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## CIVIC ENGAGEMENT'S ROLE IN WELL-BEING: EXAMINING A MEDIATIONAL MODEL ACROSS TWO SAMPLES

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CIVIC ENGAGEMENT'S ROLE IN WELL-BEING:  
EXAMINING A MEDIATIONAL MODEL ACROSS TWO SAMPLES

BY  
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A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE  
REQUIREMENTS FOR THE DEGREE OF  
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OF

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## ABSTRACT

**Introduction:** Generally, civic engagement seems to produce positive health outcomes for those who participate. However, there is conflicting evidence as to whether civic engagement may be more of an added burden for individuals from lower socioeconomic (SES) communities, or among women, perhaps due to the differing types of civic activity in which men and women may choose to engage. Type of activity may also be critical in determining whether certain forms of engagement more strongly predict well-being than others. This study explored several possible factors that inform for whom and under what circumstances civic engagement may improve health outcomes among college students.

**Methods:** Participants were recruited at a mid-sized university in the Northeast. Consented participants completed an online survey consisting of demographics, the Civic Engagement Quiz, Mental Health Continuum-SF, Meaning in Life Questionnaire, Self-Efficacy Towards Service scale, and the Interpersonal Support Evaluation List-12. Mediation, direct, and full effects models were conducted to investigate whether SES predicts civic activity, and if type of civic activity predicts subjective well-being, mediated by meaning in life and self-efficacy. Social support was added to the model as a covariate, and all models were conducted across samples of men and women.

**Results:** Participants ( $N=438$ ) were primarily White (78%), female (72%) and 68% reported at least one parent having a Bachelor's degree or higher. Students reported mean levels of well-being that indicated flourishing ( $M=45.42$ ,  $SD=14.23$ ), high self-efficacy toward service ( $M=20.17$ ,  $SD=3.63$ ), adequate social support ( $M=25.76$ ,  $SD=6.87$ ), and moderate meaning in life ( $M=50.22$ ,  $SD=8.98$ ). Overall, fit

indices showed that the full model provided the best fit in men, women, and both samples combined (low  $\chi^2$  to df ratio, nonsignificant p values, CFI > .95, RMSEA < .10). Due to power concerns, a smaller model was examined using SES as the first predictor variable, mediated by engagement type, with well-being as the dependent variable. Multisample analysis across gender groups showed that the mediational model was the best fit [ $\chi^2(8)=17.19, p=.03; CFI=.95; RMSEA=.08, 90\% CI [.03,.14]; R^2=.04(W), .05(M)$ ], and there was no significant difference in model fit by gender.

Conclusion: Results from this sample showed that the full model in the larger path analysis and the mediational model in the smaller path analysis provided a good fit for both men and women. Thus, contrary to prior literature, men and women did not behave in statistically different ways in this New England sample. Type of activity showed mixed results in relation to well-being, perhaps due to model complexity. Meaning in life and self-efficacy partially mediated the relationship between engagement and well-being, although both factors warrant further investigation. Given sample demographics and limits to generalizability, replication studies using more diverse populations, particularly in terms of age, race and ethnicity could greatly enhance the field if civic engagement is to be considered as a health promotional tool.

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## CHAPTER ONE

### INTRODUCTION

The World Health Organization (2017) reports that an estimated 300 million people now live with depression worldwide, representing an 18% increase between 2005 and 2015. In young adults, approximately 25% of 18-24-year-olds are living with a diagnosable mental illness, and colleges across the United States have been reporting increased numbers of students seeking mental health services coupled with limited resources available to meet this growing demand (National Alliance on Mental Illness, 2017; Rhodan, 2016). To reduce the rising prevalence of mental illness, the World Health Organization (2017) has advocated for increased efforts centered around health promotion and disorder prevention. One such strategy for health promotion could be through encouraging civic behaviors. Civic engagement—often conceptualized as individual or collective action taken for the betterment of a community—has been researched across many populations with varying results in terms of its costs and benefits to health and well-being (Chan, Ou, & Reynolds, 2014). Prior literature has linked development of one’s civic identity in adolescence to factors like school and peer influences, which become particularly pertinent to college students living on their own for the first time (Amna, 2012). Given that the age of most college students falls within a developmental period known to be critical for social, political, and civic identity development, more information is needed to disentangle the effects of civic engagement on health and well-being for this population if it is to be used as a point of intervention (Amna, 2012; Verba,

Schlozman, & Brady, 1995). The current study explored several possible factors to inform for whom and under what circumstances civic engagement may be beneficial to improve health outcomes among college students.

## CHAPTER TWO

### REVIEW OF LITERATURE

#### **Defining Civic Engagement**

Before delving into the evidence for and against civic activity, it is important to first define and understand civic engagement as a component of its umbrella construct, social capital. Currently, many researchers utilize Robert Putnam's (1993) framework when discussing social capital theory. Putnam defines social capital along three domains: 1) networks of civic engagement (both quality and quantity of networks), 2) norms of reciprocity (I will help you today with the expectation that you will help me in the future), and 3) social trust (trust in individuals and institutions). Putnam emphasizes civic involvement as a form of collective action, which then facilitates trust and collaboration to work together to solve future issues of public concern. According to Putnam's research, a thriving community does not generate greater social capital; rather, social capital generates thriving communities (1993).

Since Putnam's work, researchers have defined civic engagement in numerous ways, highlighting the complexities of studying this construct. Nevertheless, some instructive definitions have emerged from the literature relevant to address the question at hand. Adler & Goggin's (2005) review of the literature defines civic engagement as "the ways in which citizens participate in the life of a community in order to improve conditions for others or to help shape the community's future." Similarly, Chan et al. (2014) posited that "civic engagement includes individual and

collective activities intended to identify and address issues of public concern, and enhance the well-being of one's community and the society." They go on to clarify that civic engagement can be performed at the individual level (e.g., writing a letter to city council representatives) or at the group level (e.g., volunteering with a church group at a local soup kitchen). Civic engagement behaviors typically fall within three categories: "civic activities" that involve improving the local community, "electoral activities" such as voting or political campaign canvassing, and "political voice" (referred to as "sociopolitical voice" henceforth), which involves expressing opinions pertaining to social causes (Adler & Goggin, 2005; Andolina, Keeter, Zukin, & Jenkins, 2003; Pancer, 2005). While there may be countless ways to engage, the overarching goal is for the betterment of society at large.

### **Social Capital and Health Outcomes**

To date, several studies have investigated social capital's influence on health outcomes. For example, Frank, Davis, and Elgar's (2014) 18-month longitudinal study of two Canadian communities found that social capital moderated the main effects of financial strain on stress and depression, such that those with greater social capital experienced less stress and depressive symptoms. Social capital did not moderate the relationship for anxiety and physical health, but there was a main effect of better health and lower anxiety for those reporting greater social capital. Similarly, a cross-sectional study by Kawachi, Kennedy, Lochner, and Prothrow-Stith (1997) found that social capital mediated the relationship between income inequality and mortality rates. Not surprisingly, as income inequality rose, social mistrust also rose, and economically disadvantaged communities saw higher mortality rates. By contrast,

every single-unit increase in average per capita group membership was associated with a decline in mortality of 83.2 deaths per 100,000 people (Kawachi et al., 1997). Taken together, these studies suggest that social capital may play a pivotal role as a protective factor in bolstering health and well-being, particularly among low-income communities. If components of social capital are to be used in adaptive interventional work with underserved populations, additional research in this field could bolster claims from Kawachi et al.'s (1997) cross-sectional study.

To further study its role as a determinant of health, other lines of research have examined social capital along four primary dimensions: individual, ecological, cognitive, and structural. At the individual-ecological level, social capital is assessed by measuring an individual's level of participation (individual social capital) or by aggregating results from community members to ascertain the average level of engagement within a community (ecological social capital). At the cognitive-structural level, social capital is assessed by comparing quality (cognitive) to quantity (structural) of interactions; in other words, how does quality-based social capital like values, trust, and norms of a community compare to quantity-based social capital of relationships, memberships, and organizations (or the number of community interactions). A systematic review of both cross-sectional and longitudinal studies by De Silva, McKenzie, Harpham, and Huttley (2005) found that at the individual level, greater social capital was related to lower risk for mental illness among adults, with moderate evidence to support an inverse association between cognitive social capital and child mental illness. However, at the ecological level, social capital and mental

illness saw mixed results: two studies found an inverse association, two found a positive association, and ten found no association.

A more recent systematic review of 31 cross-sectional (primarily observational quantitative designs) and 8 cohort studies by Ehsan and De Silva (2015) showed that high cognitive social capital was associated with lower risk of developing a common mental disorder like anxiety and depression. However, results were varied for structural social capital: most studies found no association, one found a negative association, and two studies conducted with individuals from low- to middle-income countries showed that higher structural capital correlated with higher risk of developing a common mental disorder. Thus, it appears that the quality of social networks seems to yield positive results while the quantity of networks elicits more mixed outcomes. Furthermore, Ehsan and De Silva found that there seem to be certain situations, particularly among low-income countries or for those of lower socioeconomic (SES) status, in which group memberships may place an additional strain on individuals already juggling many responsibilities. This finding seems counter to Kawachi et al.'s (1997) result in which higher per capita group membership was associated with lower mortality rates, although these studies drew from completely different samples at different points in history. Moreover, authors of the two systematic reviews acknowledged the complexities inherent when comparing multiple study designs across differing cultures. Nevertheless, more evidence is needed to better understand the role of civic networks on well-being among individuals from lower SES backgrounds.

