PERCEPTION OF PERSONAL CIVIC RESPONSIBILITY AMONG

UNDERGRADUATE STUDENTS AT THE UNIVERSITY OF KANSAS


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**Abstract**

This study identified predictors of student perceptions of personal civic responsibility (civic-mindedness) among undergraduate students at the University of Kansas (KU). Using KU-specific data from the 2015 Multi-Institutional Study of Leadership (MSL), relationships between student interaction with specific components of the KU institutional environment and their self-reported perceptions of personal civic responsibility were analyzed. Prior research suggests that self-efficacy for civic engagement and intention to become civically engaged result in actual civic engagement later, and this study used student perception of personal civic responsibility, as measured by self-efficacy and intention, as a proxy for potential future civic engagement.

Results suggest correlations between student perception of personal civic responsibility and faculty mentorship, frequency of civic engagement activities during college, monthly community service participation, and discussion of social issues outside of class. Other institutional components that were studied include staff mentorship, student leadership training and participation, and multiple components of student involvement both on- and off-campus. While the study found relationships between student interactions with four components of the KU institutional environment, it did not confirm prior research findings related to the existence of other relationships. Study implications include consideration of institutional support for as well as further study of those environmental components that did (or did not) correlate with KU student perceptions of personal civic responsibility.

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Rock Chalk.

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**CHAPTER ONE: Introduction**

**Introduction and Context**

The American Psychological Association (APA) broadly defines the term *Civic Engagement* to comprise citizens' interactions with a community to address the challenges and problems facing the community as a whole, and which are targeted toward improving quality of life in the community (APA, 2015; Bowman, 2010; Ehrlich, 2000; Jugert, Eckstein, Noack, Kuhn, & Benbow, 2013). Civic Engagement (CE) includes both political and non-political activities, involving citizens and their communities in resolving challenges and providing mutual benefits (DePaola, 2014). Voting is a basic expression of CE, while other actions include community service and volunteerism, social activism and community organizing. Furthermore, with the expansion of technology and communication tools such as the internet, CE is no longer limited to in-person engagement (Jugert et al., 2013).

Good citizenship generally involves being personally responsible, participatory and justice-oriented (Mann, Dymond, Bonati, & Neeper, 2015; Westheimer & Kahne, 2004). Over the last three decades, however, CE among younger citizens has declined by multiple measures (Carpini, 2000; Flanagan & Levine, 2010; Lott, 2013). Voter turnout in the United States— particularly among African American and Latino voters—is lower than in most other industrialized nations (Ahranjani, Medearis, & Shook, 2013). Bowie (2009) further contends that the government has slowly shifted away from the mindset of "public responsibility for social problems" over the last several decades (p. 65).

**Purpose of Study**

Using data from the 2015 Multi-Institutional Study of Leadership (MSL), this study explored ways in which The University of Kansas (KU) influences student perceptions of

personal civic responsibility, also known as "civic-mindedness." Civic-mindedness is generally defined by "a person's inclination or disposition to be knowledgeable of and involved in the community, and to have a commitment to act upon a sense of responsibility as a member of that community" (Bringle & Steinberg, 2010; Bringle et al., 2011, p. 152).

The present study was not longitudinal, and did not measure actual student civic engagement after college or explore predictive relationships between that engagement and institutional environmental interactions. The study did, however, collect data on activities that have been shown to predict actual CE. Previous research suggests that student self-efficacy for CE predicts actual CE (Ahranjani et al., 2013; Barry, 2011; Billings & Terkla 2011; Bringle & Steinberg, 2010; Cooper, Cripps, & Reisman, 2013; Glass, 2012; Hellman, Hoppes, & Ellison, 2006; Jugert et al., 2013), and that student *intention* to civically engage also predicts later CE (Bringle & Steinberg, 2010; Hellman et al., 2006; Jugert et al., 2013).

Astin's (1993) Input-Environment-Outcome (I-E-O) model provided the structural framework for this study. By first understanding what characteristics and experiences students bring with them (input), KU can explore actions/interventions (environment) with which student interaction or participation relates to the desired outcome of student perception of personal civic responsibility. With the exception of inputs measured by and selected through institutional admission standards, KU cannot directly control most student input variables. Based upon the outcomes of the present study, however, the university has additional information about how students' interactions with the institutional environment might influence their perceptions of personal civic responsibility. The term "environment" is considered for purposes of this study to include those components of a student's educational experience over which the institution has

some measure of control or oversight, and which could be altered if necessary to change student outcomes.

