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# Who Participates? Who Leads? What are the Outcomes for College Students in Co-Curricular Activities?

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## ABSTRACT

Sessa and London's learning model (Sessa & London 2006, London & Sessa, 2006) was used to generate hypotheses suggesting that readiness to learn predicts which college students chose to respond to learning triggers in the institutional context of a university (i.e. co- or extra-curricular activities, take on leader roles) and that participation leads to such learning outcomes as higher GPA, psycho-social development, and flourishing/well-being. One-hundred and sixty-eight students who varied in their participation levels (no participation beyond the classroom, participation in co-curricular activities, clubs, sports, etc., and involved in leader roles) filled out an online survey. Results partially support hypotheses. Readiness to learn partially predicted which students held leader positions and which did not participate in activities beyond the classroom; readiness to learn did not predict which students participated but did not hold leader positions. Leaders differed from non-participants in psycho-social development and flourishing. Few differences were found between leaders and participants, or participants and non-participants.

*Keywords:* learning, leadership, extracurricular involvement, institutional context

Montclair State University

Who participates? Who Leads? What are the outcomes?

by

Nicole Alonso

A Master's Thesis Submitted to the Faculty of

Montclair State University

In Partial Fulfillment of the Requirements

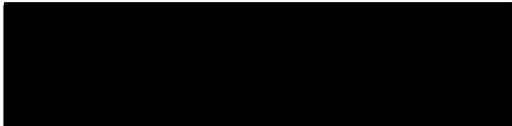
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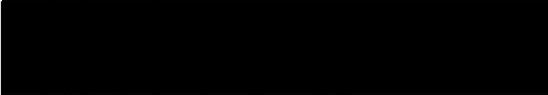
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WHO PARTICIPATES? WHO LEADS? WHAT ARE  
THE OUTCOMES FOR COLLEGE STUDENTS  
IN CO-CURRICULAR ACTIVITIES?

A THESIS

Submitted in partial fulfillment of the requirements

For the degree of Masters of Arts

by

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Montclair State University

Montclair, NJ

2017

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First and foremost, I'd like to thank God for getting me to this point. When I started this journey over two years ago I no idea what to expect, and He has blessed me every step of the way. To my loving husband, I couldn't have done this without you. Thank you for being my rock and support throughout my journey, but especially when I was struggling. To my wonderful mentors Valerie, Jennifer and Meredyth thank you all so much. You've provided me with valuable life and research lessons. It has been an absolute blessing to work with you all. Last, but not least, I'd like to thank the rest of my family (that includes you Brittany) for your love and support along the way.

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## INTRODUCTION

It is increasingly recognized in institutes of higher education that student learning and development occurs not only in the academic context, but also in the institutional (leadership roles, co- and extra-curricular activities) and social contexts (personal relationships, group membership) (Keeling, 2014). Studies have shown that involvement or participation in extracurricular activities on campus leads to positive student learning and developmental outcomes such as higher GPA (Eccles, Barber, Stone & Hunt, 2003; Webber, Krylow, & Zhang, 2013), psychosocial development, and well-being (Mayhew, Rockenbach, Bowman, Seifert, Wolniak, Pascarella & Terenzini, 2016). In addition, other studies have demonstrated similar positive learning and developmental outcomes realized by students who take on leadership roles (Pascarella & Terenzini, 2005).

However, while co- and extra-curricular activities, and student leader roles exist to complement the university's academic curriculum and to augment student educational experiences, close to one half of students do not participate in co-curricular or extra-curricular activities while in college (Buckley & Kinzie, 2005). In addition, only a portion of those engaging in co-curricular activities take on leader activities and roles.

While there is general agreement that participation, either as involvement or in a leadership role, has a beneficial impact on student learning and development, less research has focused on such things as who does not participate, who chooses to participate, and who chooses to take on leadership roles in the first place. Nor has

research directly compared the learning and development outcomes of students in each category. The purpose of this research is two-fold; with hypotheses generated using a recent learning theory (Sessa & London, 2005, London & Sessa, 2006). First, we seek to understand who participates in learning opportunities outside the classroom in terms of their awareness that co- and extra-curricular opportunities are important for their learning, their general readiness to learn, and their readiness to learn leadership specifically. Second, we seek to understand how college students who do not participate outside the classroom, who participate, or who take on leadership roles in co-curricular activities differ in terms of their academic success, their psychosocial development, and their well-being.

### **Three Participation Groups**

Approximately 50% of college students do not participate in on-going activities outside of the classroom (Buckley & Kinzie, 2005). They do not participate in clubs or organizations on campus, nor are they involved in sports teams or any other groups on campus. This may be in part because many of today's students are juggling some combination of families, jobs, and school. Many students are only able to attend college part time (Complete College America, 2011). In addition, only 40% of full time students at public universities live on campus, while over 60% of full time students at private universities do (Tellefsen, 2017). Finally, almost half of college students today are first generation students who may have difficulty navigating college (Lundberg, Schreiner, Hovaguimian & Miller, 2007). As co- or extra- curricular involvement requires additional time commitments and often costs over and above academics, time and money may be detriments to participation by working students, those who attend part time, or those who

attend full time but commute to campus. Studies that have looked at why some students participate in co- and extra-curricular activities, and others don't, tend to focus on these demographic variables (Walpole, 2003; Fischer, 2007; Lundberg, Schreiner, Hovaguimian, & Miller, 2007).

Just over 50% of students do indicate that they participate in on-going activities outside the classroom (Buckley and Kinzie, 2005). Of the 50% of students who do participate in activities outside of the classroom, 34% spend approximately 1-5 hours per week on such activities and only 9% spend over 10 hours participating per week (Buckley & Kinzie, 2005). Students who participate in co-curricular and extra-curricular activities may vary in their amount and type of participation, which would have an impact on whether they fully receive benefits in participation. For example, for some students, participation may be passively attending meetings a few times a semester. However, they *are* present, which may have some benefits over non-participation as they are being exposed to experiences, ideas, or others that they might not had access to if they did not attend. For other students, participation may involve hard work and engagement in decision-making, which pushes them out of their comfort zones. Evidence suggests that for students to actually learn from participation in co-curricular and extra-curricular experiences, they need to be involved in novel, uncertain, or meaningful activities (DeRue & Wellman, 2009).

The percentage of college students who persist in co- and extra-curricular activities to take on leadership roles while in college is largely unknown. One student leadership development program coordinator states that there are approximately 700 leadership positions available to over 21,000 students on her campus (J. Ploskanka,

personal communication, August 15, 2016). In addition to the proportionally small number of positions available, many students take on more than one position (Sessa, 2017) leaving fewer opportunities for other students. Students who take on leadership positions may not be the only students who are involved, but the ones that are also exercising agency (Bandura, 1989; Bandura, 2006). That is, they are intentionally influencing their own functioning and their life circumstances, as well as the events of the club or association that they are leading. Research demonstrates that while students do learn from participation, they learn more participating in leadership activities (see Sessa, 2017).

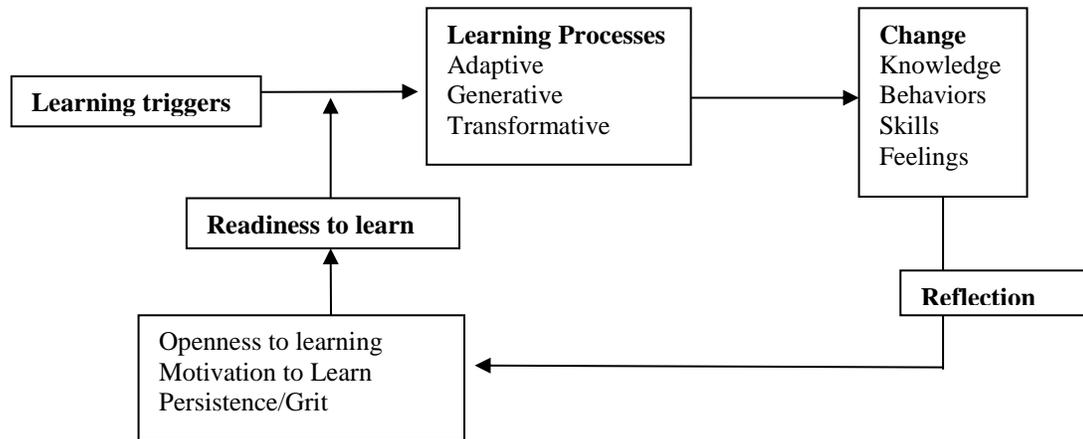
While the number of studies looking at either participants or student leaders is growing, very little is known regarding those who are not participating in extracurricular activities, those who participate but do not hold leadership positions, and those who take on a leadership role. In addition, much of this work in this area has proceeded atheoretically. In this research, we use a recently developed learning model (London & Sessa, 2006, Sessa & London, 2005) to make predictions regarding who participates beyond the classroom.