## **Civic Engagement and Health Outcomes: Gender and Socioeconomic Status Considered**

As a component of social capital, researchers have also examined civic engagement as a stand-alone concept for its potential to influence health outcomes. In older adults, civic engagement over time has been positively correlated with better self-rated health, lower functional impairment, and reduced mortality rates (Hinterlong, Morrow-Howell, & Rozario, 2007; Post, 2017). Participants randomized to a weekly volunteer group for 10 weeks showed decreased BMI, cholesterol, and inflammation pre- to post-testing when compared to waitlist controls; volunteers who reported greater levels of altruism and mental health also saw greatest reductions in biomarker levels of inflammation, cholesterol, and body mass index (Post, 2017). Similarly, African American women participating in a weight loss promotion program utilizing civic engagement as a complementary booster of behavior change saw positive pre-post changes in dietary behaviors, physical activity, cardiovascular fitness, and blood pressure (Brown et al., 2017). However, while participants reported enjoying the experience overall, they saw a non-significant increase in perceived stress, perhaps due to the additional time commitment. The social capital literature suggests that engagement may produce differing health outcomes for individuals from lower SES backgrounds; this study indicates that involvement in civic networks may have differing outcomes for women and/or racial-ethnic minority populations as well.

In concordance with findings from Brown et al.'s (2017) weight loss intervention, refugees from poor communities in Jordan were more likely to report lower levels of perceived health if they were a non-club member as opposed to those

involved in club memberships (Khawaja et al., 2006). In other words, involved individuals reported greater perceived health. However, this relationship disappeared among women but not for men after controlling for demographic, socioeconomic, and health risk factors, indicating potential for gender differences in civic engagement health benefits among highly patriarchal cultures (Khawaja et al., 2006). While this study is limited to cross-sectional data from a single timepoint, it does align with other longitudinal studies (Brown et al., 2017; Landstedt, Almquist, Eriksson, & Hammarstrom, 2016), suggesting that perhaps gender and SES play a role in determining health outcomes.

### **Types of Engagement**

As the evidence presented thus far has illustrated, civic engagement has not always engendered positive health outcomes, or often times there are specific qualifiers when it does. For example, a longitudinal study in Sweden found that while civic engagement was correlated with lower levels of depressive symptoms for both men and women, higher civic engagement was predictive of lower depressive symptoms at a later timepoint only for males (Landstedt et al., 2016). Men more often reported participation in sports or motor activities, while women reported greater membership in humanitarian organizations. The authors suggested that perhaps men benefit from the social influence and cohesion of sport, but humanitarian work can have more of an emotionally draining effect. Thus, it seems that gender differences as well as the type of civic activity are important considerations.

In a comparable manner, Ding, Berry, and O'Brien (2015) discovered that while social connectedness and civic engagement were somewhat predictive of mental

well-being the following year, political participation was not a significant predictor; in fact, political participation was inversely correlated with mental health. Of note, the authors defined civic engagement as volunteering or group participation, which is different than the current working definition of this research, and they analyzed political participation as a separate construct. Nevertheless, results from Ding et al. (2015) suggest that specific types of engagement may produce varying levels of helpfulness—or harm—to individual health and well-being. In another example, Ziersch & Baum's (2004) cross-sectional study of civil society group participation among Australian adults found an inverse relationship between physical health and civil society group participation. Authors concluded that participation in groups may be beneficial to the community but detrimental to the individual under certain circumstances where the task is particularly mentally or physically draining (2004). Thus, these data suggest the need to examine differences in health outcomes based on type of civic activity.

### **Meaning and Self-Efficacy**

The literature has also noted other factors that may mediate the relationship between civic engagement and health and well-being. There is some evidence to support the direct relationship between civic engagement and well-being. Among adolescents, organizational membership and community service has been linked to a stronger sense of community, harmony, and feeling supported when compared with disengaged youth (Flanagan, 2015). A promising study using longitudinal data among high-risk youth found that civic engagement during youth was predictive of greater life satisfaction, future optimism and greater educational attainment in emerging

adulthood (Chan et al., 2014). However, other researchers have speculated that while civic engagement may certainly be an important determinant of mental and physical health, it may be operationalized more indirectly. For example, in Piliavin & Siegl's (2007) 47-year longitudinal study with older adults, volunteerism predicted well-being above and beyond other social participation predictors of health. Involvement in diverse activities (more than three) and continuous involvement across the life span saw the highest levels of well-being. However, after controlling for "mattering"—the concept that people acknowledge their own importance and impact in the world—volunteerism was no longer predictive of well-being (2007). This finding is consistent with much of the positive psychology literature, in which meaning in life—or connection to something greater than the self—often results in positive well-being (Peterson, Park, & Seligman, 2005).

Other studies have examined civic engagement's impact on measures of empowerment and self-efficacy as opposed to specific mental and physical health outcomes. Gullan, Power and Leff (2013) explored the benefits of a school-based service-learning program in which 48 inner-city ethnic minority 6th graders spent 45 minutes for 20 weeks learning about community issues, identifying an issue to address, and addressing that issue by organizing and completing a service project. Authors grounded their approach in Zimmerman's (1995) empowerment theory, which states that sense of intrapersonal control, understanding how social/political systems interact to form power hierarchy, and behavioral efforts to exert control all lead to empowerment. Results showed that student self-reports of empowerment significantly predicted self-efficacy post-intervention, above and beyond pre-

intervention self-efficacy rates or program satisfaction. In Brown et al.'s (2017) weight loss study incorporating a civic engagement component, the authors also based their framework on empowerment theory concepts. They posited that civic engagement promotes individual and collective self-efficacy to create change for one's community, thereby increasing feelings of empowerment and overall well-being. Civic engagement has the potential to positively influence well-being, given the body of literature presented herein; but, its effects could be operationalized indirectly, as was the case in some of the aforementioned studies where there appeared to be more immediate predictors of well-being. Constructs of "mattering," or sense of meaning in life, and self-efficacy in one's ability to create change are important mediators to consider when examining civic engagement's relationship with health and well-being.

### **Gaps in the Literature**

Many studies have indicated that although positive mood begets giving, giving very strongly influences positive mood and happiness (Ding et al., 2015; Hinterlong et al., 2007; Post, 2017). Yet, the majority of studies conducted have been cross-sectional in nature, limiting the ability to draw conclusions about civic engagement's causal influence on health outcomes. To complicate matters further, much of the previous work looking at civic engagement has chosen to focus on group membership status (how many teams, clubs, and organizations an individual belongs to) as a proxy for civic engagement. While certainly a critical piece of information to consider, group membership is merely one facet of civic engagement that provides a limited understanding of civic engagement's impact. Moreover, many studies compartmentalize civic engagement into its civic, electoral, and sociopolitical voice

components, choosing only to examine a single aspect of civic engagement activity. This approach does provide helpful information in better understanding that specific type of engagement, but a more holistic approach would be helpful to glean a more accurate picture of the construct.

Multiple interventions have already utilized tenets of civic engagement with varying outcomes in efforts to prevent recidivism (Windsor, Jemala, & Benoit, 2014), empower youth (Gullan et al., 2013), re-engage those abusing substances (McCabe, 2014), reduce urban crime (Folgheraiter & Pasini, 2009), supplement weight loss interventions (Brown et al., 2017), and decrease symptoms of social isolation and powerlessness among those with mental illness (Kaplan et al., 2012). The potential is there. However, if civic engagement is to be used as a tool for health promotion among college-aged populations, especially given the nature of this critical period in defining one's civic and social identity, its benefits and burdens must be better clarified.