## Institutional Overview

The University of Kansas is a comprehensive, research extensive university located in Lawrence, Kansas. Founded in 1865, it is the largest higher education institution in the state, and at the time of the MSL research study (2015), enrolled 27,983 students in 200 degree programs housed in 15 schools across five campuses throughout the state (KU Office of Institutional Research and Planning [OIRP], 2015). KU is accredited by the Higher Learning Commission, as well as program-specific accrediting agencies (OIRP, 2015). In 2015, the majority of students (24,612) enrolled on the main campus in Lawrence and the Edwards campus in Overland Park, while the remainder enrolled at KU Medical Center campuses (OIRP, 2015).

KU students come from all 50 states and 110 countries (KU Office of International Recruitment and Undergraduate Admissions [IRUA], 2015) and the majority of students (69%) are undergraduate (OIRP, 2015). Women comprise 50.5% of the student population, and the average age of undergraduate students is 21 (OIRP, 2015). Table 1.1 contains self-reported student race and ethnicity data for 2015 as reported by OIRP (2015) as well as data from the MSL instrument for comparison between population and study sample groups. While generally representative of the KU student population, the MSL sample data set slightly under-represents for all categories except Multi-Racial, White/Caucasian, Native Hawaiian/Pacific Islander, and Asian American.

**Table 1.1. Race and Ethnicity Comparison**

| Variable | MSL Data[1] | KU Population Data[2] |
|---|---|---|
| American Indian / Alaskan Native | 5 (0.3%) | 129 (0.5%) |
| Asian American | 62 (4.1%) | 1,015 (4.1%) |
| African American / Black | 49 (3.3%) | 976 (4.0%) |
| Latino / Hispanic | 54 (3.6%) | 1,520 (6.2%) |
| Middle Eastern / North African | 3 (0.2%) | NA |
| Multi-racial / Two or more races | 149 (10.0%) | 1,115 (4.5%) |
| Native Hawaiian/Pacific Islander | 1 (0.1%) | 8 (0%) |
| White / Caucasian | 1139 (76.2%) | 17,233 (69.7%) |
| Non-Resident Alien / International | NA | 2363 (9.6%) |
| Race Option Not Available / Other Unknown | 32 (2.1%) | 349 (1.4%) |
| Totals | 1494 (100%) | 24,708 (100%) |

[1]Percentages (%) are calculated for MSL data based on the valid sample total and for KU data based on the KU population total as shown.
[2]KU Population data based upon Lawrence and Edwards Campuses only as of 2015.

According to KU OIRP (2015), the Lawrence and Edwards campuses employed 10,025 faculty and staff (5,462 FTE) including 4,770 student employees, 1,272 full-time faculty and 3,349 full-time staff. The student to faculty ratio was 17:1, and at the Lawrence campus, 69.1% of faculty were tenured or tenure-track, 20.4% of whom were minority faculty (KU OIRP, 2015). First-time, full-time KU freshman students are retained at a rate of 80.4% after the first year and graduated at a rate of 60% after six years (OIRP, 2015). Both first-year retention and 6-year graduation rates have remained nearly the same over the last 15 years, and KU is actively exploring ways to improve both through the university's strategic plan, *Bold Aspirations*. Specifically, the portion of the plan called "The 90/70 plan" sets a goal of achieving a first-year retention rate of 90% and a six-year graduation rate of 70% by the year 2022 (KU Bold Aspirations, 2015).

KU students find many ways to become involved both on- and off-campus. According to the KU Office of Study Abroad (OSA), "nearly 25 percent of KU undergraduate students participate in a study abroad program prior to graduation" (OSA, 2015), ranking KU at 26th in the nation among public universities for study abroad participation rates (OSA, 2015). Options for student involvement closer to home are also available, as students can become involved in more than 600 student, campus and community organizations registered through the KU Student

Involvement and Leadership Center (Student Involvement and Leadership Center [SILC], 2015).

