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The Impact of College Leadership Experiences on Long Term Well-Being

Kevin Meaney

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JAMES MADISON UNIVERSITY

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Abstract

In an era when the debate surrounding the value of a college education seems solely focused on the earning power of graduates, colleges and universities must make a concerted effort to include additional outcomes in the discussion. One area of promise is the examination of the impact of various college experiences on long term well-being. Using a multiple analysis of variance, this study explored the influence of collegiate leadership experiences on long term well-being and meaningful work. Results revealed that students engaged in activities with focused leadership development reported higher levels of positive meaning in their work and higher levels of meaning making through work than those with no leadership experience as well as those who held positional leadership roles without a focus on leadership development. Further, it was colleges provided this experience equally well through both paid and unpaid positions. Further research is necessary to better understand any additional post-collegiate experience that may have affected the results of the study.

Introduction

How do we measure the long term impact of college on graduates? Some would argue that it is purely through financial attainment and career achievement. But, are there not other long term outcomes that are just as important? Do we not expect colleges to produce engaged individuals, thoughtful leaders and global citizens? And should graduates not expect to view the world differently and more openly after being exposed to new thoughts, ideas and people? As post-college salaries struggle to keep pace with tuition, institutions must do a better job of celebrating other important outcomes of the college experience; outcomes that benefit society as well as the individual graduate.

Over the past several decades the United States has seen a dramatic increase in the cost to attend college. Since 1985 tuition expenses have increased 538 percent compared with a 286 percent jump in medical costs and a 121 percent gain in the consumer price index (Bloomberg, 2013). While the reasons behind these increases are many (drastic reductions in state support, rising costs for services, etc.), the increased burden on families has resulted in a spotlight being placed on colleges and the benefits of higher education. Much of that discussion has revolved around the earning power of recent college graduates and the impact of student loan debt on their ability to be successful. All of the involved parties are interested in the ability of graduates to secure jobs that allow them to manage their college debt and provide for their families. And the federal government has continued its drumbeat for a ratings system to help families determine how successful schools are in metrics like labor market success and loan repayment performance. The pressure to produce successful graduates has never been greater.

However, measuring success in purely financial terms paints an incomplete picture of the benefits of a college education. In fact, colleges and students tout many other outcomes as equally important and worthy of note and, historically, society has embraced these outcomes as well. College students are expected to increase their academic knowledge and skills, develop themselves personally and expand their understanding of both the local and global community in which they live. An undergraduate education can and should help students develop ethically and discern a sense of purpose in life (Colby, Ehrlich, Beaumont, & Stephens, 2003; Sullivan & Rosin, 2008).

Many students seek careers that are meaningful to them and offer a sense of purpose in their lives. They are willing to sacrifice earnings to achieve these outcomes (Zukin & Szeltner, 2012). Fostering a desire to engage in public service, developing leadership skills and the ability to work successfully in group setting are also goals embedded in the mission statements of many universities. These outcomes however cannot be measured by looking at salary data or socioeconomic standing alone.

One way to examine these areas is by assessing the well-being of college graduates. Well-being refers to both a subjective self-appraisal of one's current emotional condition as well as whether one has achieved a sense of purpose in life and career (Diener, Suh, Lucas, & Smith, 1999; Ryff & Keyes, 1995). Well-being is the combination of all the things that are important to an individual and how they perceive their life experiences. It is a combination of many life areas and is not confined to just wealth or physical health but instead refers to the interaction between career fulfillment, strong social relationships, community involvement and access to resources as well as

general health and wealth. If colleges are truly developing the whole person and not just preparing them for specific careers, we should see a positive impact on the long term well-being of graduates.

Recently, the Gallup organization and Purdue University revealed the results of their inaugural Gallup-Purdue Index (Gallup-Purdue, 2014). The Index was designed to assess college graduate well-being and determine what impact, if any, the college experience has on long term well-being. The Index involved interviewing more than 30,000 college graduates in an attempt to measure whether they have "great jobs," and if they are thriving in their overall well-being. The questions used for the Index were based on a 5 factor model of well-being developed by Gallup:

Purpose Well-Being: Liking what one does each day and being motivated to achieve one's goals.

Social Well-Being: Having strong and supportive relationships and love in one's life.

Financial Well-Being: Effectively managing one's economic life to reduce stress and increase security.

Community Well-Being: The sense of engagement one has with the areas where one lives, liking where one lives, and feeling safe and having pride in one's community.

Physical Well-Being: Having good health and enough energy to get things done on a daily basis.

So, does college really impact long-term well-being? The results from the initial Gallup-Purdue Index seem to say "yes". The results indicated that colleges *could* have an impact but only if graduates engaged in specific experiences during their years of attendance. Significant engagement with a faculty member or mentor, participation in a semester long project and having an internship connected to classroom learning were all related to greater job engagement and well-being after graduation. Similarly, significant participation in extracurricular activities also produced a positive effect. Graduates who were more heavily involved during their college years made up 20% of the respondents and were 1.4 times more likely to be thriving in all areas of well-being. These same graduates were also 1.8 times more likely to be engaged at work than other graduates.

The impact of extracurricular activities is particularly intriguing because benefits from involvement in non-classroom based activities would seem to indicate value in the entirety of the collegiate experience and not just the purely academic aspects. Extracurricular activities are often pointed to as integral to the college experience and help differentiate 4-year residential institutions from online and for-profit operations. College have long seen the value of extracurricular activities in helping students feel connected to the institution and students have the opportunity to participate in many different types of clubs and organizations. Options range from social organizations to sports clubs to groups based on a common faith or ethnicity.

Leadership development programs are one type of extracurricular experience that have received more attention recently. Colleges have placed a high value on these programs and at last count over 1500 formal leadership programs existed (Owen, 2012). Unlike clubs designed to foster a connection during the undergraduate years, leadership

programs have an additional goal of developing future leaders. The literature regarding these programs tells us that the effects are long lasting and life changing. We also know that these programs include outcomes related to improving civic engagement, strengthening personal connections with the community and other leaders as well helping participants find meaning in their work and purpose in life. These are all concepts closely related to well-being and individuals who flourish in these areas tend to report greater happiness and satisfaction with their lives and careers.

If colleges are interested in focusing on well-being as a valued outcome for graduates, examining the impact of leadership programs on well-being seems like a potentially fruitful endeavor. The idea that these programs might also contribute to the long term well-being of graduates should be particularly exciting to colleges. Demonstrating that they produce highly qualified leaders in a variety of fields who also lead more personally fulfilling lives would be a tremendous feather in their cap. It would also bolster the argument that the value of the college experience cannot be measured by salary alone.

Review of the Literature

Outcomes of College

The belief that college and the college experience are related to well-being has become more popular recently, however the idea that college means more than preparing for career or financial security is not new by any means. Over the past century many researchers have attempted to measure the impact of college on graduates beyond vocational or purely academic measures. While it is impossible to cover all of the previous literature here, several important works have attempted to synthesize this research through the decades.

C. Robert Pace, whose study of the impact of the college experience began in the 1930s, found that college graduates as a group, tend to possess more knowledge about public affairs, humanities, and popular culture than those who did not attend college (Pace, 1979). In addition he found that college graduates are more likely to participate in a variety of civic activities and believe that college contributed directly to the development of their interpersonal skills and personal values.

In the early 1960s James Trent and Leland Medsker studied the lives of 10,000 high school graduates. Some chose to attend college while others went directly into the work force. They found that college graduates showed greater gains in personal autonomy, openness to diversity, critical thinking skills and seemed to be more flexible and tolerant in their attitudes (Trent & Medsker, 1968).

Originally published in 1977, Howard Bowen's Investment in Learning constructed a framework of higher education goals related to outcomes for individual students. These goals included both academic and non-academic outcomes such as

personal self-discovery, psychological well-being, future orientation, personal adaptability, leadership development and citizenship. He concluded that college "helps students a great deal in finding their personal identity and in making lifetime choices congruent with this identity. It increases moderately their psychological well-being as well as their understanding, human sympathy, and tolerance toward ethnic and national groups and toward people who hold differing opinions" (Bowen, 1996, p. 433). It also "greatly enhances the practical competence of its students as citizens, workers, family members, and consumers," in addition to influencing, in positive ways, "their leisure activities, their health, and their general ability to cope with life's problems" (Bowen, p. 434).