### **Theoretical Overview: Learning Model**

In Sessa and London's (2005, 2006) theory, learning is defined as "a process of deepening and broadening of a student's capabilities in (re)structuring to meet changing conditions, adding new skills and knowledge, and (re)creating into a more and more sophisticated person through reflection on his or her own actions and consequences" (London & Sessa, 2006; Sessa & London, 2005). Learning processes lead to changes in the neural patterns of the brain (Ratey, 2001), which manifest as changes in cognition,

behavior and affect. According to the model, learning is triggered by experiences, demands, challenges and opportunities that force students to change and grow or risk being unsuccessful. Today, individuals are bombarded with stimuli that have the potential to trigger learning, but humans can only attend to a few stimuli at any given time, meaning that we need to be selective to what stimuli we attend. Readiness to learn is the mechanism through which individuals determine that triggers for learning are occurring and that learning needs to subsequently take place.

In Sessa and London's model (see figure 1), readiness to learn is composed of openness to learning, learning motivation, and grit/persistence. In line with current literature, we expand readiness to learn to include self-regulation (Kanfer, 1970). A person's readiness to learn moderates the relationship between learning triggers and learning processes. Sessa and London (2005) discuss three types of learning; adaptive, generative, and transformative (see Sessa & London, 2006; London & Sessa, 2006). Learning then leads to change in knowledge, behaviors, skills, and feelings. This change then affects an individual's readiness to learn. See figure 1. For this study, we focused on the readiness to learn component of the model; therefore, each component is discussed in depth below.



*Figure 1.* Learning Model modified with permission from London, M & Sessa, V.I. (2006), Continuous learning in organizations: a living systems analysis of individual, group, and organization learning, in Francis J. Yammarino, Fred Dansereau (ed.) *Multi-Level Issues in Social Systems (Research in Multi-Level Issues, Volume 5)* Emerald Group Publishing Limited, pp.123 - 172.

### Triggers for Learning

As mentioned above, it is increasingly recognized by academic professionals, researchers and the public at large that learning occurs in multiple contexts of higher education; namely academic, social and institutional contexts. The academic context includes time spent in the classroom as well as the time spent on work related to those classes, and interactions with faculty. Learning in this context can be triggered by the content of class material, the challenge of working in teams, or the demand on a student's time. In this context, brain-based learning is most likely to occur; the individual is gaining new knowledge (Keeling, 2004). The social context of a university includes the personal relationships and group memberships of a student. Learning in this context is stimulated by new environments and new freedoms (i.e. no more curfew). In the social context, students are likely to development their autonomy and identity as an adult (Jones & Abes, 2013). Lastly, the institutional context includes the reward/opportunity structure

of the university of college (i.e. co and extra-curricular activities, leadership roles, work study positions, teaching or research positions) and the campus culture. Learning in this context is most likely triggered by the additional opportunities and experiences offered through various roles (Sessa, 2017), and exposure to innovative ideas, situations, and people from diverse backgrounds (Barber & King, 2014). We are particularly interested in determining who responds to the triggers for learning provided in the institutional context; specifically, extracurricular activities and the leadership positions within.

### **Readiness to Learn**

To respond to the triggers present in the environment, individuals must be ready to learn (Sessa, 2017). That is, they must be willing to make the changes needed in response to the challenges, demands and opportunities presented as learning triggers. Readiness to learn can be broken down into two facets; openness to learning (or awareness of potential learning opportunities), and motivation to learn (Sessa, 2017). I also look specifically at motivation to learn leadership as a possible predictor of students who take on leadership roles.

**Awareness/Openness to Learning.** For an individual to attend to a specific trigger for learning, s/he must first be aware of the trigger. In the institutional context, students must understand that learning takes place outside of the classroom and notice the triggers presented by their surrounding environment. Some students are already aware of the importance of participating in extracurricular activities as demonstrated by the 50% of students who participate. Many students however, do not recognize that the institutional context is an important part of learning and development. Without this awareness, students lose out on a plethora of opportunities to learn and develop.

***First Generation.*** The number of first generation students attending college today is nearly equal to the number of continuing-generation students (Choy, 2001). Unfortunately, first generation persist to graduation at a much lower rate than their continuing-generation peers (Lundberg, Schreiner, Hovaguimian & Miller, 2007); this can be attributed to a number of factors such as necessity of work, lack of belonging, lack of support and lack of knowledge necessary to navigate college life (Lundberg, Schreiner, Hovaguimian & Miller, 2007). For those students who do persist to graduation, many first-generation students do not participate in extra-curricular activities on campus (Lundberg, Schreiner, Hovaguimian & Miller, 2007). First generation students typically have higher financial need than their continuing generation counterparts (Inman & Mayes, 1999; Nunez & Cuccaro-Alamin, 1998), which may not be covered by financial aid packages and may require students to work to pay for college. In addition to the need to work during college, first-generation students are less likely to live on campus (Terenzini, Springer, Yaeger, Pascarella, & Nora, 1996), which, along with lower education aspirations, according to research, explains a significant portion of the difference of involvement in extracurricular activities between first-generation students and their peers (Pike & Kuh, 2005).

A third reason that first generation students may be less likely to participate in extracurricular activities during college is a lack of support from their families (Lundberg, Schreiner, Hovaguimian & Miller, 2007). For a first-generation student, going to college is seen as breaking with family tradition or family norms (Gofen, 2009). Because of this, parents may not understand the need for student involvement in activities other than those directly related to obtaining a degree (London, 1992). This may lead to a

lack of support for participation in extracurricular activities, and expectations that time not spent in class should be time spent studying. Conversely, parents may not know to encourage their student's participation in activities outside of the classroom.

***Encouragement from mentors and peers.*** Mentors play an enormous role in the learning process for students according to numerous studies (Mayhew, Rockenbach, Bryant, Bowman, Pascarella & Terenzini, 2016). A mentor is a trusted advisor involved in a student's life who can provide guidance and encouragement (Coles, 2011). Mentoring can be formal or informal. Formal mentoring is a structured and intentional approach to help a mentee navigate various aspects of school or life, learn something new, or development in specific areas. Informal mentoring typically refers to the organically formed relationships between a student and an older individual that provides support and encouragement (Coles, 2011). In either formal or informal contexts, mentors can help students take an objective look at their goals and the paths necessary to achieve those goals (van Esch & Tillema, 2015) as well as create awareness around topics the student might not have thought of before. Because mentors are typically individuals older than the student, who have potentially had similar experiences as the student, they can direct the student's attention to areas of life (academic or personal) that need development. For instance, mentors can encourage students to participate in activities on campus to develop psychosocially. Mentors can also encourage individuals to take on leadership roles in order to develop leadership skills and abilities (Campbell, Smith, Dugan & Komives, 2012) that can be used after graduation.

**Motivation to learn.** It is not enough to simply be aware of the learning possibilities in a given environment; for intentional learning to occur, an individual must

be motivated to learn. Motivation is an internal desire that drives action (Sessa, 2017). For instance, a student is motivated to do well in a class. This then drives their actions of listening and taking notes in class, studying, and completing homework on time. The student intentionally sets a goal, creates a plan to achieve that goal, performs the actions necessary to achieve that goal, and monitors the progress towards that goal adjusting as necessary (Bandura, 2001). In terms of learning, a student must be motivated to learn to take action towards learning. Here, we modify Sessa & London's (2005) model of learning to include three components of motivation to learn; learning goal orientation, self-regulation, and grit; discussed in depth below. If students are aware that learning takes place in the institutional context, motivation to learn should relate to whether students participate in extracurricular activities. Additionally, as leaders learn more than their peers who participate do not hold a leadership position (Sessa, 2017), motivation to learn should be related to participation in leadership roles.

***Learning goal orientation.*** Dweck suggested that individuals differ in their desire to develop or demonstrate ability in achievement settings (Dweck, 1986). Some individuals would prefer to demonstrate their ability in a situation rather than attempt to learn more; known as the prove performance goal orientation. People with this goal orientation tend to think that they know all they need to know, and they want to prove to others that they already know how to do something (Dweck, 1986). In contrast, those with avoid performance goal orientation seek to hide their lack of knowledge or ability by skirting challenges and deflecting attention (VandeWalle, 1997); these individuals are less likely to ask questions in class, try new experiences or want to be challenged. Lastly, learning goal orientation is characterized by a desire to acquire new knowledge and

develop competency in new areas (VandeWalle, 1997). Students with this goal orientation recognize that they do not have all of the knowledge or ability necessary to succeed in a situation (Bouffard, Boisvert, Vezeau & Larouche, 1995), they will ask more questions, seek advice, and practice new skills and abilities (Ames, 1992).

Goal orientation has been studied extensively in the academic context, with the intentions of determining the relationship between goal orientation and engagement in the classroom (Dupeyrat & Marine, 2005), or academic achievement (Bouffard, Boisvert, Vezeau & Larouche, 1995). Sessa and London's model of learning suggests that a learning goal orientation not only aids students in being ready to recognize triggers for learning, but also having the desire to learn and develop. Numerous theories have postulated a relationship between learning goal orientation and leadership development (Avolio & Vogelgesang, 2011; Culbertson & Jackson, 2016). These theories suggest that individuals must want to master the skills and knowledge necessary to be a leader in order to participate in leadership development activities such as holding a leadership position. No studies have looked at how learning goal orientation affects students' decisions to participate in extracurricular activities.