### **The Current Study**

Data have shown that females do not participate civically as much as males, and that individuals of lower SES are less likely to engage compared to their higher-SES counterparts (Verba et al., 1995). Indeed, several studies have found that SES indicators like parental occupation, educational attainment, and income are predictive of future civic engagement (Brown & Lichter, 2006; Foster-Bey, 2008; Lechner, Pavlova, Sortheix, Silbereisen, & Salmela-Aro, 2017). The question remains: Is lower civic activity to the detriment of these individuals, accounting for situations where individuals might already feel burdened or may not possess sufficient levels of social

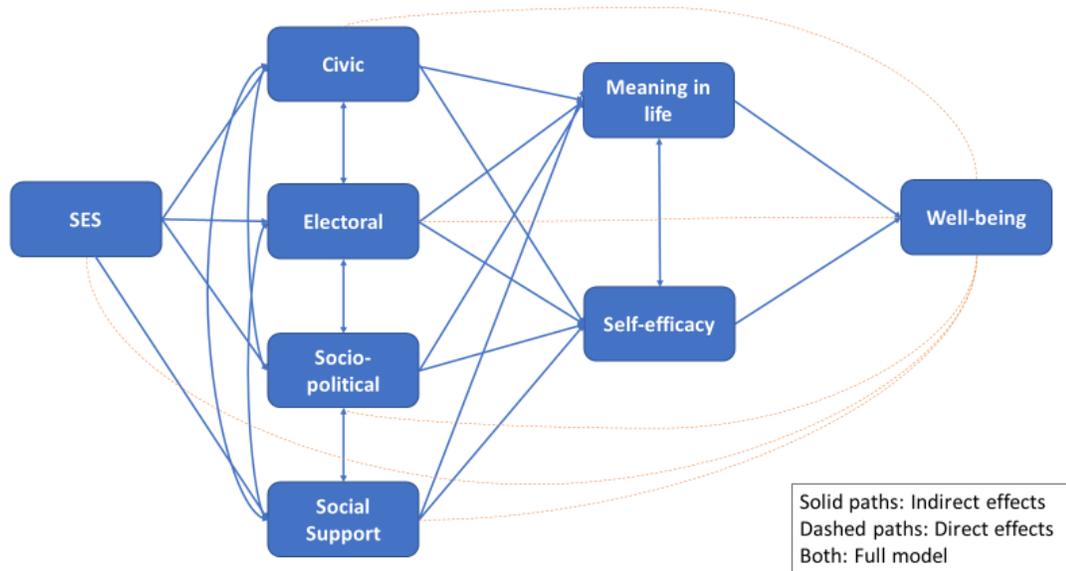
support to engage? Do certain types of civic activity produce greater well-being than others, and are there mediational factors involved? These aspects must be considered in order to elucidate the potentials and limits of civic engagement behavior. The current study explored several factors to illuminate for whom, in what ways, and under what circumstances civic engagement might play a role in bolstering health and well-being for emerging adults. To address these questions, an electronic survey was given to a sample of undergraduate students to measure their civic involvement, meaning in life, self-efficacy, perceived social support, sociodemographic factors, and well-being. The current study proposed a model in which SES predicts civic engagement, and type of engagement predicts subjective well-being, mediated by meaning in life and self-efficacy. Based upon the literature, perceived social support was added to the model as a covariate, and the model was assessed across men, women, and men and women combined (Figure 1). Specifically, the current study proposed the following three hypotheses:

- 1) A mediational, direct effects, and full model will examine various versions of a predictive model, producing differing results across gender groups, such that civic engagement will not be as strong of a predictor of well-being in women compared to men.
- 2) Type of engagement—civic activity (e.g., community service), electoral (e.g., canvassing, fundraising), and sociopolitical voice (e.g., marching, social justice acts)—will differentially impact reports of well-being; civic activity and sociopolitical voice forms of engagement will be associated with higher well-

being scores than those who choose to engage in electoral forms of participation.

- 3) The relationship between socioeconomic status and well-being will be mediated by civic engagement and, in turn, by meaning in life and self-efficacy.

Figure 1. Proposed model examining the relationship between civic engagement and well-being



## CHAPTER THREE

### METHODOLOGY

#### **Procedures and Sample**

Participants for this study included undergraduate students enrolled at the University of Rhode Island (URI). Course instructors and department chairs were asked via email for their assistance in soliciting volunteers to participate in an online survey regarding student health behaviors and wellness. Both in-person and email announcements were made for introductory courses known to enroll a significant undergraduate population. An email template describing the study and its purpose, contact information for the student investigator, and a link to an online Qualtrics survey was sent to instructors to forward to their students. Students responding to this email request for participation were directed to complete an online survey through Qualtrics. The first page in Qualtrics presented the informed consent. Students were asked for their consent to participate, and all students were required to select “yes” at the bottom of the form as acknowledgment of their willingness to participate prior to answering any survey items. Students who selected “no” were thanked for their time and exited from the survey. Of note, considerably more women than men chose to participate in this research study. Due to the nature of planned analyses to compare civic engagement levels across gender groups, an amendment request was made to the IRB to place a quota on female participants and focus recruitment efforts targeting men. Following IRB approval, emails were sent to organizations known to enlist a

large proportion of males, including athletic teams, club groups, and Greek-affiliated chapters.

Students who consented to participate were asked to complete a demographic questionnaire, the Civic Engagement Quiz, the Mental Health Continuum-Short Form, the Meaning in Life Questionnaire, the Self-Efficacy Towards Service scale, and the Interpersonal Support Evaluation List-12, described shortly. A total of  $N=555$  undergraduates opened the survey and consented to participate in this study. Students with missing data exceeding 5% and students who did not complete measures of civic engagement and well-being were not retained for analyses, reducing the final sample size to  $N=438$  students. Demographic characteristics of the sample are summarized in Table 1.

*Table 1. Participant Demographics Based on Overall Sample ( $N=438$ )*

<b>Variable</b>	<b>Statistic</b>
<b>Age</b>	M=20.22, SD=3.23
<b>Year in School</b>	Freshman, N=159, 36.3% Sophomore, N=98, 22.4% Junior, N=91, 20.8% Senior, N=90, 20.5%
<b>Race</b>	White, N=343, 78.3% Hispanic, N=36, 8.2% Black, N=18, 4.1% Asian, N=18, 4.1% Mixed, N=17, 4.1% Other, N=5, 1.1%
<b>Political Affiliation</b>	Democrat, 41.6% Republican, 13.2% Independent, 24.7% Other, 4.1% Not sure, 16.4%
<b>Employment Status</b>	None, 39.7% 1-10 hrs/wk, 21.2% 11-20 hrs/wk, 25.8% 21-30 hrs/wk, 9.4% 30+ hrs/wk, 3.9%

## Measures

**Demographic Questionnaire:** Students were asked a series of sociodemographic questions, including information about age, year in school, gender, race/ethnicity, socioeconomic status (SES), political affiliation, and employment status. SES was measured by surveying for the highest parental level of education, which is consistent with the literature showing education to be an acceptable proxy for SES (Diemer, Mistry, Wadsworth, Lopez, & Reimers, 2013; Verba et al., 1995). Participants were asked to report the highest level of education that their mother (or legal guardian 1) and father (or legal guardian 2) received. Then the highest of the two reported levels was coded using the following scale: Less than high school = 1; Some high school (no diploma) = 2; Finished high school (or GED) = 3; Some college credit (no degree) = 4; Trade/technical/vocational training = 5; Associate's degree = 6; Completed Bachelor's degree at a college or university = 7; Master's/Professional/Doctorate degree = 8. Higher levels of education correspond with higher scores, and hence, higher levels of SES.

**Civic Engagement Quiz (CEQ):** The CEQ is a 19-item measure that assesses for an array of civic engagement experiences within specific periods of time (Andolina et al., 2003). The measure is comprised of three subscales: civic activity, electoral activity, and expressions of political voice (referred to as sociopolitical voice in this study). Participants were asked to select activities in which they have participated “Yes, within the past 12 months,” “Yes, but not within the past 12 months,” or “No, never.” For example, participants were asked “Have you ever worked together with someone or some group to solve a problem in the community where you live?” Given

literature on how intensity and frequency of civic behavior influences well-being, and after consulting with the scale's developers, the decision was made to assign scale points to each level of responding (Yes, within the past 12 months=2; Yes, but not within the past 12 months=1; No, never=0). A final subscale score was summed by adding the total number of points on items within a particular subscale, with higher point totals corresponding to higher scores of engagement.

**Mental Health Continuum-Short Form (MHC-SF):** The MHC-SF is a 14-item scale based upon Keyes' (2010) conceptualization of well-being as either flourishing or languishing, where higher scores indicate flourishing while lower scores indicate languishing (Lamers, Westerhof, Bohlmeijer, ten Klooster, & Keyes, 2010). Participants were asked to respond to questions like "During the past month, how often did you feel satisfied with life?" on a 6-point Likert scale ranging from never (0) to everyday (5). The scale is broken down into three factors: social well-being, emotional well-being, and psychological well-being. This three-factor structure has been confirmed within college populations, and the scale has demonstrated good internal consistency (>.80) and discriminant validity in the US (Emory University, 2014).

**Meaning in Life Questionnaire (MLQ):** The MLQ is a 10-item scale broken into two subscales, presence of meaning and the search for meaning (Steger, Frazier, Oishi, & Kaler, 2006). Participants were asked to respond to questions like "My life has a clear sense of purpose" using a 7-point Likert scale ranging from Absolutely Untrue (1) to Absolutely True (7). Both subscales have demonstrated adequate internal consistency (.86, .87).

**Self-Efficacy Towards Service (SETS):** The SETS is a 5-item assessment using a 5-point Likert scale ranging from Strongly Agree to Strongly Disagree (Weber, Weber, Sleeper, & Schneider, 2004). Participants were asked to respond to items like: “I have confidence in my ability to help others.” The scale measures how strongly students believe in their ability to contribute time and service to the larger community. The SETS has been validated in an undergraduate sample of business majors ( $\alpha=0.80$ ).