Alexander Astin's seminal work in this area was also published in 1977. In Four Critical Years (1977), Astin analyzed data gathered through the Cooperative Institutional Research Program (CIRP), surveying some 200,000 students from 300 colleges across the nation. In analyzing the affective outcomes of college he found that students develop a more positive self-image, become more socially active and show increases in desire to develop a meaningful philosophy of life (Astin, 1977). Astin also proposes several general conclusions that point to the importance of a traditional college experience. Most relevant to the purposes of this study is the ideas that the student's involvement with peers during their time in college is the most significant influence on the growth and development of their personal values and beliefs.

Perhaps most recognizable among the works in this area has been the efforts of Pascarella and Terenzini (2005). In an attempt to produce the most comprehensive review on the question of college impact, they examined thousands of empirical studies

completed over a period of fifty years and considered outcomes in ten specific areas, including changes of identity and self-concept, changes in relating to others, impact on personal attitudes and values and quality of life after college. Some of their findings include:

- College positively impacts belief in oneself and as well as one's leadership abilities.

- College graduates report a greater sense of openness to those different from themselves and a better understanding of others.

- College increases a students' freedom from the influences of others.

- College graduates experience an increase in the maturity of their interpersonal relationships.

These collective works clearly establish the benefits of a college education beyond the improvement of one's income or career related prospects. However, the specific connection between college and well-being is under-studied. Rarely do these researchers use the term "well-being" nor do they reference well-being theories or constructs. However a closer examination of the well-being literature may reveal a stronger relationship than first realized and may help us understand the interest Gallup and Purdue have in exploring this potential connection.

Well-Being

Traditionally, researchers have distinguished between two types of well-being: hedonic and eudaimonic (Ryan & Deci, 2001; Waterman, Schwartz, & Conti, 2008).

Hedonic psychology has to do with the study of what makes experiences and life pleasant and unpleasant. This form of well-being is typically defined as having positive emotions, being satisfied with one's life, and the happiness that can be derived from attainment of goals or valued outcomes in various life endeavors (Diener, Suh, Lucas, & Smith, 1999). Compared to hedonic happiness, eudaimonic happiness is a deeper, more multi-dimensional construct. Eudaimonic theories distinguish happiness from well-being and advance the idea that the achievement of pleasure does not always equate to greater well-being.

Hedonic psychology defines well-being in terms of pleasure, or the lack thereof, and focuses on the maximization of human happiness and how we can accurately measure this construct. The predominant avenue for assessment is the examination of Subjective Well-Being (SWB) (Diener, et al., 1999). SWB emerged as a research area in an attempt to find useful indicators of quality of life. Researchers quickly came to understand that although people live in objectively defined worlds, it is how they subjectively define their lives that has a greater impact on their perception of their own happiness and well-being (Keyes, Shmotkin & Ryff, 2002). SWB is comprised of two components: life satisfaction and happiness. Life satisfaction reflects an individual's perceived distance from their aspirations and is a long-term assessment of one's life. Happiness results from a balance between positive affect and negative affect and is a reflection of pleasant and unpleasant affects in one's immediate experience (Keye's, et al., 2002). This consistent presence and interrelatedness of life satisfaction, positive affect, and negative affect has been repeatedly confirmed in numerous studies (Lucas, Diener, & Suh, 1996).

It should be noted that some researchers view Life Satisfaction as a third measure of well-being, separate from eudaimonic and hedonic happiness. As a component of subjective well-being (SWB), life satisfaction is related to, but partially independent of, the affective aspects of SWB (Lucas et al., 1996). At its heart, life satisfaction represents an evaluative judgment that can be influenced by several subjective life domains. The chosen domains can vary based on current life circumstances, age, perceived importance, etc. (Schimmack, Diener, & Oishi, 2002). More importantly, while it was previously thought that changes in life satisfaction could only have a temporary effect on overall SWB, recent research has demonstrated that certain influences on life satisfaction can actually have long-term effects (Lucas, Clark, Georgellis, & Diener, 2003).

Unlike hedonic psychology, eudaimonic theories distinguish happiness from well-being and advance the idea that the achievement of pleasure does not always equate to greater well-being. Eudaimonic psychologists are concerned with an individual's Psychological Well-Being (PWB) and whether they are living their lives to the fullest. Are they experiencing personal growth and have a purpose in life? Do they maintain meaningful interpersonal relationships and attempt to exert control over their environment? These researchers propose that eudaimonia occurs when people's life activities connect regularly with deeply held values and they feel fully engaged by these activities.

Whereas SWB views well-being in terms of satisfaction and happiness, PWB relies on personal development and life challenges. Ryff's (1989) multidimensional model of PWB is considered a seminal work in this area and includes six core psychological dimensions. Each dimension of PWB involves different challenges

individuals encounter as they strive to function positively (Ryff, 1989; Ryff & Keyes, 1995). Self-acceptance denotes an attempt to feel good about oneself even when aware of one's personal shortcomings. Positive relations with others speaks to efforts to build close and trusting interpersonal relationships. Environmental mastery involves attempts to create a personal environment that meets personal needs. Autonomy involves efforts to establish a sense of individuality through personal authority. Personal growth denotes efforts to make the most of one's talents and abilities. And, finally, purpose in life refers to efforts by an individual to find meaning in their life's path.

In developing measures of well-being researchers have faced challenges in mitigating the impact of mood and context. For instance, Schwarz and Clore (1983) were able to influence respondents' answers to a life satisfaction survey by putting them in a good mood or a bad mood. Subjects asked to relive a negative memory or asked to respond on a rainy day reported lower satisfaction than subjects asked to relive a happy memory or contacted on a sunny day. Schwarz, Strack, Kommer and Wagner (1987) also demonstrated that results are highly context dependent and show small test-retest correlations even with short intervals. Subjects contacted immediately after a World Cup soccer game responded differently to a life satisfaction questionnaire depending on how they felt about their team's performance. More recently, Eid and Diener (2004) used a structural model, and found that anywhere from 4% to 25% of the variance in various measures were accounted for by context difference.

Some researchers have criticized meaning in life instruments because they believe they are unclear as to what construct they are attempting to measure. For example, in examining the Purpose in Life Questionnaire (PIL) Steger, Frazier, Oishi and Kaler

(2006) found "…disconcertingly high correlations observed between the PIL and negative affect (–.78; Zika & Chamberlain, 1987), positive affect (.78; Zika & Chamberlain, 1992), and life satisfaction (.71; Chamberlain & Zika, 1988b)." Similarly, Debats, van der Lubbe and Wezeman (1993) found high correlations with measures of depression and anxiety. However, Diener, Inglehart and Tay (2012) point out that "many concepts in the behavioral sciences do correlate with each other, and it makes conceptual sense that they do so". Also, Lucas, Diener and Suh (1996) found that longitudinal studies showed better discriminant validity from related concepts such as positive and negative affect. So while results may be harder to separate in the short term, longer term studies appear to do a better job of isolating the construct. Additionally, it appears that some factors that can confound meaning in life findings can be effectively controlled. For instance, in the same study in which they demonstrated the impact of context difference, Eid and Diener (2004) were also able to control for it. Afterwards, they estimated that the stability for life satisfaction was actually closer to .90.

At this point it should be clear that while researchers interested in college outcomes did not make specific mention of well-being constructs or theories we can see that many of the outcomes used in both fields overlap. Life satisfaction which reflects an individual's perceived distance from their aspirations and is a long-term assessment of one's life is related to Astin's findings regarding personal life philosophy and Bowen's "future orientation". Development of personal values and beliefs measured by Pace and personal autonomy measured by Trent and Medsker are outcomes intimately associated with Psychological Well-Being. Throughout these studies, results support that college graduates are more satisfied, more engaged, have a clear sense of self and life purpose

and are more open to new ideas and individuals different from themselves. It is clear that college has a positive impact on the well-being of its graduates. But, can the same be said for collegiate leadership experiences? Is there reason to believe that these experiences have long-term effects and is there a connection between these experiences and increased well-being?

Impact of College Leadership Experiences

Colleges use student clubs and organizations to attract prospective student interest in their institution as well as to help new students become more engaged with the university community. These experiences are also intended to provide critical educational and developmental benefits for students, including boosting their teamwork and organizational skills, their openness to diversity and their leadership abilities. Many admissions events and new student orientation programs will include a student group fair where prospective and new students have an opportunity to meet current students and explore the many ways to become more involved. While some of these organizations are social in nature many are also designed to help students develop their leadership skills over the course of their involvement with the group.