***Self-regulation.*** Self-regulation is defined as “the ability to develop, implement, and flexibly maintain planned behavior in order to achieve one's goals” (Kanfer, 1970, pg. 178). First, to intentionally learn, one must have a goal to learn. Secondly, one must be able to create a plan, pursue that plan, and maintain progress toward that goal to learn. As students notice triggers for learning, and develop a desire for learning, they need to create a plan to direct their path towards the learning goal. This plan might include finding a mentor, reading articles, attending seminars, creating timelines and pursuing

relevant activities. Once the plan has been set, students then need to act on their plan to make progress towards the learning goal; participate in the activities, read the articles, meet with a mentor, etc. Lastly, students must monitor their progress towards the goal. If progress is not being made, then the students not only need recognize that, but also change or modify the behaviors being enacted. For instance, if the mentor is not helpful then a new one should be found, if minimal participation in a club or organization isn't leading to experiential knowledge, the level of participation should increase. Those with high self-regulation can, and will, monitor their own behavior as it relates to their desired goals. Self-regulation is related to academic achievement (Nota, Soresi & Zimmerman, 2004), educational outcomes (Schunk & Ertmer, 2000), and leadership development (Day, 2001; Avolio & Vogelgesang, 2011). Models of leadership development suggest that self-regulation is necessary for an individual to pursue activities related to leadership development (Avolio & Gardner, 2005; Nesbit, 2012) such as holding a leadership position in an organization. However, there is little research on the relationship between self-regulation and students' decisions to participate in extracurricular activities.

***Grit.*** A third factor of motivation to learn is grit. Angela Duckworth defines grit as working strenuously through challenges, maintaining interest and effort over time, and pushing through adversity and failure; and encompasses both perseverance and passion for long-term goals (Duckworth, Peterson, Matthews, & Kelly, 2007). Since the creation of the Grit scale (Duckworth et al., 2007) studies have used it in academic settings (Wolters & Hussain, 2015), military settings (Maddi, Matthews, Kelly, Villarreal & White, 2012), and organizational settings (Ion, Mindu, & Gorbanescu, 2017), to predict outcomes such as performance and retention. Grit has been shown to have positive effects

on persistence to graduation (Duckworth et al., 2007), retention after the first year on a job (Robertson-Kraft & Duckworth, 2014), and academic performance (Chang, 2014). However, there are no studies concerning grit and student involvement in either extracurricular activities on campus nor leadership positions in these activities. In the context of learning, a student who exhibits grit will both overcome obstacles that prevent or hinder learning, and retain a passion for learning. While a student may notice a trigger for learning, and may want to learn (learning goal orientation), it takes continued effort (self-regulation) to learn and develop, often accompanied by failure, set-backs, and adversity. Without grit, students will fail to continue their pursuit of learning and developing at the first sign of failure.

**Motivation to learn leadership.** As discussed above, general motivation to learn applies to all topics that a student could learn. Here we discuss motivation to learn leadership in particular. Theories of leadership development suggest that in order to pursue developmental activities, an individual must want to learn leadership (Avolio & Hannah, 2008, 2009; Reichard & Walker, 2016) much like someone who wants to be a nurse studies nursing. In order to intentionally become a leader, an individual must want to be a leader, and must have some motivation to be a leader (Avolio & Vogelgesang, 2011).

**Leader goals.** Identity development theory suggests that as individuals see something as being a part of their identity, they are more likely to continue pursuing activities that further develop that piece of their identity (Komives, Owen, Longersbeam, Mainella & Osteen, 2005). As students see leadership as part of their identity, or as part of their future identity (Avolio & Vogelgesang, 2011), they are more likely to pursue

activities that coincide with that identity. Subsequently, the more activities relevant to that identity a student participates in, the more ingrained in his/her identity it becomes. Leader goals, in this case, refer to the intentions that a student has to become a leader, either now or in the future. Those with leader goals are likely to agree with statements such as “My goal is to achieve a leadership position in my career field,” or “I see myself in charge of others in the future.” Much like students who have a goal of being a doctor go to medical school, students who have a goal of being a leader are more likely to participate in activities to help them develop the knowledge and abilities to be a leader (Day & Harrison, 2007). If students do not have a goal, or intention, of becoming leaders, they will be less likely to actively seek opportunities and experiences to help build their leadership abilities (Day, Harrison & Halpin, 2008).

***Motivation to lead.*** Future intentions of becoming a leader are not enough to get students to take on leadership roles in extracurricular activities in college; students must also be currently motivated to lead. Motivation to lead (MTL) can be defined as “an individual-differences construct that affects a leader’s or leader-to-be’s decision to assume leadership training, roles, and responsibilities” (Chan & Drasgow, 2001, pg. 482). In other words, MTL is one of the driving forces behind a person’s decision to take on a leadership role. Students will not actively seek leadership roles without some motivation. Chan and Drasgow describe three types of MTL: affective, social-normative, and non-calculative. Individuals who generally enjoy leading would likely be exhibiting affective MTL. These individuals lead because it makes them feel good (Chan & Drasgow, 2001). Those who lead others due to a sense of duty or obligation exhibit social-normative MTL. Lastly, some individuals may lead only if they do not calculate the costs associated with

the responsibility of leading. These individuals exhibit non-calculative MTL. Possession of any MTL increases the likelihood that a student will actively seek leadership opportunities on campus. Additionally, most students holding leadership positions in their clubs, organizations and sports teams have been members of that extracurricular activity. Therefore, those that wish to hold leadership positions would most likely need to be involved in the extracurricular activities prior to gaining a leadership role.

Applying Sessa & London's (2005) model of learning to college student development would suggest that students with higher readiness to learn are more likely to take action surrounding learning triggers in the institutional context. Wanting to learn, self-regulating actions in regards to learning, and persevering through hardships are characteristics of students who pursue goals related to learning in all contexts (Sessa & London 2006; London & Sessa, 2006). Additionally, leadership goals and a motivation to lead are related to pursuing activities related to leadership development (Reichard & Walker, 2016), which should be related to students taking on leader roles during college.

Based on the theory presented, I propose the following hypothesis:

*H1.* Amount of readiness to learn can be used to predict which students do not participate in extracurricular activities, which students participate in extracurricular activities but do not hold a leadership position, and which students take on leadership positions within extracurricular activities. That is, we expect those with the lowest readiness to learn to be less likely to participate beyond the classroom, those with the highest readiness to learn to be in leadership roles, and those with medium levels of readiness to learn to participate but not hold leadership positions.

### **Important College Learning Outcomes**

**Student success in academics.** Studies have shown mixed results concerning the academic success of students who participate in extracurricular activities or take on leadership roles. Some studies measure student success by student GPA and found a positive relationship between student GPA student participation in co- and extra-curricular activities (Hughes & Pace, 2003; Fuller, Wilson, Tobin, 2011), while others measured academic success by ACT CAAP scores and found a modest relationship between student GPA and participation at best (Ewell, 2002). We measure academic success using a student's cumulative grade point average (GPA). There are many factors that can influence a student's GPA such as high school academic preparation, motivation, innate ability and social capital (Mayhew et al., 2016); however, GPA has been demonstrated as a strong indicator of educational attainment (Pascarella & Terenzini, 2005). Several studies have shown that students who participate in clubs, organizations and sports teams on campus have higher GPA than their peers who are not involved on campus (Eccles, Barber, Stone & Hunt, 2003; Webber, Krylow, & Zhang, 2013). These studies postulate that the skills and knowledge that students learn in the institutional context can transfer to the academic context. For example, students who learn a teamwork skill such as communication in the institutional context can bring that ability to classroom and perform well in a group project. Additionally, some research suggests that students who hold leadership positions have higher levels of educational attainment than their peers who are not involved in leadership activities (Cress, Astin, Zimmerman-Oster & Burkhardt, 2001). Conversely, other studies have shown that student involvement in extracurricular activities is related to lower GPA (Montelongo, 2002). Researchers who have found this evidence postulate that because students have a finite amount of time,

those who spend time on extracurricular activities have less time to spend on academic endeavors (Montelongo, 2002). Other considerations are the specific extracurricular activities that students are involved in. For instance, those in Greek life may spend much of their time partying and not enough time on their studies. In contrast, a student in a math club may be advancing his/her knowledge of math, which could be transferred to the classroom. We believe that students will take what they've learned in the institutional context and apply it to the academic context. For this reason, we suggest the following hypotheses:

*H2a.* Students who hold (or have held) a leadership position during their college career will report higher GPAs than students who have 1) not held a leadership position during their college career but have participated in clubs, organizations or sports teams on campus or 2) not participated in any clubs, organizations or sports teams on campus.

*H2b.* Students who have participated in clubs, organizations or sports on campus will report higher GPAs than students who have not participated in any clubs, organizations or sports teams on campus.

