on the items that were completed. This followed advice from staff at Mind Garden, Inc. (personal communication, February 10, 2014).

Objectives 1 and 2. The four learning styles: accommodating, diverging, assimilating, and converging and gender were reported for objective 1. The mean scores for the three leadership styles—transformational, transactional, and passive/avoidant—and the nine scale variables associated with those styles—idealized influence

(attributed), idealized influence (behavior), inspirational motivation, intellectual stimulation, individual consideration, contingent reward, management by exception (active), management by exception (passive), and laissez-faire—along with gender were reported for objective 2.

Objectives 3 and 4. For objectives 3 and 4, the dependent variable was attendance as researchers were exploring the impact of SI leader learning and leadership styles on recurring attendance to SI sessions. Because "absenteeism is a nonevent in that no behavior can be observed," (Latham & Pursell, 1975, p. 369) only students who attended at least one SI session were included in data analysis.

Attendance was reported for the course to which the SI leader was assigned. This variable was computed by dividing the number of times a student attended SI session(s) by the number of SI sessions offered for that student's course. This produced the percentage of SI sessions that a student attended. This was done to standardize the data because not all SI leaders held the same number of SI sessions. Next, an average of the percentages for the students attending the course was calculated.

The independent variables were the learning styles, leadership styles, and leadership scales. One-way analysis of variance was used to determine whether attendance differed by learning style. Pearson product-moment correlation was used to determine the relationship between attendance and learning styles, leadership styles, and leadership scales.

Results

Objective 1

The majority of participants in this study preferred a diverging or accommodating learning style. This is true of both males and females (Table 1). As shown in Table 1, 20.59% (n = 7) of the 34 participants were female accommodating learners and 5.88% (n = 2) were males. Diverging females accounted for 23.53% (n = 8) and diverging males also accounted for 23.53% (n = 8) of total participants. No males showed a preference for the assimilating learning style, and 14.71% (n = 5) of the females reported a preference for assimilating. Female converging learners accounted for

5.88% (n = 2) of the total participants; this was the same for male converging learners, 5.88% (n = 2).

Table 1

Frequencies of Learning Styles of Supplemental Instruction Leader by Gender (N =34)

	Female		Male		Total	
Learning Style	***n***	**% of total**	***n***	**% of total**	***n***	**% of total**
Accommodating	7	20.59	2	5.88	9	26.47
Diverging	8	23.53	8	23.53	16	47.06
Assimilating	5	14.71	0	0.00	5	14.71
Converging	2	5.88	2	5.88	4	11.76
Total	22	64.71	12	35.29	34	100.00

Objective 2

There were 21 females and 11 males who provided usable responses on the MLQ. Females had a higher mean score for transformational leadership style (M = 3.02, SD = 0.26) and the scales idealized influence (attributed; M = 3.01, SD = 0.53) and individual consideration (M = 3.27, SD = 0.43). Males had a higher mean score for idealized influence (behavior; M = 2.73, SD = 0.49), inspirational motivation (M = 3.30, SD = 0.44), and intellectual stimulation (M = 2.98, SD = 0.54) scales of transformational leadership style. Male participants also had higher mean scores for transactional leadership style (M = 2.58, SD = 0.49) and its scales, as well as for passive/avoidant leadership style (M = 0.79, SD = 0.56) and its scales. Mean scores for the leadership styles and scales by gender are presented in Table 2.

Table 2

Mean Leadership Scale Scores and Leadership Style Scores by Gender (N = 32)

Construct	**Gender**	***n***	***M***	***SD***	***d***
Idealized Influence (Attributed)	Female	21	3.01	0.53	0.27
	Male	11	2.85	0.66	
Idealized Influence (Behavior)	Female	21	2.63	0.26	0.26
	Male	11	2.73	0.49	

Table 2 Continued					
Construct	**Gender**	***n***	***M***	***SD***	***d***
Inspirational Motivation	Female	21	3.25	0.47	0.11
	Male	11	3.30	0.44	
Intellectual Stimulation	Female	21	2.94	0.44	0.08
	Male	11	2.98	0.54	
Individual Consideration	Female	21	3.27	0.0.43	0.36
	Male	11	3.09	0.56	
Transformational Leadership Style	Female	21	3.02	0.26	0.09
	Male	11	2.99	0.39	
Contingent Reward	Female	21	2.93	0.51	0.17
	Male	11	3.01	0.43	
Management-by-Exception (Active)	Female	21	1.83	0.84	0.45
	Male	11	2.16	0.59	
Transactional Leadership Style	Female	21	2.38	0.55	0.38
	Male	11	2.58	0.49	
Management-by-Exception (Passive)	Female	21	0.58	0.45	0.44
	Male	11	0.80	0.54	
Laissez-Faire Leadership	Female	21	0.48	0.45	0.47
	Male	11	0.77	0.75	
Passive/Avoidant Leadership Style	Female	21	0.53	0.37	0.55
	Male	11	0.79	0.56	

Note: Scores range from 0 to 4. (0 = *not at all*, 1 = *once in a while*, 2 = *sometimes*, 3 = *fairly often*, 4 = *frequently, if not always*)

Objectives 3 and 4

Average recurring attendance ranged from 5.44% to 34.02% for individual SI leaders in this study. Learning style and leadership behaviors were not related to recurring attendance at SI sessions.