Research suggests that all college students can develop stronger leadership skills by being involved in leadership positions and campus organizations (Kezar & Moriarty, 2000). Through these programs students report gaining and improving their skills in communication, problem-solving, strategic visioning and conflict resolution. These skills support their academic endeavors as well as in their professional careers after college (Zimmerman-Oster & Burkhardt, 1999). They also develop competencies in knowledge

creation and are able to promote the sharing of ideas. These skills are hallmarks of individualized and group leadership development (Locke, 2001). Researchers have also discovered a positive relationship between student involvement in learning communities and organizations and academic performance, retention and degree completion (Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008).

Participation in organizational leadership experiences also provides students with the opportunity to compare themselves to their peers in terms of leadership abilities and often has a positive effect on their self-esteem. Komives, Lucas, and McMahon (1998) found that being an officer in a collegiate organization was one of the strongest predictors of an undergraduate's positive self-rating on leadership ability. Additionally, many leadership experiences encourage participants to engage with the community and use what they have learned to work on solutions to community problems (Azzam & Riggio, 2001). This engagement process helps establish social and professional connections between the students and the community.

The longer term impact of these experiences has also been documented. In a 2001 study, Cress, Astin, Zimmerman-Oster and Burkhardt looked at the impact of participation in student leadership and education programs four years after graduation. Ten institutions were selected, each with dedicated leadership programs that focused on one or more of the following: curriculum revision/development, community service opportunities, mentoring for formal student leadership development, individual leadership improvement and collaborative/group leadership activities.

The 10 institutions selected participated in the College Student Survey. Researchers administered 20 supplemental questions to students at each of the

institutions. While caution should be taken in over generalizing the results of the study due to the self-reported nature of the data, the supplemental questions attempted to assess changes experienced by students over the course of their college career in three specific developmental areas:

- Leadership Understanding: Ability to recognize and understand leadership theories and interest in developing leadership in others.
- Leadership Skills: Proficiency in various leadership skills including dealing with complexity, ambiguity and uncertainty.
- Personal and Societal Values: Clarity of personal values, a set of personal ethics and a commitment to civic responsibility.

The researchers also used the standard CSS questions to look at two additional areas of leadership development:

- Civic Responsibility: Engagement in local community and willingness to help others.
- Multicultural Awareness: Familiarity with and acceptance of others from diverse backgrounds.

They determined that participating in these leadership programs produced graduates who scored significantly higher on all of these measures than those who did not participate. Further, the most impactful experiences were found to be those that provided

opportunities for service to the community, experiential activities and group or collaborative projects.

Two longer term studies also found similar results. College leadership organizations often attract (indeed, these organizations often seek out) a diverse group of students for membership. A 2011 study found that interacting with group members from diverse backgrounds during these leadership experiences can have positive long term effects (Bowman, Brandenberger, Hill & Lapsley, 2011). These diversity experiences were found to have a positive, indirect effect on personal growth, purpose in life and volunteer work over a decade after graduation. Personal growth was defined as an individual sense of development, growth, and change and was measured using Ryff's (1989) psychological well-being scale. Purpose in life was measured through scales developed by Damon and colleagues based on their model of purpose development. This model included four stages (a) searching for purpose, (b) having an identified purpose, (c) being engaged in one's purpose, and (d) incorporating this purpose as a central part of one's identity.

A related longitudinal study examined the impact of volunteering and service learning 13 years after graduation. Also using Ryff's (1989) psychological well-being scale, Bowman, Brandenberger, Lapsley Hill & Quaranto (2010) examined the impact of these types of experience on purpose in life (having a sense of direction and working toward that goal), and environmental mastery (control over one's life and events). They also used the Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) to assess life satisfaction. Results showed that both types of experiences have positive, indirect effects on all three of these variables. In particular these collegiate activities are

associated with volunteering as an adult and prosocial orientation which are both positively associated with well-being.

Research in this area has effectively demonstrated that leadership experiences in college can have long-lasting effects on graduates in a number of areas. What it also seems to show us is that there is a connection between these leadership experiences and long-term well-being. As several of the studies concluded, graduates with these types of experiences demonstrate higher levels of personal growth, purpose in life (Bowman, et al., 2011), personal and societal values (Cress, et al. 2001) and experience a positive effect on their self-esteem (Komives, et al., 1998) as well as a strengthening of their interpersonal relationships (Zimmerman-Oster & Burkhardt, 1999). These are all outcomes used to measure Psychological and Subjective Well-Being and they all seem to be influenced in a positive way when students become leaders during their college years. The goal of this study is to determine whether we can measure this impact and whether the type of leadership experience, or lack thereof, influences its magnitude.

Research Methods

Purpose

The purpose of this study is to examine whether college student leaders experience a greater sense of long term well-being, either hedonic or eudemonic, than their non-leader colleagues and whether the type of leadership experience impacts the level of well-being. Involvement in leadership activities during college can help develop important skills and attitudes that are connected to both subjective (SWB) and psychological well-being (PWB). For PWB, this includes helping graduates find a purpose in life, experience a sense of environmental mastery, and greater life satisfaction (Bowman, et al., 2010). And, for SWB this includes satisfaction with career choice and a greater sense of civic responsibility and personal values (Cress, et al., 2001). Does the development of these skills and attitudes during college impact a graduate's overall well-being? And, are the effects still present some ten years after graduation?

Participants

This study employed an electronic survey which was sent to three groups of graduates from a mid-size public university. All respondents have been alumni for at least ten years, having graduated from the institution between the years 1994 to 2004. The first group of respondents were identified as "Employed Student Leaders". These graduates were all previously employed as Resident Advisors (RAs) for at least one year during their attendance at the institution. RAs receive extensive leadership, crisis management and conflict resolution training during their employment. They participated in leadership and RA related activities on a daily basis and were required to live on-

campus. RAs also received a small stipend each semester as compensation for their efforts. The total number of Employed Student Leaders contacted was 250.

The second group contacted were classified as "Volunteer Student Leaders" and will be comprised of graduates with experience in one of three on-campus student leadership groups: The University Program Board (UPB), Outriggers, and Make Your Mark On Madison (MYMOM). While other groups exist that provide for leadership *experiences* at this university, these three were selected because of their focus on *developing* leaders and leadership skills specifically. They are charged with helping undergraduates develop their leadership skills through a variety of activities. These range from creating and managing campus wide programming to working with other student groups to help them develop individualized leadership development programs. They also work with one on one with younger students and help them develop their leadership abilities. UPB's mission statement reflects the focus on leadership and service that these clubs all share:

"...the University Program Board strives to enhance the overall university experience by providing a variety of creative, educational and entertaining programs that appeal to diverse audiences. We actively seek and encourage input while dedicating and challenging ourselves to incorporate the needs and desires of the university community."

Volunteer Student Leaders participated in leadership activities on at least a weekly basis and received no compensation for their activities. MYMOM members began their experience with a weekend retreat and then met for two hours each week for

ten weeks in the fall semester. The first hour of each meeting was dedicated to a formal

leadership training program with the second hour serving as time to work with the new

material in small facilitated groups. Outriggers members go through an intense training

program where the students learn to help other student groups diagnose internal group

disfunction or help them reenergize a group that has become complacent. Their training

involves learning how to facilitate interactive, team-oriented workshops for other

organizations and helping them troubleshoot problems commonly found in student

organizations (complacency, disorganization, poor communication skills, etc.)

University Program Board. The total number of Volunteer Student Leaders contacted

was 250.

The strength and length of the development of the Volunteer Student Leaders

group was less than that of the Employed Student Leaders. While RAs received feedback

on an almost daily basis for the entire academic year and engaged in an intense 2-week

training program just prior to the start of school, Volunteer Student Leaders received

weekly feedback and had training programs that lasted a day or two. The total number of

Volunteer Student Leaders contacted was 250.

The final group was classified as "Non-Leaders". A random sample of graduates

from 1994-2004 were selected and verified as not being listed as a member of one of the

three leadership programs noted previously nor employed as Resident Assistants at any

time during their collegiate career. Additionally, this group was asked via the electronic

survey to verify that they did not have a significant student leadership experience during

their undergraduate career. The total number of Non-Leaders contacted was 250.

All respondents were asked to confirm their status as either an Employed Student Leader, a Volunteer Student Leader or a Non-Leader. Additionally, each respondent was asked if they had any other formal leadership experience during their undergraduate years. Responses to this question combined with each respondents original group membership would determine how many categories would make up the independent variable.

Instruments

The Satisfaction With Life Scale

The Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) assesses an individual's global life satisfaction which is a measure closely associated with Subjective Well-Being. The SWLS is a five-item scale that requires respondents to rate their level of agreement with positive statements about their life. An example: "In most ways my life is close to my ideal". The scale uses a seven level rating system ranging from 1 (Strongly Disagree) to 7 (Strongly Agree).