**Psycho-social development.** Out of classroom experiences (i.e. clubs, organizations and sports teams) influence student learning and personal development during college (Kuh, 1995; Goodman, 2001). This personal development could range from social maturation to autonomy to tolerance of diversity (Winston, Miller & Cooper, 1999). Students develop in these areas through the challenging experiences afforded by the consistent interaction with others in groups or teams. A challenging experience is any experiences that challenge a person to work outside his/her comfort zone (Sessa, 2017).

In working outside of their comfort zone, students may need to learn new knowledge, skills, behaviors, and feelings while also learning how to work with others and juggle multiple tasks at once. Most extra-curricular activities provide challenging experiences through tasks unfamiliar to the students.

Another way these extra-curricular activities push students out of their comfort zone is through the participation of students who may differ from one another on dimensions such as religion, ethnicity, cultural background, gender and socio-economic status, etc. Students who participate in extra-curricular activities are expected to work with others, who may or may not be different from them, to accomplish some task or goal. This action requires students to learn communication and teamwork skills, tolerance for one another and interdependence with others (Terenzini, Cabrera, Colbeck, Bjorklund, Parente, 2001; Cabrera, Nora, Crissman, & Terenzini, 2002). Leaders of clubs, organizations and sports teams are often faced with challenging experiences more often than those who do not hold leadership positions by having higher levels of responsibility. Often, student leaders are faced with juggling multiple initiatives in their organization along with the numerous projects and teams accomplishing those initiatives while also leading students who are different from them (see Sessa, 2017). Student leaders must develop psycho-socially to successfully navigate their responsibilities.

While also a component of psycho-social development as measured by Winston, Miller and Cooper, for the purposes of this paper we wanted to emphasize the career readiness of these students. Career readiness is defined as the “attainment and demonstration of requisite competencies that broadly prepare college graduates for a successful transition into the workplace” (NACE, 2015). These competencies include, but

are not limited to: critical thinking/problem solving (exercising sound reasoning to analyze issues, make decisions and overcome problems), oral/written communication, teamwork/collaboration, leadership (leverage the strength of others to achieve common goals) and career management (identify and articulate one's skills, strengths, and knowledge related to one's career). While not exactly jobs, extra-curricular activities provide students with an environment that mimics the work environment. Students, like employees, must work together to achieve a common goal through critical thinking, problem solving, teamwork and collaboration. Additionally, universities often have clubs and organizations that relate to the majors and degrees offered, which allow students to interact with professionals in their field or industry. This in turn gives them insight into the emotional and educational demands of their chosen career (Sagen, Dallam, & Laverty, 2000; Gardner & Barnes, 2007; Busteed & Seymour, 2015).

Along with the above competencies, leaders of clubs, organizations and sports teams learn how to leverage the strengths of others, as well as how to use interpersonal skills to coach and develop others. Furthermore, leaders in organizations tend to get a tremendous amount of feedback on their performance; whether it be formally from the faculty adviser and peers, or informally through the success of the group. This feedback gives an in-depth look into their abilities and limitations as a leader, which is an important characteristic that employers want in entry level employees. Lastly, studies have shown that those who are more engaged will achieve higher learning and development, which has been linked to career readiness (Sung, Turner & Kaewchina, 2011).

*H3a.* Students who hold (or have held) a leadership position during their college career will report higher psycho-social development than students who have 1) not held a leadership position during their college career but have participated in clubs, organizations or sports teams on campus or 2) not participated in any clubs, organizations or sports teams on campus.

*H3b.* Students who have participated in clubs, organizations or sports on campus will report higher psycho-social development than students who have not participated in any clubs, organizations or sports teams on campus.

**Flourishing/well-being.** Researchers differ on what exactly well-being entails; with some arguing that well-being is simply when positive affect is greater than negative affect (Bradburn, 1969), while others argue well-being is complex and encompasses self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth (Ryff, 1989). Still others argue that well-being encompasses social capital (Putnam, 2000; Helliwell, Barrington-Leigh, Harris & Huang, 2009) or psychological capital (Csikszentmihalyi, 1990). For this purpose of this study, I focus on psychological well-being which encompasses having social support, living a meaningful and purposeful life, being engaged in one's current activities, and feeling competent and capable in the activities most important to the student (Diener, Wirtz, Tov, Kim-Prieto, Choi, Oishi & Biswas-Diener, 2010).

Postsecondary educational institutions are concerned not only with the percentage of students who persist to graduation, but also with the well-being of their students during and after college. Studies using data from the Cooperative Institutional

Research Program and the Wabash National Study found moderate positive correlations between extracurricular involvement and well-being (Seifert, Goodman, Lindsay, Jorgensen, Wolniak, Pascarella & Blaich, 2008; Mayhew et al. 2016). Researchers also found that participation in sports teams, whether at the collegiate level or intramural level, was associated with higher well-being in students, mainly because these sports teams provided a space for socialization (Mayhew et al., 2016). In a 2014 study by Gallup and Purdue University, researchers found that students who are involved in extracurricular activities on campus are more engaged at work following college and have higher well-being (Gallup-Purdue Index report, 2014).

Involvement in extracurricular activities provides students with opportunities to make friends with others who have similar interests. It also gives students additional access to faculty members who can provide support and guidance to students during their college career (Mayhew et al., 2016). Students who take on leadership positions while in college will face more demands on their time, but those who are successful learn time-management, delegation, and team work skills that may carry over into the rest of their life (Logue, Hutchens, & Hector, 2005). Being in a leadership position exposes students to a wider range of experiences, resources, and people; creating a larger social network and further development which is related to well-being (Louis, Leithwood, Wahlstrom, Anderson, Michlin & Mascall, 2010).

*H4a.* Students who hold (or have held) a leadership position during their college career will report higher well-being than students who have 1) not held a leadership position during their college career but have participated in clubs, organizations or sports

teams on campus or 2) not participated in any clubs, organizations or sports teams on campus.

*H4b.* Students who have participated in clubs, organizations or sports on campus will report higher well-being than students who have not participated in any clubs, organizations or sports teams on campus.

## METHODS

### **Participants**

Participants were recruited in three ways for this study from a large public research university in the northeast. First, students in their third and fourth year of college were recruited through subject pool recruitment systems as a requirement for certain psychology courses (N=99). Second, students were recruited through the co-curricular leadership development office on campus (N=56). Lastly, resident assistants (RAs) were invited to participate through the RA director (N=21). 72% of all participants are female, 51% Caucasian, 27% Hispanic, 9% Asian, and 7% Black. All students in this study were under the age of 24, with a large majority being 20-21 (76%). 35% of these students live on campus and 52% live off campus with family, family friends or relatives.

### **Procedure**

A request to collect data from human subjects was filed with the university's institutional review board (IRB) for approval. Once obtained, students were recruited to participate as described above. Students filled out the survey online either at home or in a computer lab. The first page of the survey contained the consent form with information pertaining to the study, a list of potential effects students may encounter from participation in the study (fatigue), and a reminder that all answers would be anonymous. If students consented to participate in the study they indicated so, and proceeded to complete the survey. Only students who were traditional aged (24 year of age and below) were included in the data

analysis, those over 24 years of age were dropped from the data set (n=6). Also, students who held leadership positions outside of school and did not hold leadership positions on campus were removed from the data set (n=6). Some of the students who were over the age of 24 were also students who held leadership positions off-campus but not on campus. The total number of students dropped from the data set was eight. All students received class credit or leadership credit for their participation in this study.

### **Participation Group**

In order to compare students who hold leadership positions to those that participate in extra-curricular activities (but have not held leadership positions) and to those that have not participated in any extra-curricular activities, students were asked a number of questions pertaining to their involvement in various clubs, organizations and sports teams during their college career. Students were asked to indicate what leadership positions they have held during college and what clubs, organizations and sports teams they've participated in during college. Students were then divided into three groups based on their responses. Students who currently hold, or have previously held, a leadership position were placed into the leadership group. Leadership positions included elected roles in organizations such as president and vice president, along with the other roles that the university defines as leadership such as resident assistant, student ambassador, and office manager. Students who participated in any clubs, organizations or sports team during their college career but did not indicate holding a leadership position were placed into a participant group. Students who did not indicate involvement in any clubs, organizations or sports team on campus were placed in the non-participant group.

## Measures

**Readiness to learn.** *Awareness* was measured using two variables; *role model/mentor* and *First generation*. *Role model/mentor*. Students were asked to indicate whether they had an adult mentor or a peer role model through the following questions. “Is there an adult in your life (teacher, parent, minister) who has served as a mentor or role model in your leadership journey during your college career?” and “During college, have you had or currently have a friend, peer, or roommate who served as a mentor or role model in your leadership journey?” *First Generation*. Students were asked to indicate separately the highest level of education their mother and father had achieved. A first-generation variable was calculated based on student response. If either of a student’s parents had attended college they were marked as a continuing-generation student. If neither parent had attended college, the student was marked as a first-generation student.