KU students also engage with the off-campus community through the Center for Community

Outreach (CCO), which provides resources for 12 student-run community service programs

(CCO, 2015). KU's Center for Civic and Social Responsibility (CCSR) also provides training

and planning materials for faculty interested in incorporating service learning into the curriculum

(CCSR, 2015).

## Research Questions

This study seeks to better understand the relationship between student perception of

personal civic responsibility (dependent variable), and student interaction with specific

components of the KU environment (independent variables). The study controlled for race,

gender, college GPA, year in school, parental education and experience with community service

prior to college. The MSL instrument measures student self-reported interactions with

components of the university environment, and KU institutional data was used to report the

availability of programs or resources.

The following research questions guide the present study:

1)  *Based upon MSL survey results, how frequently do undergraduate KU students report
    that faculty and staff mentors assist them with their personal development, participate in
    research with faculty, participate in community service and/or service learning, become
    civically engaged, and participate in activities and organizations focused on academic
    interests, student leadership, multi-cultural interests, general interests, social fraternities
    and sororities, sports and recreation, and service and advocacy?*

2)  *What are KU undergraduate students' perceptions of their own civic responsibility?*

3) *How do gender, year in school, parent educational attainment, student college academic performance, and pre-college experience with civic engagement relate to undergraduate KU students' perceptions of personal civic responsibility?*

4) *To what extent do faculty/staff mentorship, undergraduate research, community service/service learning, general civic engagement during college, and type of involvement in student organizations or activities individually correlate with undergraduate KU students' perceptions of personal civic responsibility?*

5) *Controlling for relevant demographic variables, to what extent are undergraduate KU students' perceptions of personal civic responsibility predicted by faculty/staff mentorship, undergraduate research, community service/service learning, general civic engagement during college, and type of involvement in student organizations or activities?*

**Theoretical Framework**

This study determined how students' interactions with identified components of the KU environment relate to student civic-mindedness, and Astin's (1991, 1993) input-environment-outcome (I-E-O) model provides central theoretical support for the study. This model informs the structural process through which student outcomes are influenced by institutional interventions or environmental characteristics when controlling for individual student characteristics (inputs) such as demographics.

Student involvement theory and student engagement theory provide secondary theoretical support to the study by helping to explain the nature of student interactions with the KU institutional environment which ultimately produce the desired outcomes. Astin (1984, 1999) defines student involvement as "the amount of physical and psychological energy that the

student devotes to the academic experience" (Astin, 1999, p. 518). This energy may be devoted to co-curricular as well as well as extra-curricular activities, and may include both academic (e.g., out-of-class study sessions) and non-academic pursuits (e.g., student clubs and organizations). The theory also suggests that outcomes related to student involvement are "directly proportional to the quality and quantity of the student involvement" (p. 519).

Kuh (2001, 2003, 2009) defines student engagement as "the time and effort students devote to activities that are empirically linked to desired outcomes of college *and* what institutions do to induce students to participate in these activities" (Kuh, 2009, p. 683). Student engagement, therefore, is a step beyond student involvement, in that it includes the reciprocation of the institution with the student's involvement, and the strategically focused nature of the activity as being directly related to the institution's desired student outcomes. Both involvement and engagement theory are critical to the present study because they represent student interaction with institutional environments as measured by the independent variables (the "E" in I-E-O), and because they inform both sides of the student's experience: student investment in the activity *and* institutional investment in the student.

### Conceptual Overview

The purpose of the present study is to explore relationships between undergraduate students' perceptions of civic responsibility and their interactions with parts of the KU environment. As suggested in the research questions, student perception of personal civic responsibility is the dependent variable concept, while student interactions with multiple KU environmental components represent the independent variable concepts. The KU environment is defined broadly, for purposes of this study, as those components of the student's educational experience over which the institution has some measure of control, and which are related to

student outcomes. Examples of KU environments include, but are not limited to, physical classroom spaces, the availability of student support services such as tutoring, availability of opportunities for student involvement such as clubs and organizations, and the presence of an institutional mission that guides decision-making at all levels, from curriculum to budget allocations. This study does not attempt to address all components of the KU environment; rather, it focuses on a selection of specific components related to the literature-based outcomes being studied.