The SWLS was developed to be effective in the assessment of a variety of people from different backgrounds and of different ages. Confirmatory factor analysis of data collected through the administration of the SWLS has consistently resulted in a single factor solution although the fifth item almost always shows lower factor loadings than the first four (Senecal, Nouwen, & White, 2000). However, the fifth item is still highly correlated with the others and useful to researchers. Coefficient alpha for the SWLS has been shown to be consistent and sufficient. In their original study, Diener et al., (1985) reported an alpha of .87 while a more recent study by Adler and Fagley (2005) had the

same finding. Similarly, test-retest reliability examples have included alphas of .82 in 1985 and .80 as recently as 2006 (Steger, Frazier, & Oishi).

Diener et al. (1985) also presented data from two student samples which demonstrated the scale's validity through its convergence with results from other measures. This included correlations between the SWLS and the Fordyce Happiness Scale (Fordyce, 1977), the Gurin Scale (Gurin, Veroff, & Felld, 1960) and the Delighted-Terrible Scale (Andrews & Whitney, 1976). A subsequent paper by Pavot, Diener, Colvin, and Sandvik (1991) further validated the SWLS when they demonstrated high inter correlation with the Life Satisfaction Index-A (Neugarten et al., 1961) and the Philadelphia Geriatric Center Morale Scalle (Lawton, 1975) in one study and the Fordyce Scale again, in another.

The Work and Meaning Inventory

A relatively new scale, the Work and Meaning Inventory (WAMI) (Steger, Dik & Duffy, 2012) is a ten item measure with scores ranging from 1 (absolutely untrue) to 5 (absolutely true), which is aimed at understanding the construct of Meaningful Work. The WAMI survey consists of three subscales: Positive Meaning (items 1, 4, 5, & 8), Meaning-Making through Work (items 2, 7, & 9), and Greater Good Motivations (items 3, 6, & 10). Positive Meaning attempts to measure the degree to which people find their work to hold personal meaning, significance, or purpose. Meaning-Making through Work measures how much respondents rely on their work to help them to make sense of their life experiences. The Greater Good Motivations scale measures the degree to which people see that their work benefits others or society.

The scores for the Positive Meaning and Meaning-Making through Work subscales are computed by simply adding up the responses to the appropriate items listed above. The score for the Greater Good Motivations subscale is calculated by subtracting the response to item 3 from item 6 and then adding this difference to the responses to items 6 and 10. Steger et al.'s (2012) early research found no differences based on gender, race or ethnicity. Subscale scores were internally consistent during their initial testing with coefficients of .89, .82, and .83 respectively. The scales can also be added together for an overall Meaningful Work score which reflects the depth to which people experience their work as something they are personally invested in and is a source of flourishing in their lives. Internal consistency for the overall scale was high at .93. High correlation with similar scales also demonstrated the WAMI's validity. These includes dimensions of the Brief Calling scale (r = .51) and several subscales having to do with finding positive meaning through work (r = .67) (Dik, Eldridge, Steger, & Duffy, 2012).

The Meaning in Life Questionnaire

The Meaning in Life Questionnaire (Steger et al., 2006) is comprised of two subscales that assess Psychological Well-Being. The first five items assess the *presence* of meaning in the life of the respondent while the second five items assess the *search* for meaning in life. Items completed using a seven point scale from 1 (Absolutely True) to 7 (Absolutely Untrue). Construct validity for the MLQ included correlating initial results with the Purpose in Life Test (Crumbaugh & Maholick, 1964) and the Life Regard Index (Battista & Almond, 1973). Correlations were all statistically significant and ranged from .58 to .74.

Confirmatory factor analysis by Steger et al. has shown consistent loadings of five items on each of two factors. Their alpha coefficient for the Presence subscale was .86 while the alpha for the Search subscale was .87. A recent study by Schulenberg, Strack and Buchanan (2011) documented six administrations of the MLQ (including their own) since 2007 that resulted in alphas for the Presence subscale ranging from .81 to .93 and alphas for the Search subscale ranging from .88 to .93 (Duffy & Raque-Bogdan, 2010; Kashdan & Breen, 2007; Park, Park, & Peterson, 2010; Schulenberg, Schnetzer, & Buchanan, 2011; Whittington & Scher, 2010). MLQ scores have also demonstrated sufficient test-retest reliability both in the short term as well as for periods exceeding 1-year. (Dik, Sargent, & Steger, 2008; Steger & Kashdan, 2007).

The Sources of Meaning, Meaning in Life Questionnaire

The Sources of Meaning, Meaning in Life Questionnaire (SoMe) is a 151-item scale which measures 26 sources of meaning as well as degrees of experienced meaningfulness (Schnell & Becker, 2006). For this study only the five item meaningfulness subscale was used to further assess Psychological Well-Being. The meaningfulness scale measures the degree of subjectively experienced meaningfulness. Meaningfulness is defined as "a fundamental sense of meaning, based on an appraisal of one's life as coherent, significant, directed, and belonging" (Schnell, 2009). Subscale items contain complementary facets of experiences of meaningfulness and read as follows:

• I lead a fulfilled life.

• I think that there is meaning in what I do.

• I have a goal in life.

• I feel I belong to something bigger than myself.

• I think my life has a deeper meaning.

Based on Schnell's (2009) research the meaningfulness subscale demonstrated an internal consistency of .74 as well as high short-term stability with an average 2-month test-retest coefficient of .81 for the scale. The stability of the subscale remained acceptable even after six months with an alpha of .72.

Research Design

A multivariate analysis of variance (MANOVA) will be calculated to study possible average differences among the groups of an independent variables on six dependent variables. Specifically, the groups of the independent variable are: Employed Student Leaders (EMP LDR), Employed Student Leaders with Other Experience (EMP LDR w/OTHER), Volunteer Student Leaders (VOL LDR), Volunteer Student Leaders with Other Experience (VOL LDR w/OTHER), Other Leaders (OTHER LDR) and Non-Leaders (NON-LEADER). The dependent variables include two indications of psychological well-being through the measurement of meaning in life (the SoMe & the MLQ), one measure of subjective well-being via the SWLS and a meaningful work scale (WAMI) that will be analyzed via its three subscales: Positive Meaning, Meaning-Making through Work and Greater Good Motivations.

A significant MANOVA and follow up ANOVAs will be followed up with

planned contrasts designed to examine the six hypotheses presented in the next section.

The planned contrasts can be found in Table 1.

Table 1

Significant ANOVA Planned Contrasts

Contrast #	Contrast Group 1	Contrast Group 2
1	EMP LDR and VOL LDR	NON-LEADER
2	EMP LDR w/OTHER and VOL LDR w/OTHER	NON-LEADER
3	EMP LDR and VOL LDR	OTHER LDR
4	EMP LDR	VOL LDR
5	EMP LDR	EMP LDR w/OTHER
6	VOL LDR	VOL LDR w/OTHER

Hypotheses

Previous research looking at the long-term impact of collegiate experiences has

shown that longer term experiences that are more developmental in nature have more of

an impact than shorter experience or experiences that simply put students in a leadership

position (Cress, et al., 2001; Bowman, et al., 2010; Bowman, et al., 2011). This study

will attempt to determine whether leadership experiences have an impact on long-term

well-being and whether the type, length and depth of the experiences matters. The

dependent variables have been selected to represent long-term high frequency

feedback/intense training and development experiences (EMP LDR and EMP LDR

w/OTHER), shorter term, less frequent feedback, lower intensity training and

development experiences (VOL LDR and VOL LDR w/OTHER) and experiences that

have little to no development or training (OTHER LDR and NON-LEADER).

In order to explore these potential differences this study will examines six hypotheses:

H1: When compared to Non-Leaders, Employed Student Leaders and Volunteer Student Leaders will report significantly higher average levels of:

- Satisfaction with life (SWLS)

- Meaningfulness and purpose in their lives (MLQ and SoMe)

- Meaningful work (Positive Meaning, Meaning-Making through Work and Greater Good Motivations subscales of the WAMI).

H2: When compared to Non-Leaders, Employed Student Leaders with Other Experience and Volunteer Student Leaders with Other Experience will report significantly higher average levels of:

- Satisfaction with life (SWLS)

- Meaningfulness and purpose in their lives (MLQ and SoMe)

- Meaningful work (Positive Meaning, Meaning-Making through Work and Greater Good Motivations subscales of the WAMI).