*Motivation to learn.* Motivation to learn was measured using three surveys. *Learning goal orientation* was assessed using the goal orientation, a 5-item scale was developed by VandeWalle (1997). The Likert scale was reduced from its original 7-point scale to 5-point scale, ranging from 1 = ‘strongly disagree’ to 5 = ‘strongly agree’. Sample item includes “I am willing to select a challenging work assignment that I can learn a lot from.” Internal consistency was high ( $\alpha=.89$ ). *Self-regulation Questionnaire:* The Self-Regulation Questionnaire was developed by Brown, Miller & Lawendowski (1999) and is a 63-item scale to assess the self-regulatory processes to describe general principles of behavioral self-control. The Self-Regulation Questionnaire was developed as a first attempt to assess these self-regulatory processes through self-report since until this scale, it was not known whether people could reliably and accurately report their own

self-regulatory capabilities (Brown, Miller & Lawendowski, 1999). Items were developed to mark each of the seven sub-processes of the Miller and Brown (1991) model (receiving, evaluating, triggering, searching, formulating, implementing and assessing), forming seven rationally-derived subscales of the SRQ. Items can also be combined to form a single measure of overall self-regulation. Sample items include “I usually keep track of my progress toward my goals” (receiving), “I think a lot about what other people think of me” (evaluating), “I am willing to consider other ways of doing things” (triggering), “If I wanted to change, I am confident that I could do it” (searching), “Once I have a goal, I can usually plan how to reach it” (formulating a plan), “I can stick to a plan that’s working well” (implementing), and “When I’m trying to change something, I pay a lot of attention to how I’m doing” (assessing). Internal consistency of the scale was also high ( $\alpha = .91$ ). *Grit*. Grit was measured using the Grit Scale developed by Duckworth (2007). The scale is self-reporting and consists of 12 items rated on a 5-point scale from 1- not like me at all to 5- very much like me; e.g. “I finish whatever I begin,” and “I have overcome setbacks to conquer an important challenge,” and reverse-scored statements such as, “My interests change from year to year.” Internal consistency of the scale is high ( $\alpha = .85$ ).

*Motivation to learn leadership*. Motivation to learn leadership was measured in two ways; leader goals and motivation to lead. *Leader Goals*. Leader goals was measured by the outcome expectations of an individual. A four-item scale was developed for the purpose of this study and each item was measured on a scale of ‘1’ to ‘5’ (‘1’= ‘Strongly Disagree’, ‘2’ = ‘Slightly Disagree’, ‘3’= ‘Neither Disagree nor Agree’, ‘4’ = ‘Slightly Agree’, ‘5’= Strongly Agree’). The four items that constituted this scale were, “My main

goal professionally is to achieve a leadership position”, “I have plans to develop myself as a leader during college to achieve my professional goals after college”, “I plan to be in a leadership position in college in the near future”, and finally, “I see myself continuously furthering or advancing in the development of my leadership throughout my life”.

Internal consistency of the scale was sufficient ( $\alpha=.73$ )

### **Learning Outcomes Important in College.**

*Academic Success.* Students were asked to input their cumulative GPAs through an open-ended question.

*Student Developmental Task and Lifestyle Assessment.* This assessment is concerned with measuring the changes produced in individuals as a result of accomplishing a developmental task or having addressed important life events or issues within the context of higher education. The SDTLA is composed of developmental tasks defined as an “interrelated set of behaviors and attitudes that the culture specifies should be exhibited at approximately the same time by a given age cohort” within the context of higher education. These developmental tasks are divided into more specific subtasks.

*Emotional Autonomy.* Measures the extent to which students are free from the need for continuous reassurance and approval from others, trusting their own ideas and feelings.

Sample item includes “It bothers me if my friends don’t share the same leisure interests as I have.” Internal consistency for this subtask is sufficient ( $\alpha=.71$ ).

*Interdependence.* Students who have high scores on this subtask recognize the reciprocal nature of the relationship between the individual and his/her community. They fulfill their citizenship responsibilities and are actively involved in activities that promote improvement of the institution and the larger community. Concern for others is reflected in their awareness of

how their behavior affects the community. Sample item is “As a citizen, I have the responsibility to keep myself well-informed about current issues.” Internal consistency is sufficient ( $\alpha = .76$ ). *Instrumental Autonomy*. Students who have completed this subtask demonstrate an ability to structure their lives and to manipulate their environment in ways that allow them to satisfy daily needs and meet responsibilities without extensive direction or support from others. They can manage their time and other aspects of their lives in ways that allow them to meet daily demands, satisfy personal needs, and fulfill community and family responsibilities; to establish and follow through on realistic plans; to solve most problems as they arise. They are independent, goal-directed, resourceful, and self-sufficient. Sample item is “I have arranged my living quarters in a way that makes it easy for me to study, sleep, and relax.” Internal consistency for this subtask is low ( $\alpha = .62$ ). *Peer Relationships*. Students who score highly in this subtask describe their relationships with peers as shifting toward greater trust, independence, frankness, and individuality and as feeling less need to conform to the standards of friends or to conceal shortcomings or disagreements. Students can distinguish between friends and acquaintances and have both kinds of relationships. Friendships survive the development of differences in activities, beliefs, and value, and reflect an appreciation for individual differences. Relationships with peers are open and honest; disagreements are resolved or simply accepted. Sample item includes “I find it difficult to accept some of the ways my close friends have changed over the past year.” Internal consistency for this subtask is low ( $\alpha = .65$ ). *Tolerance*. Respect for and acceptance of those of different backgrounds, beliefs, cultures, races, lifestyles and appearances describe students who have high achievement on this subtask. They respond to people as individuals; do not employ racial,

sexual, or cultural stereotypes; have an openness to new or unconventional ideas and beliefs; and are appreciative of individual differences. Students high in tolerance do not shy away from or reject contact with those with different ethnic, racial or cultural heritage or with different religious beliefs, political views, or lifestyles. A sample item is “Within the past 12 months, I have undertaken an activity intended to improve my understanding of culturally/racially different people.” Internal consistency is sufficient ( $\alpha = .74$ ).

*Career Readiness.* An awareness of the world of work, an accurate understanding of one’s abilities and limitations, a knowledge of requirements for various occupations, and an understanding of the emotional and educational demands of different kinds of jobs are evidence of accomplishment of this subtask. Students who have achieved this subtask have synthesized knowledge about themselves and the world of work into a rational order which enables them to make a commitment to a chosen career field and formulate specific vocational plans. They have taken the initial steps necessary to prepare themselves through both educational and practical experiences for eventual employment, and have taken steps necessary for beginning a job search or enrollment in graduate school. A sample item is “Thinking about employment after college... A. I do not know how to find out about the prospects for employment in a variety of fields, B. I have a vague idea about how to find out about future employment prospects in a variety of fields, C. I know one source that could provide information about future employment prospects in a variety of fields, D. I know several sources that can provide information about future employment prospects in a variety of fields.” Internal consistency for this subtask scale is high ( $\alpha = .84$ ).

*Flourishing/Well-being.* The Flourishing Scale consists of eight items describing important aspects of human functioning ranging from positive relationships, to feelings of competence, to having meaning and purpose in life. The scale was called Psychological Wellbeing in an earlier publication, but the name was changed to more accurately reflect the content because the scale includes content that goes beyond psychological well-being narrowly defined. Each item of the FS is answered on a 1–7 scale that ranges from Strong Disagreement to Strong Agreement. All items are phrased in a positive direction. Scores were calculated by averaging the items. High scores signify that respondents view themselves in positive terms in important areas of functioning. A sample item includes “I lead a purposeful and meaningful life.” Internal consistency for this scale was high ( $\alpha=.91$ ).

### **Analyses**

Students were first separated into their respective participation group (leader, participant, or non-participant). To test the first hypothesis, determining the impact of readiness to learn on participation group, the 10 variables (peer role model, adult mentor, first generation, learning goal orientation, self-regulation, grit, leader goals, motivation to lead-affective, motivation to lead: social normative, and motivation to lead: non-calculative) were inputted as independent variables into a discriminant analysis with participation group as the dependent variable.

To test hypotheses 2 through 4, a MANOVA was conducted with participation group as the grouping factor and GPA, psychosocial development, and flourishing as the dependent variables. Because the MANOVA significant an ANOVA was conducted for each variable independently. Subsequently, independent samples t-tests were conducted

to compare leaders and participants, leaders and non-participants, and participants and non-participants for psychosocial development and flourishing. Results can be found below.

## RESULTS

### Participation Group

The number of students in each participation category is as follows: leaders (N=106), participants (N=26), and non-participants (N=36); for a total of 168 participants. Mean scores and standard deviations for all variables are presented in Table 1. Some students did not fill out all survey questions which accounts for the differences in n sizes between variables.