**Interpersonal Support Evaluation List-12:** The ISEL-12 is a 12-item scale designed to measure perceived level of social support (Cohen, Mermelstein, Kamarck, & Hoberman, 1985). Participants were asked to respond to questions such as “If I were sick, I could easily find someone to help me with my daily chores” using a 4-point Likert scale ranging from definitely false (0) to definitely true (3). Cronbach’s alphas compiled from four studies revealed good internal consistency for the overall score ( $\alpha=0.80-0.90$ ) (Cohen, 2008).

### **Data Analysis**

Data were examined for normality and completeness. The data violated assumptions of normality for variables of parental education (used as a proxy for SES), self-efficacy, and electoral engagement. Parental education (SES) and self-efficacy were negatively skewed, while electoral engagement was positively skewed. Following recommendations by Tabachnick and Fidell (2007) and Howell (2007), all three variables were transformed to better approximate a normal distribution. Parental education (SES) was transformed using square root ( $k-x$ ), where  $k=9$  given education’s maximum value of 8; self-efficacy was transformed using square root ( $k-$

x), where  $k=26$  given self-efficacy's maximum value of 25<sup>1</sup>; electoral engagement was transformed using  $\log_{10}(x+c)$ , where  $c=1$  given electoral engagement's minimum value of 0. All transformations were successful in producing an approximately normal distribution on the three variables. Data were missing across both gender groups, particularly in the measure of civic activity. Data imputation has been debated in the literature for cross-sectional designs, due to inherent limitations of having only one timepoint to estimate missing items. However, given the small sample size of men ( $N=119$ ) and prior research suggesting that structural equation modeling may require samples above  $N=100$ , data imputation was warranted after examining the number of cases missing (Wolf, Harrington, Clark, & Miller, 2013). To account for missing data in both groups, full information maximum likelihood (FIML) estimation was employed to maintain adequate power, which has been recommended in the literature for structural equation modeling (Enders & Bandalos, 2001).

To address all three main research questions, multisample path analysis was attempted to examine the fit of mediational, direct, and full predictive models across male and female gender groups. Given the complexity of the models and the use of FIML to account for missing data, these analyses would not fully execute in the EQS statistical software package. Hence, the mediational, direct, and full models were examined across both men and women, in women separately, and then in men separately.

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<sup>1</sup> The sign of paths between square root transformed variables (SES and self-efficacy) has been reversed in all model interpretations.

## CHAPTER FOUR

### RESULTS

#### **Descriptive Statistics**

Descriptive statistics were calculated on all variables for men and women (Table 2). Of note, only two of 438 respondents identified with a gender other than “man” or “woman.” Given this limited sample, these two cases were not included in analyses examining gender differences, although future research would greatly benefit from including larger populations of gender non-binary and non-conforming respondents. About 68% of the overall sample reported having a parent/guardian with a Bachelor’s degree or higher. Students were most likely to engage in civic activity, followed by sociopolitical activity and then electoral activity. Importantly, the electoral engagement area encompasses activities like canvassing and fundraising that do not require an individual to be at least 18 years of age in the way that voting does; however, it is quite possible that students participating in this Spring 2018 study had not been of age to vote during the 2016 election, which may have influenced the likelihood of them engaging in other types of electoral activity. On average, students reported levels of well-being that indicate flourishing, high levels of self-efficacy towards service, adequate social support, and moderate levels of meaning in life.

Table 2. Observed Statistics for Path Analysis Variables Across Gender Groups

Variable	Gender			
	N	Women (M, SD)	N	Men (M, SD)
<b>SES (Highest Parental Education)</b>	315	6.41, 1.80	119	6.22, 1.94
<b>Civic (scale 0-18)</b>	267	*6.37, 3.14	105	*5.60, 3.53
<b>Electoral (scale 0-10)</b>	312	1.59, 1.95	116	2.04, 2.44
<b>Sociopolitical Voice (scale 0-18)</b>	310	4.87, 4.02	117	4.61, 4.35
<b>Well-Being (scale 0-70)</b>	298	45.51, 14.15	115	45.18, 14.51
<b>Meaning in Life (scale 10-70)</b>	300	*50.95, 8.36	114	*48.29, 10.25
<b>Self-Efficacy (scale 5-25)</b>	307	20.24, 3.68	116	19.97, 3.53
<b>Perceived Social Support (scale 0-36)</b>	296	26.14, 7.01	110	24.75, 6.41

Education is measured on a scale from 1-8, where 1 represents less than a high school education (low SES) and 8 represents graduate-level education (high SES)

\*significant at the .05 level

Correlations were calculated on all variables to be used in the path analysis models (Table 3). Independent variables differed in their correlational relationships with mediational and dependent variables. There was no evidence of multicollinearity.

Table 3. Correlation Matrix of Transformed Path Analysis Variables

Variable	1	2	3	4	5	6	7	8
1. SES	-							
2. Civic	.25**	-						
3. Electoral	.10*	.25**	-					
4. Sociopolitical Voice	.17**	.26**	.54**	-				
5. Well-Being	.19**	.17**	.07	-.01	-			
6. Meaning in Life	.13**	.04	.03	.11*	.53**	-		
7. Self-Efficacy	.14**	.17**	.12*	.16**	.46**	.46**	-	
8. Social Support	.24**	.07	-.06	-.07	.49**	.24**	.31**	-

\*=significant at the .05 level; \*\*=significant at the .01 level

One-way analyses of variance were conducted to examine whether differences between men and women existed on each variable to be used in the path analysis models. As the assumption of homogeneity of variances was violated for variables of meaning in life and electoral activity, Welch F-tests were used for these variables. Findings demonstrated that women reported significantly higher levels of meaning in life and civic activity compared to men [ $F(1,173)=6.15, p=0.01$ ;  $F(1,370)=4.23, p=0.04$ ].

### **Hypothesis 1: Examining Gender Differences**

Results from the three predictive models can be found in Table 4 and Figures 2, 3, and 4. Overall, fit indices indicated that the full model provided the best fit in all three groupings of women and men, women only, or men only. The full model (Figure 4) fit the overall sample and the women's only sample slightly better than the men's only sample, although all three groupings produced relatively good fit. The overall sample and women's only sample for the full model demonstrated chi squares close to the number of degrees of freedom, non-significant p values, CFI scores above the recommended level of  $CFI \geq 0.95$ , and RMSEA fit indices below the suggested  $RMSEA < 0.10$  for structural equation modeling (Harlow, 2014). The full model demonstrated a very large effect size in all three groupings.

Table 4. Fit Indices of Three Models Across Gender Groupings

Model	Grouping		
	Women & Men	Women Only	Men Only
<b>Mediation</b>	$\chi^2(7)=80.02, p<.01$ CFI=.90 RMSEA=.15, 90%CI [.12, .18] R <sup>2</sup> =.35	$\chi^2(7)=74.0,$ p<.01 CFI=.87 RMSEA=.16, 90%CI [.13, .20] R <sup>2</sup> =.31	$\chi^2(7)=22.98, p<.01$ CFI=.93 RMSEA=.13, 90%CI [.06, .19] R <sup>2</sup> =.42
<b>Direct</b>	$\chi^2(16)=258.55,$ p<.01 CFI=.65 RMSEA=.18, 90%CI [.16, .20] R <sup>2</sup> =.25	$\chi^2(16)=186.45,$ p<.01 CFI=.66 RMSEA=.17, 90%CI [.15, .20] R <sup>2</sup> =.31	$\chi^2(16)=91.49,$ p<.01 CFI=.65 RMSEA=.19, 90%CI [.15, .23] R <sup>2</sup> =.17
<b>Full</b>	$\chi^2(2)=1.05, p=.59$ CFI=1.0 RMSEA=.00, 90%CI [.00, .07] R <sup>2</sup> =.46	$\chi^2(2)=1.19,$ p=.55 CFI=1.0 RMSEA=.00, 90%CI [.00, .09] R <sup>2</sup> =.46	$\chi^2(2)=8.02, p=.02$ CFI=.97 RMSEA=.15, 90%CI [.05, .27] R <sup>2</sup> =.49