H3: When compared to Other Leaders, Employed Student Leaders and Volunteer Student Leaders will report significantly higher average levels of:

- Satisfaction with life (SWLS)

- Meaningfulness and purpose in their lives (MLQ and SoMe)

- Meaningful work (Positive Meaning, Meaning-Making through Work and Greater Good Motivations subscales of the WAMI).

H4: When compared to Volunteer Student Leaders, Employed Student Leaders will report significantly higher average levels of:

- Satisfaction with life (SWLS)

- Meaningfulness and purpose in their lives (MLQ and SoMe)

- Meaningful (Positive Meaning, Meaning-Making through Work and Greater Good Motivations subscales of the WAMI).

H5: When comparing Employed Student Leaders and Employed Student Leaders with Other Experience, no average differences will be found for:

- Satisfaction with life (SWLS)

- Meaningfulness and purpose in their lives (MLQ and SoMe)

- Meaningful work (Positive Meaning, Meaning-Making through Work and Greater Good Motivations subscales of the WAMI).

H6: When comparing Volunteer Student Leaders and Volunteer Student Leaders with Other Experience, no average differences will be found for:

- Satisfaction with life (SWLS)

- Meaningfulness and purpose in their lives (MLQ and SoMe)

- Meaningful work (Positive Meaning, Meaning-Making through Work and Greater Good Motivations subscales of the WAMI).

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┌──────────────────────────────────────────────────────────────┐
│  • 6 IVs: EMP LDR, EMP LDR w/OTHER, VOL LDR, VOL LDR           │
│    w/OTHER, OTHER LDR, NON-LEADER                              │
│                                                                │
│  • 6 DVs: SWLS, MLQ, SoME, 3 WAMI Subscales                   │
└──────────────────────────────────────────────────────────────┘
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MANOVA

• If the MANOVA is significant, follow-up ANOVAs will be condcted to determine which of the individual scales are significant.

ANOVAs

• Six planned contrasts (see Table 1) designed to examine the six hypotheses will be performed as post-hoc testing on the statistically significant ANOVAs.
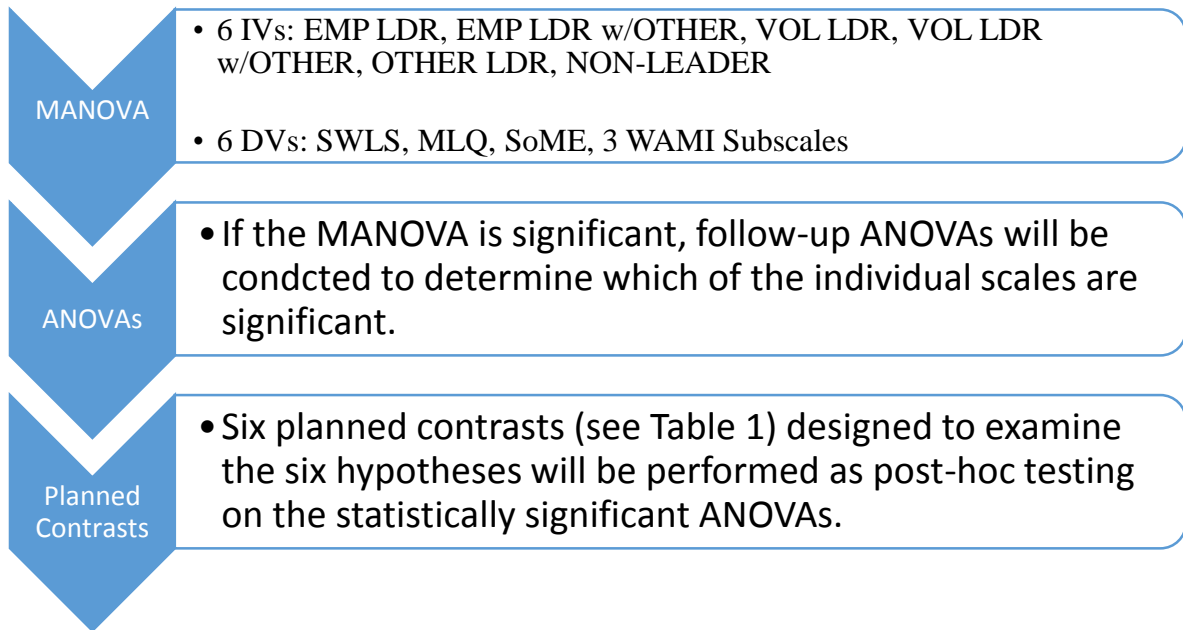
Planned Contrasts

Figure 1: Flowchart of research design and planned statistical analyses.

Results

This study used a between subjects multivariate analysis of variance to study possible average differences among six leadership groups of former college students on the six dependent variables of SWLS, SoMe, MLQ, WAMI – Positive Meaning, WAMI - Meaning-Making through Work and WAMI - Greater Good Motivations. Results were calculated using SPSS statistical analysis software. In addition to confirming their status as a former Employed Student Leader, a Volunteer Student Leader or a Non-Leader, respondents were asked to list any other clubs or organizations in which they previously held leadership positions to determine if other leadership experience might impact the results. Composite scores using each author's instructions were then calculated for each scale for use during the analysis.

Assumptions of the Study

Like all similar projects, there are assumptions and limitations to this study. First, while the sample size is adequate for the purposes of this study, the representativeness of the sample is limited. One should be cautious when attempting to generalize the results to the population at large as additional studies at other institutions are necessary before any firm conclusions can be drawn. Second, even a statistically significant finding linking a particular leadership activity to a higher average score on one of the scales will not prove a causal relationship due to the self-reported nature of the data.

In order to secure responses from the relevant leadership groups (Resident Advisors, Outriggers, MyMom and UPB) alumni email addresses were acquired from those organizations while email addresses for non-leaders came from a random sample of

former students. While there is no way to determine why some alumni chose to respond and others did not, using email addresses provided by the organizations could introduce selection bias. It is possible that alumni with more positive memories of their experience in those organizations may have been more likely to keep their contact information up to date and may have been more likely to respond. Also, it was not possible to control which participants were included in each group. Students self-selected their groups during their undergraduate years making it impossible to randomly select group members.

Finally, this study targeted former students who have not attended JMU as undergraduates for at least 10 years. The hope was to reach alumni more established in their lives and careers than more recent graduates. However, the gap between their date of last attendance and this study also leaves open the possibility that they may have had other life experiences that would impact their responses and the results of this study.

Respondents

The total number of completed surveys was ninety. Thirty respondents from the Employed Student Leaders group, thirty one from the Volunteer Student Leaders group and twenty nine from the Non-Leaders group (see Table 1). Also, forty seven respondents indicated they had served in a leadership role in another organization during their undergraduate years. These forty seven respondents were spread out through the original three groups so the one independent variable was divided into six categories representing each of the unique leadership groups: Employed Student Leader (EMP LDR), Employed Student Leader with Other Experience (EMP LDR w/OTHER),

Volunteer Student Leader (VOL LDR), Volunteer Student Leader with Other Experience (VOL LDR w/OTHER), Other Student Leader (OTHER LDR) and Non-Leader (NON-LEADER).

Table 2

Group Means

LeaderGroup	SWLS	SoMe	MLQ	WAMI – Positive Meaning	WAMI- Meaning Making	WAMI – Greater Good	N
EMP LDR	9.80	15.73	29.00	13.13	9.73	9.80	15
EMP LDR w/OTHER	9.73	15.20	29.80	13.93	9.86	10.26	15
VOL LDR	12.10	15.80	26.70	13.10	8.90	9.50	10
VOL LDR w/OTHER	9.81	15.91	29.24	13.38	10.00	10.04	21
OTHER LDR	8.00	16.82	28.91	12.55	9.00	10.00	11
NON-LEADER	10.39	14.94	28.06	10.94	8.16	8.78	18
Total	9.94	15.67	28.73	12.81	9.32	9.72	90

Reliability

Using SPSS, reliability was calculated using Cronbach's alpha coefficient of internal consistency for each dependent variable scale. All six scales (SWLS, SoMe, MLQ, WAMI – Positive Meaning, WAMI - Meaning-Making through Work and WAMI - Greater Good Motivations) produced alpha scores higher than .60 making them acceptable for research purposes (see Tables 2-7). Thus it was concluded that that each scale has reasonable internal consistency. Because all three WAMI subscales produced acceptable alpha coefficients it was decided to use them in the analysis instead of the overall WAMI. Using the subscales will allow for greater detail in the examination of

any significant findings and will better distinguish which areas of meaningful work have

been influenced.