**Table 1**  
*Means and Standard Deviation of Variables*

Variable	Leaders		Participants		Non-Participants		Total	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Peer role model	1.51	.50	1.69	.47	1.86	.35	1.61	.49
Adult mentor	1.32	.47	1.46	.51	1.64	.49	1.41	.49
First-generation	.28	.45	.12	.33	.11	.32	.22	.41
LGO	4.76	.74	4.64	.59	4.55	.99	4.70	.78
Self-regulation	3.71	.49	3.49	.52	3.32	.48	3.59	.51
Grit	2.64	.38	2.62	.38	2.61	.53	2.62	.41
Leader Goals	3.88	.55	3.63	.58	3.45	.63	3.75	.60
MTL: Affective	3.46	.56	3.27	.47	3.30	.55	3.40	.55
MTL: Non-calculative	3.60	.71	3.20	.55	3.25	.70	3.46	.70
MTL: Social Normative	3.72	.62	3.68	.61	3.53	.70	3.67	.64
GPA	3.20	.47	3.12	.40	3.14	.39	3.17	.45
Emotional Autonomy	3.72	.58	3.50	.54	3.32	.56	3.60	.59
Interdependence	3.21	.63	2.81	.67	2.50	.51	2.99	.68
Instrumental Autonomy	3.29	.68	3.18	.66	2.95	.60	3.20	.67
Peer Relationships	3.76	.58	3.54	.80	3.45	.64	3.66	.64
Tolerance	3.90	.56	3.68	.58	3.66	.59	3.82	.57
Career Readiness	2.89	.81	2.59	.77	2.29	.70	2.71	.81
Flourishing/well-being	5.93	.80	5.92	.87	5.46	1.00	5.83	.87

N=168

### Readiness to Learn

To test Hypothesis 1, a direct discriminant function analysis was performed using 10 readiness to learn variables as predictors of membership in three groups. Predictors were

adult mentor, peer role model, first-generation student, learning goal orientation, self-regulation, grit, leader goals, motivation to learn: affective, motivation to learn: non-calculative, and motivation to learn: social normative. Groups were student leaders, participants in extra- or co-curricular activities, and non-participants. Of the original 168 cases, two were dropped from analysis because of missing data. For the remaining 166 cases (104 leaders, 26 participants and 36 non-participants), evaluation of assumptions of linearity, normality, and homogeneity of variance-covariance matrices revealed no threat to multivariate analysis.

Two discriminant functions were calculated, with a combined  $X^2(20) = 54.27$ ,  $p < .01$ . After removal of the first function there was not a strong association between groups and predictors. The two discriminant functions accounted for 92% and 8% respectively, of the between-group variability. As shown in figure 1, the first discriminant function maximally separates leaders from non-participants, with participants falling in the middle.

The loading matrix of correlations between predictors and discriminant functions, as seen in table 2, suggests that the best predictors for distinguishing between leaders and the other two groups (first function) are having an adult mentor, having a peer role model, being a first-generation college student (negative relationship), having higher self-regulation, and scoring higher on leader goals and motivation to lead: non-calculative scales. These findings provide partial support for hypothesis 1 in that students with high readiness to learn were in the leader group and those with lower readiness to learn were in the non-participant group. However, readiness to learn could not accurately predict which students became participants but did not hold leadership positions.

**Table 2***Results of Discriminant Analysis of Variables Related to Participation Group*

Predictor Variable	Standardized discriminant function coefficient	Wilks' Lambda	F(2, 163)
Peer Role Model <sup>a</sup>	-.482	.911	7.94**
Adult Mentor <sup>a</sup>	-.226	.929	6.225**
First-generation	.410	.962	3.215*
Learning Goal Orientation	-.254	.987	1.047
Self-regulation	.556	.902	8.847***
Grit	.059	.999	.061
Leader Goals	.366	.906	8.449***
MTL: Affective	.031	.975	2.122
MTL: NC	.236	.934	5.767**
MTL: SN	-.212	.986	1.190

N=168

<sup>a</sup> It is important to note that peer role model and adult mentor are coded 1=yes and 2=no.

Note: \*p&lt;.05, \*\*p&lt;.01, \*\*\*p&lt;.001

### Learning Outcomes Important in College

To test hypotheses 2-4, a multivariate analysis of variance was conducted. The one-way MANOVA revealed a significant multivariate main effect for leader group, Wilks'  $\lambda = .788$ ,  $F(16, 300) = 2.37$ ,  $p < .01$ , partial eta squared = .112. Power to detect the effect was .988. Given the significance of the overall test, each outcome was analyzed independently to determine specific differences between participation group.

*Hypothesis 2:* To further test hypothesis 2, an analysis of variance (ANOVA) was conducted to determine if there were significant differences in GPA between leaders, participants and non-participants. The ANOVA revealed no significant difference in GPA between the three groups ( $M=3.20$ ,  $M=3.12$ ,  $M=3.14$   $F(2, 159) = .37$ , n.s.). See table 3. As such, no support for hypotheses 2a or 2b was found; students who have held leadership positions in college do not report a higher GPA than 1), those who participate but do not hold a leadership position nor 2). those who do not participate beyond the

classroom. Nor do students who participate in extracurricular activities report higher GPAs than students who do not participate.

**Table 3**

*One-Way ANOVA of GPA by Participatory Category*

	Source	df	SS	MS	F	p
GPA	Between groups	2	.15	.07	.37	.694
	Within groups	157	31.61	.20		
	Total	159	31.76			

N=160

*Hypothesis 3:* To test hypotheses 3a and 3b, concerning psycho-social development between groups, a multivariate analysis of variance (MANOVA) was conducted. The one-way MANOVA revealed a significant multivariate main effect for leader group, Wilks'  $\lambda = .789$ ,  $F(12, 320) = 3.35$ ,  $p < .001$ , partial eta squared = .112. Power to detect the effect was .996. Given the significance of the overall test, six ANOVAs were conducted. The first ANOVA tested emotional autonomy component of psycho-social development between the leaders, participants and non-participants ( $M=3.72$ ,  $M= 3.46$ ,  $M=3.31$   $F(2, 165) = 6.95$ ,  $p<.01$ ), the second tested the interdependence component ( $M=3.21$ ,  $M=2.74$ ,  $M=2.50$ ,  $F(2, 165) = 19.10$ ,  $p<.001$ ), the third tested instrumental autonomy ( $M=3.29$ ,  $M=3.15$ ,  $M=2.92$ ,  $F(2,165) = 3.60$ ,  $p<.05$ ), the fourth tested peer relationships ( $M=3.76$ ,  $M=3.52$ ,  $M=3.44$ ,  $F(2, 165) = 3.85$ ,  $p<.05$ ), the fifth tested tolerance ( $M=3.91$ ,  $M=3.66$ ,  $M=3.69$ ,  $F(2,165) = 3.33$ ,  $p<.05$ ), and the sixth tested career readiness ( $M=2.89$ ,  $M=2.59$ ,  $M=2.29$ ,  $F(2, 165) = 8.33$ ,  $p=.000$ ). As can be seen from table 4.

**Table 4***One-Way ANOVA of Psycho-Social Development by Participatory Category*

	Source	df	SS	MS	F	p
Emotional Autonomy	Between groups	2	4.57	2.29	6.96	.001
	Within groups	165	54.25	.33		
	Total	167	58.82			
Interdependence	Between groups	2	14.46	7.23	19.10	.000
	Within groups	165	62.42	.38		
	Total	167	76.88			
Instrumental Autonomy	Between groups	2	3.15	1.58	3.60	.03
	Within groups	165	72.29	.44		
	Total	167	75.44			
Peer Relationships	Between groups	2	3.03	1.51	3.85	.02
	Within groups	165	64.85	.39		
	Total	167	67.87			
Tolerance	Between groups	2	2.14	1.07	3.33	.04
	Within groups	165	53.00	.32		
	Total	167	55.13			
Career Readiness	Between groups	2	10.14	5.07	8.33	.000
	Within groups	165	100.49	.61		
	Total	167	110.64			

N=168

To test hypothesis 3a, that leaders will report higher psycho-social development than both participants and non-participants, two independent samples t-tests were conducted for each aspect of psycho-social development. *Emotional Autonomy*. There was no significant difference in emotional autonomy between leaders (M=3.72, SD=.58) and participants ((M=3.50, SD=.54),  $t(130)=1.76$ , n.s.). There was significant difference between leaders ((M=3.72, SD=.58) and non-participants (M=3.32, SD=.56),  $t(140)=3.55$ ,  $p<.01$ ). *Interdependence*. There was significant difference in interdependence between leaders (M=3.21, SD=.63) and participants ((M=2.81, SD=.67),  $t(130)=2.81$ ,  $p<.01$ ). There was also significant difference between leaders (M=3.21, SD=.63) and non-participants ((M=2.50, SD=.51),  $t(140)=3.92$ ,  $p<.001$ ). *Instrumental Autonomy*. There was no significant difference in instrumental autonomy between leaders

( $M=3.29$ ,  $SD=.68$ ) and participants ( $M=3.18$ ,  $SD=.66$ ),  $t(130)=.78$ , n.s.). There was significant difference between leaders ( $M=3.29$ ,  $SD=.68$ ) and non-participants ( $M=2.95$ ,  $SD=.60$ ),  $t(140)=2.68$ ,  $p<.01$ ). *Peer Relationships*. There was no significant difference between leaders ( $M=3.76$ ,  $SD=.58$ ) and participants ( $M=3.54$ ,  $SD=.80$ )  $t(130)=1.59$ , n.s.). There was significant difference in peer relationships between leaders ( $M=3.76$ ,  $SD=.58$ ) and non-participants ( $M=3.45$ ,  $SD=.64$ ),  $t(140)=2.73$ ,  $p<.05$ ). *Tolerance*. There was no significant difference in tolerance between leaders ( $M=3.91$ ,  $SD=.56$ ) and participants ( $M=3.68$ ,  $SD=.58$ ),  $t(130)=1.81$ , n.s.). There was significant difference between leaders ( $M=3.91$ ,  $SD=.56$ ) and non-participants ( $M=3.67$ ,  $SD=.59$ ),  $t(140)=2.22$ ,  $p<.05$ ). *Career Readiness*. There was no significant difference in career readiness between leaders ( $M=2.89$ ,  $SD=.81$ ) and participants ( $M=2.59$ ,  $SD=.77$ ),  $t(130)=1.70$ , n.s.). There also significant difference between leaders ( $M=2.89$ ,  $SD=.81$ ) and non-participants ( $M=2.29$ ,  $SD=.72$ ),  $t(140)=3.98$ ,  $p<.001$ ). The above findings provide partial support for Hypothesis 3a in that leaders report higher psychosocial development than participants on the interdependence subtask scale but not on any other scale. Leaders do report higher development than non-participants on all developmental subtasks. See tables 5 and 6.