Figure 2. Mediation model in women and men

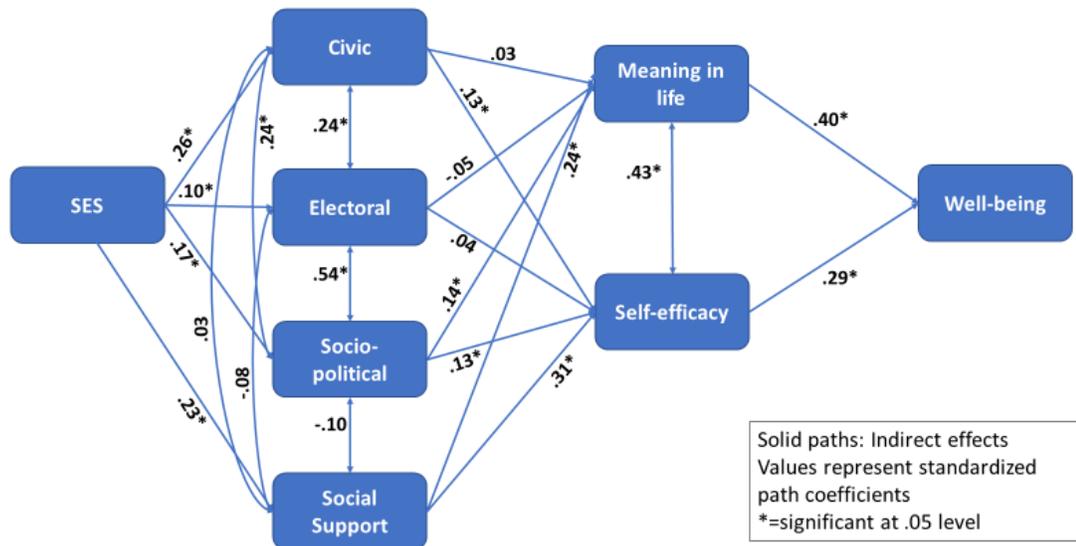


Figure 3. Direct model in women and men

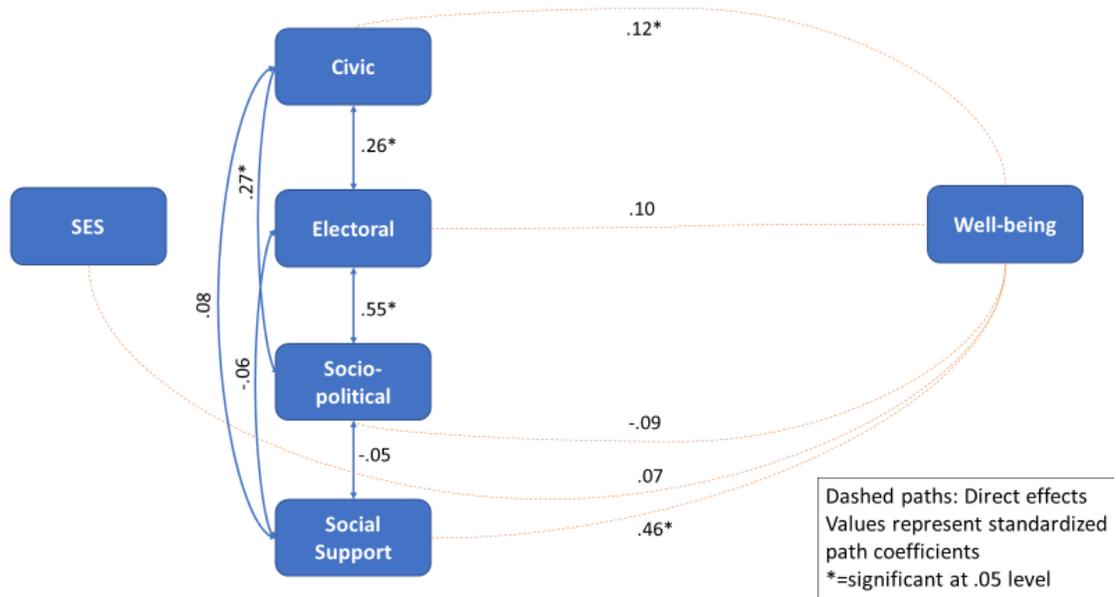
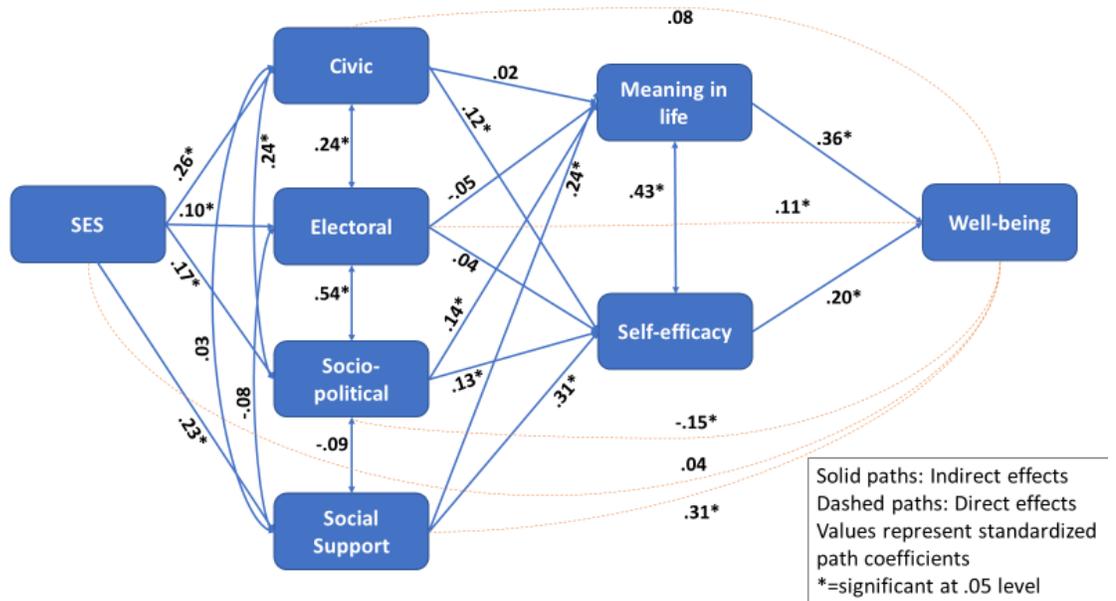


Figure 4. Full model with direct and indirect effects in women and men



Due to concerns about statistical power limitations of fitting such a large model with a limited sample size among men, a smaller subset of the model was tested to better examine the impact of different types of engagement on well-being for men

and women. In this model, SES was added as the first predictor variable, mediated by civic, electoral, and sociopolitical forms of engagement, with well-being as the dependent variable. Multisample analyses across men and women were conducted for mediational and direct models (the full model could not be analyzed due to limited degrees of freedom where  $df=0$ ). FIML was not employed for these analyses, as the multisample comparison depends upon comparing configural and constrained results and the constrained models could not be conducted with FIML estimation. Table 5 demonstrates findings from configural and constrained models using this smaller subset of the larger model. Results indicate that the mediational model fits the data better than the direct model, evidenced by CFI indices=0.95 and RMSEA indices close to 0.10 (Figures 5 and 6). In order to assess for statistical differences in the mediational model fit between men and women, degrees of freedom and chi square values from the constrained model (pathways assumed to be invariant) and the configural model (pathways freely estimated) were compared. This chi square difference test demonstrated that there were no statistically significant differences in mediational model fit between men and women. Further, the effect sizes for both men and women were small. Taken together, the larger model seemed to fit men and women well, with a slightly better fit for women. There was no statistically significant difference in model fit between men and women in the smaller subset of the larger path analysis.

Table 5. Multisample Analysis Fit Indices for SES, Type of Engagement, and Well-Being

Model	Configural	Constrained
<b>Mediation</b>	$\chi^2(2)=10.07, p=.01$ CFI=.96 RMSEA=.15, 90% CI [.07, .25] R <sup>2</sup> =.06 (W), .05 (M)	$\chi^2(8)=17.19, p=.03$ CFI=.95 RMSEA=.08, 90% CI [.03, .14] R <sup>2</sup> =.04 (W), .05 (M)
<b>Direct</b>	$\chi^2(12)=41.97, p<.01$ CFI=.83 RMSEA=.12, 90% CI [.08, .16] R <sup>2</sup> =.03 (W), .06 (M)	$\chi^2(13)=42.11, p<.01$ CFI=.84 RMSEA=.12, 90% CI [.08, .15] R <sup>2</sup> =.04 (W), .04 (M)