Table 3

SWLS – Scale Reliability

Reliability Statistics	
Cronbach's Alpha	.87
N of Items	5

Item-Total Statistics	Item-Total Correlation
In most ways my life is close to my ideal.	.69
The conditions of my life are excellent.	.74
I am satisfied with my life.	.79
So far I have gotten the important things I want in life.	.71
If I could live my life over, I would change almost nothing.	.54

Table 4

SoMe: Meaningfulness Subscale – Scale Reliability

Reliability Statistics	
Cronbach's Alpha	.86
N of Items	5

Item-Total Statistics	Item-Total Correlation
I lead a fulfilled life.	.47
I think there is meaning in what I do.	.81
I have a task in life.	.73
I feel part of a bigger whole.	.76
I think my life has a deeper meaning.	.63

Table 5

MLQ – Scale Reliability

Reliability Statistics	
Cronbach's Alpha	.67
N of Items	10

Item-Total Statistics	Item-Total Correlation
I understand my life's meaning.	.31
I am looking for something that makes my life feel meaningful.	.26
I am always looking to find my life's purpose.	.52
My life has a clear sense of purpose.	.37
I have a good sense of what makes my life meaningful.	.25
I have discovered a satisfying life purpose.	.35
I am always searching for something that makes my life feel significant.	.44
I am seeking a purpose or mission for my life.	.43
My life has no clear purpose (R).	.22
I am searching for meaning in my life.	.15

Table 6

WAMI: Positive Meaning Subscale – Scale Reliability

Reliability Statistics	
Cronbach's Alpha	.81
N of Items	4

Item-Total Statistics	Item-Total Correlation
I have found a meaningful career	.58
I understand how my work contributes to my life's meaning.	.69
I have a good sense of what makes my job meaningful.	.62
I have discovered work that has a satisfying purpose.	.62

Table 7

WAMI: Meaning-Making through Work Subscale – Scale Reliability

Reliability Statistics	
Cronbach's Alpha	.64
N of Items	3

Item-Total Statistics	Item-Total Correlation
I view my work as contributing to my personal growth.	.35
My work helps me better understand myself.	.52
My work helps me make sense of the world around me.	.49

Table 8

WAMI: Greater Good Motivations Subscale – Scale Reliability

Reliability Statistics	
Cronbach's Alpha	.79
N of Items	3

Item-Total Statistics	Item-Total Correlation
My work really makes no difference to the world (R).	.57
I know my work makes a positive difference in the world.	.73
The work I do serves a greater purpose.	.63

MANOVA Assumptions

Homogeneity of variance and covariance

The assumption of the equality of variance between groups was tested using

Levene's test. The six scales of interest all produced non-statistically significant results

indicating they satisfied this assumption (see Table 8). Additionally, the assumption of

homogeneity of covariance was also satisfied with Box's *M* non-statistically significant at

the $p < .001$ level, $M = 178.055$, $F = 1.347$, $p = .011$ (Tabachnick and Fidell, p. 252,

2007). Due to the unequal group sizes in the sample, Pillai's Trace was selected to be

used when interpreting MANOVA results in this study (Field, p. 605, 2009). Finally, the

smallest number of cases in any group is 10 participants which exceeds the total number

of dependent variables (6) so the sample size requirement for MANOVA has also been

satisfied.

Table 9

Levene's Test Results

Scale	F	df1	df2	Sig.
SWLS	1.851	5	84	.112
SoMe	1.348	5	84	.252
MLQ	1.909	5	84	.101
WAMI – Positive Meaning	1.302	5	84	.271
WAMI – Meaning-Making through Work	.154	5	84	.978
WAMI – Greater Good Motivations	.447	5	84	.814

Multivariate Analysis

A between subjects multivariate analysis of variance was performed to study

possible differences among the six leader groups of Employed Student Leader, Employed

Student Leader with Other Experience, Volunteer Student Leader, Volunteer Student

Leader with Other Experience, Other Student Leader and Non-Leader on the six

dependent variables of SWLS, SoMe, MLQ, WAMI – Positive Meaning, WAMI –

Meaning-Making through Work, WAMI – Greater Good Motivations.

Table 10

Multivariate Statistics

Independent Variable	Pillai's Trace	F	Sig.
LeaderGroup	.496	1.52	.040*

* - significant at $p < .05$ level

Table 11

SWLS - ANOVA Statistics

Level	Independent Variable	Sum of Squares	df	Mean Square	F	Sig.
Main	LeaderGroup	92.97	5	18.60	2.15	.067

Table 12

SoMe - ANOVA Statistics

Level	Independent Variable	Sum of Squares	df	Mean Square	F	Sig.
Main	LeaderGroup	28.68	5	5.74	.77	.572

Table 13

MLQ - ANOVA Statistics

Level	Independent Variable	Sum of Squares	df	Mean Square	F	Sig.
Main	LeaderGroup	73.44	5	14.69	1.15	.343

Table 14

WAMI: Positive Meaning Subscale - ANOVA Statistics

Level	Independent Variable	Sum of Squares	df	Mean Square	F	Sig.
Main	LeaderGroup	91.60	5	18.32	3.56	.006*

* - significant at p < .01 level

Table 15

WAMI: Meaning-Making through Work Subscale - ANOVA Statistics

Level	Independent Variable	Sum of Squares	Df	Mean Square	F	Sig.
Main	LeaderGroup	43.59	5	8.72	2.40	.044*

* - significant at p < .05 level

Table 16

WAMI: Greater Good Motivations Subscale - ANOVA Statistics

Level	Independent Variable	Sum of Squares	df	Mean Square	F	Sig.
Main	LeaderGroup	24.16	5	4.83	1.26	.289

The MANOVA results was statistically significant and so follow up ANOVAs were performed (Field, p. 605, 2009) which indicated statistical significance for the independent variable on two of the WAMI subscales: Positive Meaning and Meaning Making through work. Planned contrasts based on the six hypotheses were performed to determine differences between the groups in the independent variable (see Table 16). In the first planned contrast, the Employed Student Leader and Volunteer Student Leader groups were compared to the Non-Leader group. On average these two groups scored higher than the Non-Leader group on the Positive Meaning subscale, $t(84) = 3.07$, p =

.003 but not on the Meaning-Making through Work subscale, $t(84) = 1.93$, p = .057.

Effect size for this comparison was moderate with $r = .38$.   It should also be noted that

statistical power is limited for this comparison due to the modest sample size (N = 43). A

post hoc power analysis revealed that an n of approximately 58 would be needed to

obtain statistical power at the recommended .80 level (Cohen, 1988).

In the second planned contrast the Employed Student Leader with Other

Experience and the Volunteer Student Leader with Other Experience groups were also

compared to the Non-Leader group. On average the two leader groups reported greater

Positive Meaning and Meaning-Making through Work than the Non-Leader group, $t(84)$

= 4.123, p = .001 and $t(84) = 3.191$, p = .002. The effect size for both comparisons was

large with $r = .44$ on the Meaning-Making through Work subscale and $r = .51$ on the

Positive Meaning subscale. Both of these comparisons surpassed the recommended

statistical power level of .80.

Because the comparison were non-orthogonal, Bonferroni post hoc tests were

performed to control for Type 1 errors. Post hoc testing confirmed that Employed

Student Leader and Volunteer Student Leader groups reported significantly higher levels

Positive Meaning through work when compared with Non-Leaders (p < .05). Post hoc

testing also confirmed that Employed Student Leader with Other Experience and the

Volunteer Student Leader with Other Experience reported higher levels of Positive

Meaning and Meaning-Making through Work than Non-Leaders (p < .05).

There were no significant differences found for any of the other four planned

contrasts (see Tables 17 and 18). The third contrast compared Employed Student Leaders

and Volunteer Student Leaders to Other Leaders. The fourth contrast compared

Employed Student Leaders to Volunteer Student Leaders. The fifth contrast compared

Employed Student Leaders to Employed Student Leaders with Other Experience and the

sixth contrast compared Volunteer Student Leaders to Volunteer Student Leaders with

Other Experience.