**Table 5**  
*T-test Psychosocial Development Leaders and Participants*

	Leaders		Participants		<i>t</i> -test	<i>df</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Emotional Autonomy	3.72	.58	3.50	.54	1.80	130
Interdependence	3.21	.63	2.81	.67	2.81**	130
Instrumental Autonomy	3.29	.68	3.18	.66	.78	130
Peer Relationships	3.76	.58	3.54	.80	1.59	130
Tolerance	3.90	.56	3.68	.58	1.81	130
Career Readiness	2.89	.81	2.59	.77	1.70	130

$N=132$

\*\* $p<.01$

**Table 6***T-test psychosocial development leaders and non-participants*

	Leaders		Non-Participants		<i>t</i> -test	<i>df</i>
	M	SD	M	SD		
Emotional Autonomy	3.72	.58	3.32	.56	3.55**	140
Interdependence	3.21	.63	2.50	.51	6.07***	140
Instrumental Autonomy	3.29	.68	2.95	.60	2.68**	140
Peer Relationships	3.76	.58	3.45	.64	2.73**	140
Tolerance	3.90	.56	3.67	.59	2.22*	140
Career Readiness	2.89	.81	2.29	.70	3.98***	140

N=142

\* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$ 

To test hypothesis 3b, which predicts that participants will report higher psychosocial development than non-participants, one t-test was conducted for each developmental subtask to compare participants to non-participants. Support was found only for the interdependence subtask of psychosocial development. As seen in table 7, There was significant difference between participants (M=2.81, SD=.67) and non-participants ((M=2.50, SD=.51)  $t(60)=2.09$ ,  $p < .05$ ). All other sub-components of psychosocial development did not differ between participants and non-participations. Only on interdependence do participants report higher psychosocial development than non-participants. This provides partial support for hypothesis 3b; participants only report higher psychosocial development than non-participants on the interdependence subtask scale.

**Table 7***T-test psychosocial development participants and non-participants*

	Participants		Non-Participants		<i>t</i> -test	<i>df</i>
	M	SD	M	SD		
Emotional Autonomy	3.50	.54	3.32	.56	1.19	60
Interdependence	2.81	.67	2.50	.51	2.09*	60
Instrumental Autonomy	3.18	.66	2.95	.60	1.40	60
Peer Relationships	3.54	.80	3.45	.64	.52	60
Tolerance	3.68	.58	3.67	.59	.13	60
Career Readiness	2.59	.77	2.29	.70	1.61	60

N=62

\**p*<.05

*Hypothesis 4:* To test hypothesis 4, which predicts differences in well-being between groups, an ANOVA was conducted. The ANOVA revealed significant results (M=5.93, M=5.92, M=5.46,  $F(2, 165) = 4.17, p < .05$ ). See table 8.

**Table 8***One-Way ANOVA of Flourishing by Participatory Category*

	Source	<i>df</i>	SS	MS	F	<i>p</i>
Flourishing	Between groups	2	6.10	3.05	4.17	.02
	Within groups	165	120.58	.73		
	Total	167	126.67			

N=168

To further test hypothesis 4a, that leaders would report higher well-being than participants and non-participants, two independent t-tests were conducted. There was no significant difference between leaders (M=5.93, SD=.80) and participants ((M=5.92, SD=.87)  $t(130) = .054, n.s.$ ). However, a significant difference between leaders (M=5.93, SD=.80) and non-participants ((M=5.46, SD=1.00)  $t(140) = 2.83, p < .01$ ) was found providing partial support for hypothesis 4a. As seen in tables 9 and 10, findings indicate that leaders do not report higher well-being than participants, but leaders do report higher well-being than non-participants.

**Table 9**  
*T-test flourishing leaders and participants*

	Leaders		Participants		<i>t</i> -test	<i>df</i>
	M	SD	M	SD		
Flourishing	5.93	.80	5.92	.87	.05**	130

N=132

\* $p < .01$

**Table 10**  
*T-test flourishing leaders and non-participants*

	Leaders		Non-Participants		<i>t</i> -test	<i>df</i>
	M	SD	M	SD		
Flourishing	5.93	.80	5.46	1.00	2.83	140

N=142

To test hypothesis 4b, which predicted that participants will report higher well-being than non-participants, one independent samples t-test was conducted. I found no support that participants report higher well-being than non-participants. See table 11.

**Table 11**  
*T-test flourishing participants and non-participants*

	Participants		Non-Participants		<i>t</i> -test	<i>df</i>
	M	SD	M	SD		
Flourishing	5.92	.87	5.46	1.00	1.88	60

N=62

## DISCUSSION

There is currently some interesting research surrounding the reasons students participate in learning in the institutional context. These studies have dived into various reasons for student involvement in activities in the institutional context. Many of the variables studied in past research have been demographic: race (Fisher, 2007), gender (Walpole, 2003), SES (Lundberg, Schreiner, Hovaguimian & Miller, 2007), living arrangements (Tellefsen, 2017). This study framed participation in co- and extra-curricular activities as a learning context and used a learning model to predict which students would engage in learning outside of the classroom. Additionally, there are studies to suggest that student who participate in activities outside the classroom experience various benefits such as psychosocial development and higher academic success as well as other studies that suggest the same is true of students who take on leader roles outside of the classroom. We sought to compare the two areas of literature and determine what benefits student leaders gain above their non-leading counterparts, and what benefits participants gain above their non-participating counterparts.

The purpose of the current study was to test a model of learning as a way to discriminant between students who do not participate, student who participate but do not lead, and students who take on leader roles. I found that many aspects of readiness to learn could significantly separate leaders from non-participants; but it was difficult to separate participants from either group. There was no support for differences in GPA

between the three groups of students. But I found that leaders significantly differ from non-participants on both psychosocial development and flourishing. Leaders and participants significantly differ only on the interdependence aspect of psychosocial development, as is also true for participants and non-participants.

## **Findings**

### **Hypothesis 1: Readiness to Learn**

**Awareness.** Using this theory, I postulated that one reason students don't participate beyond the classroom is a lack of awareness that the institutional context is an important part of the university learning and development experience. Our study found that having a role model/mentor and/or being a continuing-generation student could significantly differentiate which participation group a student was a part of. That is, students who had at least one parent go to college or had a mentor/role model, participated in activities beyond the classroom on campus, and took on leadership roles. This finding might suggest that parents who go to college, or mentors who have probably gone to college, understand the importance of participation in activities outside of the classroom and pass that understanding on to their child/mentee. Unfortunately, awareness of learning in the institutional context was not directly measured, it was measured indirectly by determining whether the student had an older figure in his/her life that may have guided the student; therefore, I cannot make any assumptions pertaining to whether being a continuing-generation student, or having a role model/mentor, made students aware of the institutional context as an important learning environment. Future studies should directly determine whether students are aware of learning in the institutional context. However, this study does provide evidence that having a parent who went to

college, or a role model/mentor significantly impacts whether a student gets involved in activities outside the classroom.

**Motivation to learn.** Our study found only partial support that motivation to learn predicts whether students participate in activities in the institutional context or hold leadership positions. Learning goal orientation was statistically equivalent across all groups. This is perhaps due to the nature of the subject pool. For this study, I looked only upperclassmen. Previous studies that have studied the effects of learning goal orientation in postsecondary education have mainly focused on freshmen and their retention to second year. It is possible that the students who continue in school until their junior and senior year are those that have higher learning goal orientation. The same is possibly true of grit; those that make it to their junior and senior year are grittier than those who don't. If this is true, then our sample would include only those with high grit and learning goal orientation.

It is interesting that self-regulation was a significant factor in the discriminant analysis. Several studies have shown that students with the ability to self-regulate have strategies needed to learn, and can apply those strategies to a specific learning task (Cohen, 2012). These findings suggest that students with high self-regulation tend to make goals of involvement or leadership, make plans to pursue those goals, perform behaviors necessary towards those goals, and flexibly maintain their behavior towards these goals. Fortunately, for students who do not know how to self-regulate, or do not know how to self-regulate well, self-regulation skills and abilities can be learned and developed (Weinstein, Husman & Dierking, 2000). Suggestions pertaining to practice can be found below.