Figure 5. Mediation model for SES, type of engagement, and well-being in women

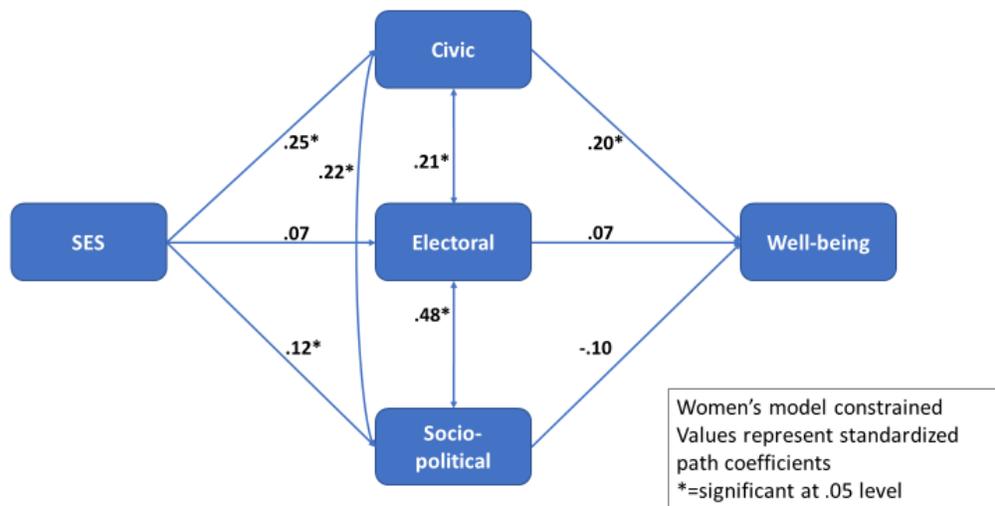
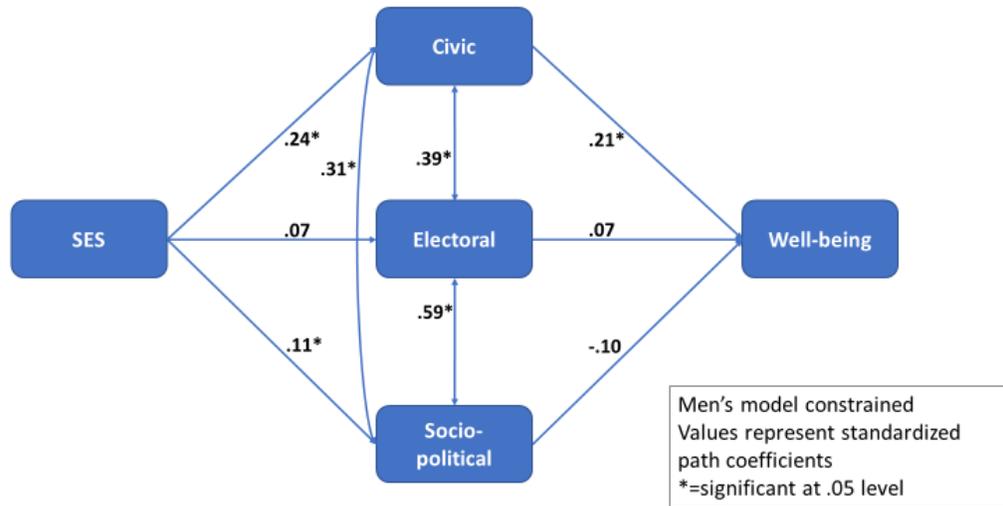


Figure 6. Mediation model for SES, type of engagement, and well-being in men



### Hypothesis Two: Types of Civic Engagement

In both the larger models and the smaller path analysis models, standardized path coefficients demonstrated a positive relationship between SES and all three types of engagement such that an incremental increase in SES was associated with an incremental increase in engagement. Interestingly, perceived social support had very small correlations with all three types of engagement, contrary to findings from prior literature. However, the relationship between social support and meaning in life, self-efficacy, and well-being was stronger than any of the three types of engagement and meaning in life, self-efficacy and well-being. The parameter estimate between meaning in life and well-being demonstrated moderate strength (.36) while self-efficacy and well-being demonstrated a small to moderate positive relationship (.20). In the large, full model, sociopolitical voice seemed to have the strongest path coefficients to meaning in life (.14), self-efficacy (.13), and well-being (-.15) compared to civic and electoral forms of engagement, although all three types of

engagement showed relatively small parameter estimates to meaning, self-efficacy, and well-being. However, in the smaller subset mediational model, the path coefficient between civic activity and well-being was strongest [.20(W), .21(M)], perhaps because civic activity comprises elements like group membership that could be construed as more social involvement, and social support was not accounting for any of the variance in this smaller model. Contrary to the original hypothesis, findings show that electoral activity did not demonstrate a negative relationship with well-being; further, in the larger model, civic activity actually had the weakest parameter estimate to well-being while sociopolitical activity and well-being were inversely associated.

### **Hypothesis Three: Meaning in Life and Self-Efficacy as Mediators**

This study had two proposed layers of mediation in the larger model: Types of civic engagement followed by meaning in life and self-efficacy. Results indicated that meaning in life partially mediated the relationship between SES, sociopolitical activity, social support, and well-being. Self-efficacy partially mediated the relationship between SES, sociopolitical and civic activity, social support, and well-being. When the smaller path model was used to examine this second mediational model, only civic activity appeared to mediate the relationship between SES and well-being, and the effect sizes and path coefficients were small.

## CHAPTER FIVE

### DISCUSSION

This study investigated several factors to elucidate for whom, in what ways, and under what circumstances civic engagement can be used to bolster health and well-being. Prior literature has shown that while civic engagement is generally associated with positive health outcomes for individuals, those from lower-socioeconomic backgrounds and women may not reap the same benefits (Brown et al., 2017; Ehsan & De Silva, 2015). Further, the literature has shown that perhaps there are mediational factors attenuating the relationship between civic engagement and well-being, or it may be likely that certain typologies of engagement more strongly predict well-being than others (Brown et al., 2017; Gullan et al., 2013; Peterson et al., 2005); Piliavin & Siegl, 2007). The present study assessed the relationship between civic engagement and well-being while accounting for these complex dynamics. Further, the present study investigated these dynamics through recruitment of a young adult sample – a developmental period known to be crucial for social and political identity formation (Amna, 2012; Verba et al., 1995). Using data from a cross-sectional design with undergraduate students, findings indicated that 1) the larger mediational model best fit the current sample slightly better for women than men, although there was no statistical difference in model fit between men and women for the smaller model; 2) meaning in life and self-efficacy were found to mediate relationships between various types of engagement and well-being, while civic activity mediated the relationship between SES and well-being in the smaller model; and 3) electoral

activity was not negatively associated with well-being, sociopolitical activity was negatively associated with well-being, and civic activity demonstrated mixed results.

Given prior literature examining how contextual factors like gender and socioeconomic status might influence the relationship between civic engagement and well-being, findings from the current study provide some clarification in addressing who might benefit from civic engagement. On average, women reported experiencing more meaning in life than men and higher civic activity compared to men. However, the tested models did not indicate that these differences resulted in incongruent model fit, and hence, incongruencies in the way in which men's and women's civic engagement may influence their ultimate well-being. If anything, the larger model indicated a slightly better fit in the women's sample compared to the men's sample. These results run counter to prior literature, which has found that men and women may participate in different types of engagement, and hence, they may experience different levels of well-being as a result (Landstedt et al., 2016). For example, Landstedt et al. (2016) noted that women often report participating in more emotionally burdensome activities, which could lead to poorer mental health outcomes. Given the mediational effects of meaning in life and self-efficacy in the current study, it is plausible that women are still engaging in burdensome activities; yet, if they are able to feel a sense of purpose and agency when performing these acts, a null or positive increase in well-being may result. Further, women reported higher levels of civic activity than men, and civic activity encompasses activities like belonging to community organizations and acts of volunteerism. While certainly not all community organizations and volunteer experiences can be construed as burden-

free, perhaps the women in this sample are choosing to engage in less-burdensome activities, resulting in a null or positive change in well-being.

Similarly, Ehsan & De Silva (2015) have highlighted the impact of socioeconomic status on ability to participate among those already feeling overburdened. The current findings are consistent with previous literature regarding individuals from lower SES communities engaging less than those from higher SES communities (Verba et al., 1995). In this sample, path coefficients between SES and civic, electoral, sociopolitical engagement and perceived social support were statistically significant and positive, which suggests that higher-SES individuals were reporting higher levels of engagement and social support while lower-SES individuals reported lower levels. However, for those who do choose to engage, the relationship between engagement and well-being appears to be a positive one when meaning in life and self-efficacy serve as mediators. Taken together, these study findings suggest that women's civic engagement is not associated with lower well-being contrary to some prior literature, nor is civic engagement necessarily ill-advised for those from low-SES communities. However, more research is needed to better understand why someone from these marginalized identities may choose to engage or abstain from involvement, and the mechanisms in which that engagement may or may not impact their mental health.

This study explored some of the ways and circumstances in which civic engagement may influence well-being, specifically by examining meaning in life and self-efficacy as mediators. In this sample, the full effects model explained the data particularly well in women only, men only, and in women and men combined.

Interestingly, meaning in life only mediated the relationship between sociopolitical activity and well-being and social support and well-being, such that greater sociopolitical activity and social support resulted in greater meaning in life, which then related to stronger well-being. Self-efficacy was also a partial mediator, where civic activity, sociopolitical activity, and social support showed positive parameter estimates with self-efficacy, which in turn resulted in a significantly positive parameter estimate to well-being. Thus, both meaning in life and self-efficacy seem to play an important role in mediating the relationship between engagement and well-being.