Table 17

ANOVA Planned Contrasts Coefficients

Contrast #	EMP LDR	EMP LDR w/OTHER	VOL LDR	VOL LDR w/OTHER	OTHER LDR	NON-LEADER
1	1	0	1	0	0	-2
2	0	1	0	1	0	-2
3	1	0	1	0	-2	0
4	1	0	-1	0	0	0
5	1	-1	0	0	0	0
6	0	0	1	-1	0	0

Table 18

WAMI: Positive Meaning Subscale - Planned Contrasts Results

Contrast #	Contrast Group 1	Contrast Group 2	t	Df	Sig.
1	EMP LDR and VOL LDR	NON-LEADER	3.07	84	.003*
2	EMP LDR w/OTHER and VOL LDR w/OTHER	NON-LEADER	4.12	84	.000**
3	EMP LDR and VOL LDR	OTHER LDR	.69	84	.491
4	EMP LDR	VOL LDR	.04	84	.971
5	EMP LDR	EMP LDR w/OTHER	-.97	84	.337
6	VOL LDR	VOL LDR w/OTHER	-.32	84	.748

* - significant at p < .01 level
** - significant at p < .001 level

Table 19

WAMI: Meaning-Making through Work - Planned Contrasts Results

Contrast #	Contrast Group 1	Contrast Group 2	t	df	Sig.
1	EMP LDR and VOL LDR	NON-LEADER	1.93	84	.057
2	EMP LDR w/OTHER and VOL LDR w/OTHER	NON-LEADER	3.19	84	.002*
3	EMP LDR and VOL LDR	OTHER LDR	.46	84	.650
4	EMP LDR	VOL LDR	1.07	84	.288
5	EMP LDR	EMP LDR w/OTHER	-.191	84	.849
6	VOL LDR	VOL LDR w/OTHER	-1.50	84	.137

* - significant at $p < .01$ level

Results of Hypotheses

H1: When compared to Non-Leaders, Employed Student Leaders and Volunteer

Student Leaders will report significantly higher average levels of:

- Satisfaction with life (SWLS)

- Meaningfulness and purpose in their lives (MLQ and SoMe)

- Meaningful work (Positive Meaning, Meaning-Making through Work and

  Greater Good Motivations subscales of the WAMI).

H2: When compared to Non-Leaders, Employed Student Leaders with Other Experience

and Volunteer Student Leaders with Other Experience will report significantly higher

levels of:

- Satisfaction with life (SWLS)

- Meaningfulness and purpose in their lives (MLQ and SoMe)

- Meaningful work (Positive Meaning, Meaning-Making through Work and

  Greater Good Motivations subscales of the WAMI).

Findings: Partial support was found for Hypothesis 1 and Hypothesis 2. While no

difference was found in the areas of satisfaction with life and meaningfulness and

purpose in life, support was found for a significant difference in the area of meaningful

work amongst the Employed Student Leader and Volunteer Student Leader groups when

compared to Non-Leaders. Specifically, Employed Student Leaders and Volunteer

Student Leaders, on average, reported higher levels of positive meaning in their work

than Non-Leaders. Similarly, for Hypothesis 2, Employed Student Leaders with Other

Experience and Volunteer Student Leaders with Other Experience, on average, reported higher levels of positive meaning in their work and higher levels of meaning-making through work.

H3: When compared to Other Leaders, Employed Student Leaders and Volunteer Student Leaders will report significantly higher average levels of:

- Satisfaction with life (SWLS)

- Meaningfulness and purpose in their lives (MLQ and SoMe)

- Meaningful work (Positive Meaning, Meaning-Making through Work and Greater Good Motivations subscales of the WAMI).

H4: When compared to Volunteer Student Leaders, Employed Student Leaders will report significantly higher average levels of:

- Satisfaction with life (SWLS)

- Meaningfulness and purpose in their lives (MLQ and SoMe)

- Meaningful (Positive Meaning, Meaning-Making through Work and Greater Good Motivations subscales of the WAMI).

Findings: No support was found for Hypothesis 3 and Hypothesis 4. Employed Student Leaders and Volunteer Student Leaders did not report higher levels of satisfaction or meaningfulness in any area when compared to Other Leaders nor did Employed Student Leaders when compared to Volunteer Student Leaders.

H5: When comparing Employed Student Leaders and Employed Student Leaders with Other Experience, no average difference will be found for:

- Satisfaction with life (SWLS)

- Meaningfulness and purpose in their lives (MLQ and SoMe)

- Meaningful work (Positive Meaning, Meaning-Making through Work and Greater Good Motivations subscales of the WAMI).

H6: When comparing Volunteer Student Leaders and Volunteer Student Leaders with Other Experience, no average differences will be found for:

- Satisfaction with life (SWLS)

- Meaningfulness and purpose in their lives (MLQ and SoMe)

- Meaningful work (Positive Meaning, Meaning-Making through Work and Greater Good Motivations subscales of the WAMI).

Findings: Hypothesis 5 and Hypothesis 6 were both fully supported. No statistically significant difference was found on any of the scales when comparing the Employed Student Leaders to the Employed Student Leaders with Other Experience and no difference was found when comparing the Volunteer Student Leaders to the Volunteer Student Leaders with Other Experience.

Discussion

Conclusions

The purpose of this study was to better understand the impact college leadership development might have on long term well-being and meaningful work of graduates. A range of alumni were surveyed including those involved in paid leadership positions, unpaid leadership positions, and those with no reported leadership experiences while as undergraduates. It was hypothesized that specific types of experiences that involved focused leadership development (and not just occupying a leadership position) would lead to long lasting effects of personal well-being and meaning.

Results demonstrated that the main impact of these experiences appears to be in the area of meaningful work. Alumni who previously served as Employed Student Leaders or Volunteer Student Leaders reported higher levels of positive meaning at work. The Positive Meaning subscale of the WAMI is intended to measure the degree to which people find their work to hold personal meaning, significance, or purpose. The same is true for the Employed Student Leaders with Other Experience and the Volunteer Student Leaders with Other Experience. Additionally, these two groups also reported higher levels of meaning-making through work. The Meaning-Making through Work subscale is intended to measure how much respondents rely on their work to help them to make sense of their life experiences.

These are important findings for higher education. The implication is that there is a link between targeted leadership development and finding ones work to be more than a job but rather a significant and purposeful part of their lives. In an era where the cost of college attendance is being scrutinized and the value of out-of-classroom experiences is

being questioned and many attendees want to see a direct connection between their degree and their career aspirations, this appears to help demonstrate the value of continuing to fund these types of extracurricular experiences. Perhaps, most importantly, the impact appears to be connected to the professional arena, meaning these collegiate experiences could help colleges make the connection between out-of-classroom experiences and greater career satisfaction.

These findings should also be of interest to the employers of recent college graduates. As Gallup found, employees who are engaged at work are both more loyal and more productive (Gallup-Purdue, 2014). Gallup defined workplace engagement as being emotionally and intellectually connected to their organization because they enjoyed and found value in their work. Based on this definition, Gallup's work place engagement is strongly connected to positive meaning and meaning-making through work. Most employers already look for co-curricular collegiate involvement and leadership when they hire new employees just out of college. The results of this study, which indicate that students engaged in leadership development activities as undergraduates are more likely to have higher levels of well-being later in life, should help employers better focus their review of this involvement. Savvy employers should look for more developmental leadership experiences, knowing that these applicants are more likely to be fully engaged at work and more positive members of their team.

Interestingly, there appeared to be no similar benefit when we examined Other Leaders. The Other Leaders group consisted of alumni who self-reported that they had held a leadership position in a campus group other than a directed institutional leadership program like UPB, MyMom or Outriggers. Other Leaders also never worked as Resident

Advisors. Unlike the Employed Student Leaders and Volunteer Student Leaders, alumni in the Other Leaders group served as executive officers but did not receive the same intensive leadership development training and guidance. The only area in which other leadership experience had an effect was on the Meaning-Making through Work subscale and only when combined with experience as an Employed Student Leader or a Volunteer Student Leader. This is also an important finding. The implication here is that while leadership experience itself has some benefit, the greater value can be found in experiences that actually provide for leadership development and have a more formal development structure.

The results of the final two contrasts seem to support this conclusion. No difference was found when comparing the Employed Student Leaders to Employed Student Leaders with Other Experience nor when comparing Volunteer Student Leaders to Volunteer Student Leaders with Other Experience. Being a leader in another organization did not have an additive effect in the area of meaningful work. While previous research has demonstrated the long term benefits of any leadership experience on other areas of well-being, it does not appear that this is true when examining the impact on meaningful work. A deeper and more developmental experience appears to be required rather than simply occupying a leadership position.

This important finding should have an impact on the way colleges prioritize their out-of-classroom opportunities. When given the choice, they should be focusing on programs that offer leadership *development* and not just leadership experience. Structured training programs coordinated by members of the Student Affairs field should be more prevalent. Whether they are full-fledged leadership development programs like

the ones used in this study or simply requiring more of the elected student leaders of the

various clubs and organizations already on campus, focused development is the key.