**Motivation to Learn Leadership.** In line with previous research (Avolio & Vogelgesang, 2011), motivation to learn leadership was related to students taking on leadership roles in college. Both leader goals and motivation to lead: non-calculative were significant predictors of participation group. Leader goals accounted for approximately 10% of the variance in participation in group, with motivation to lead: non-calculative accounting for an approximately 7%. Motivation to lead: affective and motivation to lead: social normative were not significant predictors. At this point in their careers, students may not have much experience with leadership roles or working towards a leadership role, and therefore do not know whether they enjoy the feeling of leading. Similar rationale explains why motivation to lead: social normative is not a significant predictor. Students have probably not formed norms surrounding acceptance of leadership positions due to social obligation. One concern with this sample is that the juniors may have high motivation to learn leadership but simply have not had the opportunity to hold a leadership position at the time of data collection. I postulate that motivation to lead: non-calculative is a significant predictor of participation group because many students already have a lot on their plate with school. Those that don't think about the cost in time and energy required to lead are more likely to take on leadership roles simply because they are not overwhelmed by the cost of leading.

The readiness to learn model could separate which students wound up in the leader group relatively well, was somewhat able to separate which students wound up in the non-participant group, and was fairly unable to separate which students wound up in the participant group. This leads me to believe that the learning model proposed by Sessa and London (2005, 2006), can only predict which students are likely to become leaders

during their college career. Future research in this area might look into other variables that might account for students' participation in co- and extra-curricular activities.

### **Learning outcomes important in college**

**Hypothesis 2: Student success.** Contrary to numerous studies (Chang, 2014), this study provided no evidence that students who participate in institutional context activities on campus, or those who hold a leadership position, have higher GPA than their peers who do not participate in or lead, institutional context activities. While we hypothesized that students who participated in extracurricular activities would be able to take what they've learned through their involvement back to the classroom, there is no indication that this occurs. This might be explained by the time and effort required by the extracurricular activities. Students who are involved in clubs, organizations or sports teams may spend less time studying or completing homework. Conversely, the students who participate and hold leadership positions in clubs, organizations and sports on campus may not know how to transfer their learned knowledge and abilities to the classroom. Thereby putting all students on the same level in terms of academic achievement.

**Hypothesis 3: Psychosocial development.** In support of previous studies (Kuh, 1995; Pascarella & Terenzini, 2005; Kuh, 2009, Carini, Kuh & Klein, 2006; Trowler, 2010), I found some evidence that students in leadership positions report higher psychosocial development than students who participate in co- and extra-curricular activities as well as extensive evidence that students in leadership positions report higher psychosocial development than students who do not participate beyond the classroom. Previous evidence suggests that for students to develop from participation in co-curricular and

extra-curricular experiences, they need to be challenged by novel, uncertain, or meaningful activities (DeRue & Wellman, 2009). According to Sessa (2017), students in leadership positions are more likely to encounter these challenges than students who participate but do not hold leadership positions, which should result in higher development. Support for this idea was found in the significant difference in psycho-social development between leaders and non-participants. However, I did not measure student's participation level within their co- and extra-curricular activity which could have affected my results.

While part of psycho-social development, we placed an emphasis on career readiness as this is a highly-desired student outcome of higher education. This study provides evidence that student leaders feel readier for a career after graduation than non-participants. This in line with research suggesting that those who actively participate in novel/uncertain experiences, meaningful activities and challenging events will be more psycho-socially developed (Kuh, Cruce, Shoup, Kinzie & Gonyea, 2008; DeRue & Wellman, 2009; Trowler, 2010; Sessa, 2017), which has been linked to higher career readiness (Sung, Turner & Kaewchina, 2011). Students in leadership positions during college are more likely to encounter these novel/uncertain experiences, meaningful activities and challenging events than participants and non-participants. Again, level of participation may affect these results, such that students who are actively participating within the co- or extra-curricular activity but not in a leadership position, may face many of the same experiences that leaders do by coordinating projects/events and working with teams. Support for this was seen in the lack of significant difference between leaders and participants.

**Hypothesis 4: Flourishing/well-being.** This study provided mixed results about the relationship between participation in institutional context activities and student well-being. Contrary to the literature (Seifert, Goodman, Lindsay, Jorgensen, Wolniak, Pascarella & Blaich, 2008; Gallup-Purdue Index report, 2014; Mayhew et al. 2016), I found no evidence to suggest that students who participate in activities in the institutional context have higher well-being than those that don't participate beyond the classroom. I did find that leaders report higher well-being than students who do not participate. This may be due to the support system leaders tend to have (Mayhew et al., 2016), or perhaps leaders find more purpose and meaning in their life as a student than non-participants. It is possible that we didn't find any differences between leaders and participants because some participants are highly involved in activities outside of the classroom but do not hold a leadership position. They may gain the same benefits as the leaders do. Conversely, it is possible that some of the participants are not as involved and therefore report well-being ratings similar to those who do not participate.

### **Theoretical Implications**

While we intended to use a learning model to predict which students participate in co- and extra-curricular activities and which students take on leader roles, we ultimately found we were testing a model of leadership development. Readiness to learn as a whole model did not accurately predict which students were in each participation group. However, the aspects of readiness to learn that were significant in predicting the participation group are similar to the variables included in a leadership development model developed by Avolio and Vogelgesang (2011). In this model, they suggest that self-regulation, learning goal orientation, grit and motivation to lead (which they call

developmental readiness) are important characteristics that individuals must exhibit before participating in leadership development activities. We did not find evidence to suggest that students with a higher learning goal orientation, or grit, were more likely to take on leader roles. However, our study does provide evidence that self-regulation and motivation to lead do predict which students take on leader roles. Taking on leader roles is considered one form of leadership development (Day, 2001; Komives et al., 2005; Cress et al., 2001). Two aspects that differed from the model suggested by Avolio and Vogelgesang (2011) were the leader goals a student has, and awareness. Other leadership development researchers suggest that leader goals must also be present for students to participate in leadership development (Reichard & Walker, 2016). Other research suggests that mentors and role models can play a vital role in a student's decision to participate in leadership development (Amagoh, 2009; Solansky, 2010). We suggest that an expanded model of leadership development (Avolio & Vogelgesang, 2011), accurately predicts which students take on leader roles in co- and extra-curricular activities.

### **Practical Implications**

This study demonstrates the importance of awareness of the institutional context as an important learning environment. While administration in institutions of higher education are making a concerted effort to get students involved in activities outside of the classroom, they also need to make students aware of the learning that takes place in the institutional context and why it's important. Providing students with, or encouraging students to have, a peer role model or adult mentor can help them to engage in activities outside of the classroom, thereby learning and developing in ways they may not otherwise. Additionally, as self-regulation was highly predictive of participation group,

higher education faculty may want to provide self-regulation training to students to increase participation in activities outside the classroom. This can be done via workshops, online training modules, classroom training in general education requirements, etc.

Lastly, this study demonstrated the additional benefits student leaders see above and beyond their peers who do not take on leadership roles. Because there are a limited number of leadership roles on campus, administration could better leverage activities in the institutional context to provide participants with similar benefits seen by student leaders. In other words, participants may see similar benefits in psychosocial development and flourishing as student leaders do if they are able to lead a committee within the organization, or lead a big project. Faculty advisors for student clubs and organizations may want to be deliberate in helping many students take on quasi-leader roles through leading projects, initiatives, or subcommittees.

### **Limitations and Future Research**

The first limitation of this study is the number of individuals in each group. I was able to collect information from more leaders than participants and non-participants which made comparisons between the groups difficult. Another limitation of this study is its cross-sectional nature. At this time, I cannot determine whether students develop more psychosocially or have higher well-being by holding leadership positions or whether students who are already more developed than their peers are the ones to hold the leadership positions. To determine causation, a longitudinal study is needed. Future studies may also want to differentiate levels of engagement among those who participate in co- and extra-curricular activities. Those students who are more actively involved in their club, organization or sport may follow trends similar to those in leadership

positions, while those who are passively involved may follow trends similar to non-participants. Lastly, future studies may want to capture a more complete history of students' involvement in organizations both in high school and off campus.

## CONCLUSION

I used a model of learning to try predicting whether students participated in activities outside the classroom or held leadership positions on campus. Additionally, I compared leaders, participants and non-participants on three desired learning outcomes at the university level: academic success, psychosocial development and flourishing/well-being. Results show that specific aspects of readiness to learn are good indicators of which group a student will be in. Additionally, students who take on leadership roles in college demonstrate better desired learning outcomes than those who do not take on leadership roles. These results indicate that there are other factors to consider when determining who participates in activities outside of the classroom, and who leads. Lastly, the results indicate that institutes of higher education may want to focus on how to better develop the students who do not participate beyond the classroom, as well as those who participate but do not hold leadership positions.

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