Discussion

These findings are encouraging, as the responsibilities of the SI leader that contribute to the success of SI can be seen to overlap transformational leadership behaviors. SI leaders are responsible for creating an environment in their sessions in which students gain skills to be successful, independent learners (Hurley et al., 2006). They incorporate strategies to help attendees with how to learn (Arendale, 1997). This can be seen to interrelate with the intellectual stimulation

scale. Bass (1988) claimed that an intellectually stimulating leader contributes to followers' independence by teaching them how to fish rather than giving them fish. The mean score for intellectual stimulation was 2.95 ($SD = 0.47$), indicating that these SI leaders perceived themselves to engage in this behavior between sometimes and fairly often.

The highest mean score reported by the SI leaders was for inspirational motivation ($M = 3.27$, $SD = 0.76$). Behaviors of leaders engaging in inspirational motivation provide a vision of what is possible and a clear understanding of shared goals. Both of these are responsibilities of the SI leader (Hurley et al., 2006), which SI leaders in this study perceived that they displayed between fairly often and frequently, if not always.

Individual consideration is shown when each individual is treated uniquely and individual support is provided (Avolio & Bass, 2004). The mean score for this scale was 3.21 ($SD = 0.48$). The SI leader can demonstrate individual consideration behaviors by engaging all students in the session, designing sessions that consider a diverse group of students, and delivering learning activities that involve all types of learning.

On the other side of the full range of the leadership continuum are passive/avoidant leaders, who make no effort toward effective leadership behaviors. They do not set goals or clarify expectations (Northouse, 2007). This style has a negative effect on desired outcomes (Avolio & Bass, 2004). The mean score for passive/avoidant leadership for SI leaders in this study was noticeably lower ($M = 0.62$, $SD = 0.45$), indicating that they perceived that they engaged in these behaviors less than once in a while. Low scores for this style signify that these SI leaders believed that they were choosing to utilize effective leadership behaviors.

Adams (2011) found that SI leaders with a diverging learning style reported designing sessions that incorporated brainstorming and gathering information by creating learning games to get the students involved with each other in small groups. Accommodating learners reported designing sessions that relied heavily on student involvement. Those with an assimilating style reported engaging in extensive talking and lecturing during their sessions. Participants with

a converging style reported incorporating a systematic application of tasks.

Almost three-quarters (n = 25, 75.53%) of the SI leaders in the present study were either accommodating or diverging learners. Individuals using these two styles tend to prefer to work with others, view situations from different points of view, and learn from hands-on experience. Adams (2011) concluded that SI leaders with these learning styles are more likely to design SI sessions that incorporate more active teaching and/or facilitation strategies that encourage student involvement as opposed to more passive strategies. This becomes important in regard to the foundations of SI for several reasons. For example, SI leaders have the responsibility to involve all attendees in the session with each other and with the material (Hurley et al., 2006). Furthermore, students can be motivated to attend regularly when the SI leader engages them with learning games and other interactive activities (McGuire, 2006), such as those which, according to Adams (2011), are designed by SI leaders with accommodating and diverging learning styles. SI leaders should be open to suggestions from student attendees and consider their needs so that all attendees benefit (Hurley et al., 2006). Thus, while the types of teaching/facilitation strategies incorporated by SI leaders and the impact of the various teaching/facilitation strategies on SI session attendance was beyond the scope of the present study, it is nevertheless encouraging that 25 of the 34 SI leaders in the present study had learning styles shown to be more likely to create interactive learning environments that rely on student interaction and involvement.

Recommendations for Practice

This study adds to the literature base by identifying learning styles and leadership styles of SI leaders. This addition can be of value to the work of practitioners and researchers alike. An awareness of SI leaders' preferences can shape training, recruitment, and evaluation practices. Findings can be used to establish the importance of administering learning and leadership instruments to SI leaders as part of training. When an SI leader completes the instruments, the program administrators and the SI leader gain an understanding of the SI leader's unique approach to learning and leadership. An

awareness of the approaches employed by individual SI leaders allows for individualized guidance related to the complexities of planning and leading sessions that appeal to all students. For example, if program supervisors are aware of the learning style and leadership style of individual SI leaders, they can assign SI leaders to courses that can benefit from the strategies they are likely to employ as a result, if possible, and/or coach SI leaders to be more cognizant of the strategies they employ as a result of their individual styles.

With the understanding that teachers teach as they prefer to learn and that session design can reflect learning style, SI leaders should be given the LSI as part of training. The LSI provides a language for learning preferences that can foster conversations on creating the best learning environment (Kolb & Kolb, 2005). Additionally, administering the MLQ as part of training provides a profile for leadership preferences that can be used by SI supervisors to provide individualized feedback and coach specific behaviors These conversations can occur between SI leaders or between SI leaders and administrators. An SI leader with an understanding of how personal learning and leadership style impacts teaching sessions is more likely to plan sessions that appeal to all attendees.

Learning preferences and leadership preferences for SI leaders in this study did not have a relationship with recurring attendance. Staff involved with SI should continue ongoing marketing efforts that encourage regular attendance.

Suggestions for Research

SI is implemented in hundreds of colleges and universities across the globe. This study represented a small sample from only one of those universities. A larger, random sample across multiple universities could serve to validate conclusions drawn in this study. Further, a larger sample should be conducted to determine the influence of variables, not just the relationship.

The MLQ leader form was used to obtain information about the leadership behaviors of the SI leaders. The MLQ rater form could be administered to students who attend SI sessions and to the SI supervisor to provide a more comprehensive picture of the SI leader's leadership behaviors.

Students are sometimes enrolled in two courses with SI in the same semester. A study examining their attendance habits in relation to the characteristics of the two SI leaders could be conducted. Although the present study did not find a relationship between the learning or leadership style of the SI leader and recurring attendance of participants, it would be interesting to examine if individual SI participants were more likely to attend SI sessions of one SI leader as opposed to another, and if such attendance was a function of the learning and/or leadership style of a particular SI leader.

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