Students need to be trained in how to be leaders. They must be challenged and given

goals to achieve as well as provided with mentoring and leadership education throughout

their experience. They need to be taught how to handle adversity as a leader and how to

pass this knowledge on to others. These types of programs provides greater benefit to the

institution in the present as well as to the student both now and in the future. Further, by

providing more structure to their leadership offerings, colleges can demonstrate to

employers that the experiences listed on the resumés of recent graduates are of high

quality and indicative of real leadership potential.

However, it is also unclear why no difference was found in levels of satisfaction

and meaningfulness in contrast three, which compared Employed Student Leaders and

Volunteer Student Leaders to Other Leaders. One possibility is that while the Employed

Student Leaders and the Volunteer Student Leaders were ready for deeper leadership

development experiences during their undergraduate years, the Other Leaders were only

beginning the exploration of their leadership potential during that time period but have

since had additional experiences that impacted the results of this study. Another

possibility is that other leadership experiences do have a small impact on meaningful

work but the limitations of this study are preventing them from being detected.

Finally, the absence of a difference between the Employed Student Leader group

and the Volunteer group is also good news for colleges generally, as well as residential

life programs specifically. The finding that paid and unpaid positions do not produce

significantly different levels of positive meaning and meaning-making through work

indicates that providing these opportunities for students is not necessarily tied to being able to pay them. This is important from a funding perspective as it is obviously more cost effective for a university to create volunteer opportunities for students than to find funding for paid positions. That being said, paid student positions are still necessary in several areas at most universities, residence life often being one of the most popular examples.

For residence life programs there is an opportunity to enhance their recruitment efforts with this information. RA positions can often be somewhat unattractive to students because they usually require a more significant time commitment than many other leadership positions and RAs are sometime forced to hold their peers accountable for policy violations. Many programs try to entice students to apply for RA positions by highlighting not just the salary but other transferable skills and career benefits. Connecting the RA position to greater workplace wellness seems like an excellent way to entice higher caliber candidates to apply for these positions. Residence Life programs can also make use of this information when they advocate for additional funding for new positions. Colleges and universities are not just allocating salary money but are also funding opportunities that provide a unique and valuable out-of-classroom experience that impacts long term well-being. In an era where funding is becoming more scarce, being a able to demonstrate the multiple benefits of a position is a valuable tool in the fight for more resources.

Suggestions for Further Research

The idea of connecting the collegiate experience to long term well-being and meaningful work is one that is growing in popularity and importance. As traditional

colleges and universities attempt to maintain their status in both the collegiate market place as well as society at large, college administrators must be able to demonstrate the value of the total college experience extends beyond simply earning a degree. This study of out-of-class experiences is just one attempt at trying to demonstrate that value.

While the results of this study are encouraging, caution must be taken before attempting to generalize the results. The size of the sample and the fact that only one institution was involved allows only for the belief that thee appears to be some connection between collegiate leadership development and well-being. A similar study with a larger sample size using multiple institutions is necessary before more ambitious conclusions can be made.

Also, as mentioned in the Limitations section above, it is not known what other leadership experiences these alumni may have had since graduation. It is possible that other experiences, provided by their employers for instance, have impacted their lives similarly. Additional study needs to be done to determine whether these benefits are unique to experiences during the developmental college years or whether they can be experienced at other points in time.

This study did not attempt to control for a variety of socio-economic factors. It would be of great value to know whether students of a particular gender, ethnicity or economic background experienced greater benefits from these programs and why that might be the case. As colleges and universities continue to refine their recruitment and marketing techniques, understanding which programs most directly benefit which students would be an invaluable tool. This would not only allow schools to better market

themselves but would also allow them to develop programs that most effectively address the needs of their students.

Studies similar to this one are an important part of the future of higher education. Colleges must continue to grow the breadth of research that connects their efforts to general well-being and meaningful work. The federal government has already shown that it is ready to step in and provide data on what it deems to be college "success". Many of these metrics (starting salary, student loan debt, etc.) are useful but misleading when viewed alone. If colleges do not provide context for these measurements and data of their own regarding the importance of a full college experience, students and their families will be forced to make their decisions based on incomplete data. More importantly, without evidence to demonstrate the worth of programs like MyMOM, UPB and Outriggers, policy makers looking to reduce the cost of higher education for their constituents will focus on those programs as unnecessary and ripe for discontinuation. It is through studies like this one that higher education can be demonstrate that the value of a full college education extends beyond the numbers on a paycheck and has long lasting effects on a graduate's personal well-being.

Appendix A - The Satisfaction With Life Scale

Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

7 - Strongly agree

6 - Agree

5 - Slightly agree

4 - Neither agree nor disagree

3 - Slightly disagree

2 - Disagree

1 - Strongly disagree

_____ In most ways my life is close to my ideal.

_____ The conditions of my life are excellent.

_____ I am satisfied with my life.

_____ So far I have gotten the important things I want in life.

_____ If I could live my life over, I would change almost nothing.

Scoring:

31 - 35 Extremely satisfied

26 - 30 Satisfied

21 - 25 Slightly satisfied

20   Neutral

15 - 19 Slightly dissatisfied

10 - 14 Dissatisfied

5 - 9   Extremely dissatisfied

Appendix B - The Meaning in Life Questionnaire

Please take a moment to think about what makes your life and existence feel important and significant to you. Please respond to the following statements as truthfully and accurately as you can, and also please remember that these are very subjective questions and that there are no right or wrong answers. Please answer according to the scale below:

Absolutely Untrue	Mostly Untrue	Somewhat Untrue	Can't Say True or False	Somewhat True	Mostly True	Absolutely True
1	2	3	4	5	6	7

1. I understand my life's meaning.

2. I am looking for something that makes my life feel meaningful.

3. I am always looking to find my life's purpose.

4. My life has a clear sense of purpose.

5. I have a good sense of what makes my life meaningful.

6. I have discovered a satisfying life purpose.

7. I am always searching for something that makes my life feel significant.

8. I am seeking a purpose or mission for my life.

9. My life has no clear purpose.

10. I am searching for meaning in my life.

Scoring:

Item 9 is reverse scored.

Items 1, 4, 5, 6, & 9 make up the Presence of Meaning subscale

Items 2, 3, 7, 8, & 10 make up the Search for Meaning subscale

Scoring is kept continuous.

Appendix C - The Work and Meaning Inventory (WAMI)

Please indicate how well the following statements apply to you and your work and/or career. Please try to answer as truthfully as you can.

	Absolutely Untrue	Mostly Untrue	Neither True nor Untrue	Mostly True	Absolutely True
1. I have found a meaningful career	1	2	3	4	5
2. I view my work as contributing to my personal growth.	1	2	3	4	5
3. My work really makes no difference to the world.	1	2	3	4	5
4. I understand how my work contributes to my life's meaning.	1	2	3	4	5
5. I have a good sense of what makes my job meaningful.	1	2	3	4	5
6. I know my work makes a positive difference in the world.	1	2	3	4	5
7. My work helps me better understand myself.	1	2	3	4	5
8. I have discovered work that has a satisfying purpose.	1	2	3	4	5
9. My work helps me make sense of the world around me.	1	2	3	4	5
10. The work I do serves a greater purpose.	1	2	3	4	5

Scoring the WAMI:

Responses for items 1, 4, 5, & 8 can be summed for the Positive Meaning subscale score.

Responses for items 2, 7, &, 9 can be summed for the Meaning-Making through Work subscale score.

Item #3 is a reverse-scored item. Responses for item #3 can be subtracted from 6, then added to responses for items 6 & 10 for the Greater Good Motivations subscale score.

The scores from the Positive Meaning, Meaning-Making through Work, and Greater Good Motivations subscales can be summed for the Meaningful Work total score.

Appendix D - Sources of Meaning - Meaning in Life: (SoMe)

Please indicate your level of agreement with each statement using the scale below.

Meaningfulness Subscale

Q1 I lead a fulfilled life.

Strongly Disagree					Strongly Agree
0	1	2	3	4	5

Q29 I think there is meaning in what I do.

Strongly Disagree					Strongly Agree
0	1	2	3	4	5

Q57 I have a task in life.

Strongly Disagree					Strongly Agree
0	1	2	3	4	5

Q85 I feel part of a bigger whole.

Strongly Disagree					Strongly Agree
0	1	2	3	4	5

Q113 I think my life has a deeper meaning.

Strongly Disagree					Strongly Agree
0	1	2	3	4	5

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