Of note, sociopolitical voice demonstrated a significantly negative parameter estimate with well-being in the larger model, although pathways to meaning in life and self-efficacy were significantly positive. It could very well be that individuals who make concerted efforts to engage socio-politically may become disillusioned if they are unable to see the fruits of their labor. Oftentimes, sociopolitical activities like marching and calling congress people require significant emotional energy and time. By comparison, civic activity like volunteering at a local soup kitchen or fundraising money during a bike-a-thon may produce instantaneous good will, as was the direct relationship between civic activity and well-being in the smaller path model. Thus, it is important to consider what drives people to engage in the first place – are they participating out of internal conflict or desire to change policy (as is likely with sociopolitical engagers), to reap potential material or social benefits that may coincide with civic forms of participation, or perhaps some combination of both (Verba et al., 1995). If the motivational drive is due to conflict, perhaps meaning in life and self-

efficacy become that much more central to attenuating the relationship between civic engagement and well-being. For college students still in the process of developing their social and political identities, interventions might prompt young adults to reflect upon: Why am I doing this activity? Do I feel confident in my ability to engage in this manner? Is engaging in this activity super frustrating but something that I still find meaningful and important? Do I feel like I can engage despite multiple barriers that may arise? These results are promising as an indication of the mechanisms responsible for enhancing or diminishing well-being among those who engage; however, statistical model fit does not necessarily mimic reality, and several study limitations will be discussed shortly.

While this study clarified the role that meaning and life and self-efficacy may serve as mediators, pathways from the three civic typologies warrant further investigation. In the large sample model of total effects, sociopolitical voice demonstrated the strongest path coefficients with meaning in life (.14) and self-efficacy (.13), which were small in nature. Civic activity demonstrated the next strongest relationship with self-efficacy (.12) and a non-significant parameter estimate to meaning in life. Parameter estimates between electoral activity and meaning in life and self-efficacy were not significant. As was stated earlier, electoral engagement was minimally endorsed across the entire sample. While students could have participated in activities like campaigning for candidates, it is plausible that an individual not yet old enough to vote may not be engaged in this capacity generally. Hence, there may have been a floor effect with electoral engagement, which would partially explain its nonsignificant path coefficients with outcome variables in many of the models. Future

studies examining these models with an older population that has had time to witness multiple election cycles would be beneficial to ascertain the relationship between electoral engagement and well-being.

Of note, in the smaller model of indirect effects across men and women, civic activity was shown to have the strongest significant parameter estimate to well-being [.20(W), .21(M)] while electoral and sociopolitical activity estimates to well-being were not significant. Thus, it seems counterintuitive that in one model, civic type of engagement would seem the strongest indicator of well-being, while in another, it may be one of the weakest. One plausible explanation is that it is difficult to compare the large full effects model with all variables to the smaller mediational model using only typology as the mediators. Perhaps the social aspect that often accompanies many civic forms of engagement (e.g., belonging to various clubs) may have become more salient without social support accounting for any variance within the smaller model. Further, it should be noted that FIML was employed across the larger models, while FIML was not used in the smaller multisample analyses, which might have impacted parameter estimates. Finally, it is important to again consider the motivational forces that drive an individual to civically engage in the first place. Overall, both the larger and smaller models provided an adequate fit, serving as evidence that there may be some relationship between SES, type of engagement, and well-being. Given the small effect size of the smaller model, replication studies should be conducted to further examine the nature of these relationships between typology and well-being.

There are several limitations of the current study that should be noted. As the study employed a cross-sectional design, the relationships shown in the models are

correlational rather than causal in nature; hence, it is plausible that those who experience higher levels of well-being may also civically engage more frequently. The proposed predictive models were based on a priori information from previous literature on civic engagement and health factors, but the relationships are complex and not easily interpretable. Longitudinal designs could help to bolster some of the preliminary findings noted above. Further, this research was conducted in a sample of predominantly White, female undergraduates. While the demographic breakdown of this sample does not significantly differ from the URI student body, students who have reached the point of a college education already experience certain privileges and perhaps have certain qualities that may make them more or less likely to civically engage. As an example, the mean and mode for self-efficacy toward service was a score of 20 out of a possible 25. These were individuals who may have already felt capable of enacting change in their surrounding environment, regardless of whether they actually decided to engage in that change. For these reasons, these findings may not be generalizable to other young adults. So it is with caution that these results be used to suggest to women and those from lower SES communities that civic engagement would be to their benefit—indeed, it might be, but further information is required before making such a claim.

It should also be noted that sample size, missing data, and normality were problematic in the current study. The intended analyses would have been optimized with sample sizes of at least 150-200 participants for both men and women; while the women's sample was adequate, the men's sample fell short of this goal. Statistical power for structural equation modeling differs dependent upon parameters, variables,

and the research question. It is possible that the current male sample was not adequately powered for these analyses. FIML estimation for missing data and transforming data for non-normality may have also impacted results. Structural equation modeling depends upon completeness and normal distributions in order to produce appropriate results. However, estimating for missingness can introduce an extra layer of error, as can transforming variables. This body of research would greatly benefit from replication studies using larger, diverse samples to introduce greater variance among the variables and to mitigate potential concerns about power.

Finally, civic engagement is a multifaceted, evolving concept, which makes it difficult to operationalize and standardize across studies. The current study utilized a measure of civic engagement that differentiates across typologies, and scored these typologies by providing scaled “credit” for responses of varied intensity or frequency. After consulting with the measure developers, it was unclear if initial research using this scale employed a similar methodology of scoring procedures to account for frequency of behaviors. Hence, while direct comparisons to prior usage of this civic engagement measure may be limited, the current study was able to incorporate issues of frequency likely pertinent to the relationship between civic engagement and well-being. Further, while this scale encompasses many common civic activities, it has not been updated since 2003 to reflect more current trends in civic participation. For example, the evolution of platforms like Facebook and Twitter has many individuals flocking to social media as a way to demonstrate activism. Musical artists and writers have historically taken pen to paper to lyrically and poetically discuss important issues of social concern, yet their messages are transported on a larger scale today due to the

influx of social media platforms. These forms of engagement are not reflected in the measure of civic engagement used in this study, and should either be considered for implementation with future research or used in measure development efforts to create a more accurate depiction of engagement.

The current study contributes to the psychological field by better clarifying the role of civic engagement as a health determinant. Importantly, while those from lower-SES backgrounds reported lower levels of engagement, those who do seem to engage demonstrated a positive relationship with meaning in life and self-efficacy, resulting in positive well-being. Moreover, model fit was not statistically different in samples of men and women. These results are encouraging that perhaps women and low-SES individuals might benefit from participating civically in order to bolster mental health. However, this study noted several limitations, including sample size and missing data, that necessitate replication studies with more diverse populations using updated measures of civic engagement. Finally, if civic engagement is to be used as a point of intervention, the current study underscores the importance of helping individuals identify meaningful ways in which they can engage while simultaneously strengthening their self-efficacy to do so. Certainly, many forms of engagement are necessary and important to contribute to a well-functioning society, even if they create some frustration and stress amongst engagers. Interventions have the potential to instill the necessary attitudes, knowledge, and skill-building among young adults during a time period that is highly critical to their civic identity development. Further, by fostering awareness of activities that are likely to produce greater meaning in life, perhaps individuals can more confidently and mindfully choose engagement known to

offer a quick boost while protecting against feelings of disillusionment. In other words, remind rebels of their cause.

## APPENDICES

### Appendix A- Demographic Questionnaire

1. Age:
  - Less than 18 years
  - 18
  - 19
  - 20
  - 21
  - 22
  - 23
  - 24
  - 25
  - Greater than 25 years
  
2. Rank in school: Freshman Sophomore Junior Senior
  
3. Gender: Man Woman Transgender Gender Queer Not listed (please share):\_\_\_\_\_
  
4. Ethnicity origin or race (please select all that apply):
  - White/Caucasian
  - Black or African American
  - Hispanic/Latino
  - Asian
  - Native Hawaiian or Pacific Islander
  - American Indian or Alaskan Native
  - Mixed
  - Other\_\_\_\_\_
  
5. About how many hours per week do you work for pay?
  - None
  - 1-10 hours a week
  - 11-20 hours
  - 21-30 hours
  - More than 30 hours
  
6. Generally speaking, do you think of yourself as a:
  - Democrat (do you consider yourself to be a strong democrat or a not very strong democrat?)
  - Republican (do you consider yourself to be a strong republican or a not very strong republican?)
  - Independent (do you consider yourself to be closer to the Republican or Democratic party?)

7. In general, how would you describe your own political viewpoint?
- Very liberal
  - Liberal
  - Moderate
  - Conservative
  - Very conservative
  - Not sure
8. What is the zip code of your permanent residence? \_\_\_\_\_
9. What is the highest level of education your mother (or legal guardian) and father (or legal guardian) received?

Tick only one box in each column...	Mother	Father
Less than high school		
Some high school, no diploma		
Finished high school (or GED)		
Some college credit, no degree		
Trade/technical/vocational training		
Associate's degree		
Completed bachelor's degree at a college or university		
Master's/Professional/Doctorate degree		
I don't know		

10. What is the present occupation of the head of household?
- Professional/Technical
  - Manager/Official/Proprietor
  - Clerical
  - Sales
  - Crafts/Trades
  - Operator
  - Laborer
  - Service worker
  - Retired
  - Homemaker
  - Student
  - Unemployed
  - Other

**Appendix B- Civic Engagement Quiz** (Andolina, Keeter, Zukin, & Jenkins, 2003)

	Yes, Within the last 12 months (2)	Yes, But not within the last 12 months (1)	No, Never (0)
1. Have you ever worked together with someone or some group to solve a problem in the community where you live?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Have you volunteered or done any voluntary community service for no pay?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Indicate whether you have volunteered with any of the following types of organizations or groups:

	Yes, I have volunteered within the last 12 months (1)	Yes, I volunteer once a month or more (2)	Not within the last 12 months (0)
2A. Religious Group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2B. Environmental Organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2C. Civic or community organization involved in health or social services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2D. An organization for youth, children, or education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2E. Any other group _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Yes (1)	No (2)
3A. Do you belong to or donate money to any groups or associations, either locally or nationally such as charities, labor unions, professional associations, political or social groups, sports or youth groups, and so forth?	<input type="radio"/>	<input type="radio"/>

	Active member of at least one of them (2)	Member, but not active in at least one of them (1)	Given money only (1)	No (0)
3B. Are you an active member of this group or any of these groups, a member but not active, or have you given money only? Mark all that apply	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes, Have done it within last 12 months (2)	Yes, But not within last 12 months (1)	No, Never (0)
4. Have you personally walked, ran, or bicycled for a charitable cause-this is separate from sponsoring or giving money to this type of event?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Besides donating money, have you ever done anything else to help raise money for a charitable cause?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Yes, definitely (2)	I think so (1)	No (0)
6A. Many people are not registered to vote because they are too busy or move around often. Are you currently registered in your election district, or not?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Yes, always (2)	Yes, usually (1)	No (0)
6B. We know that most people don't vote in all elections. Do you vote in both national and local elections?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Yes, Within the last 12 months (2)	Yes, But not within the last 12 months (1)	No, Never (0)
7. Have you volunteered for a political organization or candidate running for office?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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	Yes, Always (2)	Yes, Usually (1)	No (0)
8. When there is an election taking place, do you try to convince people to vote for or against one of the parties or candidates, or not?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Do you wear a campaign button, put a sticker on your car, or place a sign in front of your house?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Yes, Within the last 12 months (2)	Yes, But not within the last 12 months (1)	No, Never (0)
10. Have you given money to a candidate, political party, or organization that supported candidates?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Have you done any of the following to express your views?

	Yes, Within the last 12 months (2)	Yes, But not within the last 12 months (1)	No, Never (0)
11. Contacted or visited a public official- at any level of government- to express your opinion?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Contacted a newspaper or magazine to express your opinion on an issue?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Called in to a radio or television talk show to express your opinion on a political issue, even if you did not get on the air	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Taken part in a protest, march, or demonstration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Signed an email petition about a social or political issue?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Have you ever signed a written petition about a political or social issue?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Have you ever NOT bought something from a certain company because you disagree with the social or political values of the company that produces it?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Have you bought something because you like the social or political values of the company that produces or provides it?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. Have you worked as a canvasser – going door to door for a political or social group or candidate?



**Appendix C- Meaning in Life Questionnaire** (Steger, Frazier, Oishi, & Kaler, 2006)

Please take a moment to think about what makes your life feel important 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-1
- Mostly Untrue- 2
- Somewhat Untrue- 3
- Can't Say True or False- 4
- Somewhat True- 5
- Mostly True- 6
- Absolutely True- 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.

MLQ scoring: Presence = 1, 4, 5, 6, & 9-reverse-coded Search = 2, 3, 7, 8, & 10

**Appendix D – Self-Efficacy Towards Service** (Weber, Weber, Sleeper, & Schneider, 2004)

Please use the following scale to respond to each item. Circle the letter or letters that best describe the extent to which you agree or disagree with the statement.

SA – Strongly agree

A – Agree

N – Neither agree or disagree

D – Disagree

SD – Strongly disagree

I can have a positive impact on social problems. SA A N D SD

I can help people with handicaps. SA A N D SD

I have confidence in my ability to help others. SA A N D SD

I can make a difference in my community. SA A N D SD

Each of us can make a difference in the lives of the less fortunate. SA A N D SD

**Appendix E- Community Service Attitudes Scale** (adapted from Shiarella, McCarthy, & Tucker, 2000)

Please indicate how much you agree with each statement with 1 being that you strongly disagree and 7 being that you strongly agree with the statement. 1 = strongly disagree, 7 = strongly agree

- 32. I do not want to engage in community service. 1 2 3 4 5 6 7
- 33. I will participate in a community service project in the next year. 1 2 3 4 5 6 7
- 34. Would you seek out an opportunity to do community service in the next year? 1 2 3 4 5 6 7

Please indicate how participating in service-learning is likely to impact you with 1 being extremely unlikely and 7 being extremely likely to impact you. 1 = extremely unlikely, 7 = extremely likely

- 1. I would have less time for my schoolwork. 1 2 3 4 5 6 7
- 2. I would have forgone the opportunity to make money in a paid position. 1 2 3 4 5 6 7
- 3. I would have less energy. 1 2 3 4 5 6 7
- 4. I would have less time to work. 1 2 3 4 5 6 7
- 5. I would have less free time. 1 2 3 4 5 6 7
- 6. I would have less time to spend with my family. 1 2 3 4 5 6 7
- 7. I would be contributing to the betterment of the community. 1 2 3 4 5 6 7
- 8. I would experience personal satisfaction knowing that I am helping others. 1 2 3 4 5 6 7
- 9. I would be meeting other people who enjoy community service. 1 2 3 4 5 6 7
- 10. I would be developing new skills. 1 2 3 4 5 6 7
- 11. I would make valuable contacts for my professional career. 1 2 3 4 5 6 7
- 12. I would gain valuable experience for my resume. 1 2 3 4 5 6 7

**Appendix F- Interpersonal Support Evaluation List-12** (Cohen, Mermelstein, Kamarck, & Hoberman, 1985).

Instructions: This scale is made up of a list of statements each of which may or may not be true about you. For each statement circle "definitely true" if you are sure it is true about you and "probably true" if you think it is true but are not absolutely certain. Similarly, you should circle "definitely false" if you are sure the statement is false and "probably false" if you think it is false but are not absolutely certain.

1. If I wanted to go on a trip for a day (for example, to the country or mountains), I would have a hard time finding someone to go with me.  
1. definitely false      2. probably false      3. probably true      4. definitely true
2. I feel that there is no one I can share my most private worries and fears with.  
1. definitely false      2. probably false      3. probably true      4. definitely true
3. If I were sick, I could easily find someone to help me with my daily chores.  
1. definitely false      2. probably false      3. probably true      4. definitely true
4. There is someone I can turn to for advice about handling problems with my family.  
1. definitely false      2. probably false      3. probably true      4. definitely true
5. If I decide one afternoon that I would like to go to a movie that evening, I could easily find someone to go with me.  
1. definitely false      2. probably false      3. probably true      4. definitely true
6. When I need suggestions on how to deal with a personal problem, I know someone I can turn to.  
1. definitely false      2. probably false      3. probably true      4. definitely true
7. I don't often get invited to do things with others.  
1. definitely false      2. probably false      3. probably true      4. definitely true
8. If I had to go out of town for a few weeks, it would be difficult to find someone who would look after my house or apartment (the plants, pets, garden, etc.).  
1. definitely false      2. probably false      3. probably true      4. definitely true
9. If I wanted to have lunch with someone, I could easily find someone to join me.  
1. definitely false      2. probably false      3. probably true      4. definitely true
10. If I was stranded 10 miles from home, there is someone I could call who could come and get me.  
1. definitely false      2. probably false      3. probably true      4. definitely true
11. If a family crisis arose, it would be difficult to find someone who could give me good advice about how to handle it.  
1. definitely false      2. probably false      3. probably true      4. definitely true
12. If I needed some help in moving to a new house or apartment, I would have a hard time finding someone to help me.  
1. definitely false      2. probably false      3. probably true      4. definitely true

Appraisal: item numbers 2R, 4, 6, 11R

Belonging: item numbers 1R, 5, 7R, 9

Tangible: item numbers 3, 8R, 10, 12R

**Appendix G- Mental Health Continuum- Short Form** (Lamers, Westerhof, Bohlmeijer, ten Klooster, & Keyes, 2010)

Place a check mark in the box that best represents your experiences and feelings.

<b>During the past month, how often did you feel the following ways...</b>	NEVER	ONCE OR TWICE	ABOUT ONCE A WEEK	2 OR 3 TIMES A WEEK	ALMOST EVERY DAY	EVERY DAY
1. happy						
2. interested in life						
3. satisfied with life						
4. that you had something important to contribute to society						
5. that you belonged to a community (like a social group, school, neighborhood, etc.)						
6. that our society is a good place, or is becoming a better place, for all people						
7. that people are basically good						
8. that the way our society works made sense to you						
9. that you liked most parts of your personality						
10. good at managing the responsibilities of your daily life						
11. that you had warm and trusting relationships with others						
12. that you had experiences that						

challenged you to grow and become a better person						
13. confident to think or express your own ideas and opinions						
14. that your life has a sense of direction or meaning to it						

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