**Student Perception of Personal Civic Responsibility**

From a practical standpoint, student perception of personal civic responsibility, or civic-mindedness, suggests a mindset of perceived importance to accomplish a specific activity related to civic engagement such as voting, volunteering, organizing, engaging in community activism, etc. Students with a strong sense of self-efficacy regarding ability to make positive change in the community are more likely to engage civically (Ahranjani et al., 2013; Barry, 2011; Billings & Terkla 2011; Bringle & Steinberg, 2010; Cooper et al., 2013; Glass, 2012; Hellman et al., 2006; Jugert et al., 2013), and students who have expressed an intention to become civically engaged are more likely actually become engaged than students who have not expressed similar intent (Bringle & Steinberg, 2010; Hellman et al., 2006; Jugert et al., 2013). The MSL study does not provide data regarding student civic engagement following college, and although direct predictive relationships cannot be inferred from the MSL data, the present study uses the dependent variable of student perception of personal civic responsibility as a proxy for potential future civic engagement.

**Student Interaction with the KU Institutional Environment**

The primary focus of this study is to determine how KU student perception of personal civic responsibility is predicted by students' interactions with specific components of the KU institutional "environment." These components include 1) faculty and staff mentoring relationships, 2) student participation in undergraduate research, 3) community and service learning participation during college, 4) civic engagement frequency during college, and 5) student co- and extra-curricular involvement. A brief review of each of these key independent variables is found here, along with a more detailed treatment in Chapter 3.

**Faculty/Staff Mentoring Relationships**

Mentoring relationships during college have been shown to improve student outcomes in many ways, including student persistence and academic performance (Campbell & Campbell, 1997; Crisp & Cruz, 2009; Freeman, 1999; Kahveci, Southerlan, & Gilmer, 2006; Mangold, Bean, Adams, Schwab, & Lynch, 2003; Pagan & Edwards-Wilson, 2003; Ross-Thomas & Bryant, 1994; Salinitri, 2005; Sorrentino, 2007; Wallace, Abel, & Ropers-Huilman, 2000). The present study focuses on faculty and staff mentoring relationships, and explores how the existence and nature of those relationships may result in greater student perception of personal civic responsibility.

**Undergraduate Research**

Pascarella and Terenzini (2005) and Hu, Kugh, and Gayles (2007) suggest that undergraduate research is associated with overall persistence and likelihood to pursue graduate school studies. KU has placed increasing emphasis on the value of undergraduate research opportunities that allow students to develop themselves as researchers and engage with faculty mentors along the way (KU Center for Undergraduate Research, 2015). *Bold Aspirations*

includes undergraduate research as a component of its 90/70 retention and graduation plan (KU Bold Aspirations, 2015), and although the literature does not suggest an explicit relationship between undergraduate research participation and civic-mindedness, this is an item of particular interest to the researcher, with implications for KU's stated goals through *Bold Aspirations*.

### Community Service and Service Learning Participation

Students who have participated in community service previously, and whose experiences were positive, are more likely to participate again (Astin & Sax, 1998; DePaola 2014; Getto & Rivait, 2012; Jugert et al., 2013; Weiler, Zimmerman, Krafchick, Henry, and Rudisill, 2013). Furthermore, prior service also leads to greater self-efficacy with regard to service (Barry, 2011; Bringle & Steinberg, 2010; Cooper et al., 2013). The MSL instrument measures the types of community service activities in which students engage during college. KU provides a variety of opportunities for community service (discussed in greater detail in Chapter 2), and the present study explores the frequency with which students serve the community as it relates to their levels of civic-mindedness.

### General Civic Engagement Frequency

In the context of the KU environment, general civic engagement refers to multiple types of activities in which KU students are involved during their time at KU that are directly related to their non-campus-based communities, and the frequency of those involvements. These CE involvements are designed to improve students' communities (APA Online, 2015; Bowman & Brandenberger, 2012; Ehrlich, 2000; Jugert et al., 2013) and generally represent a civic mindset that values social justice and intercultural exchange (AACU, 2010; Bowman, 2010). The MSL instrument provides student responses that can be used to determine whether or not frequency of civic engagement during college is related to student perception of personal civic responsibility.

**Co- and Extracurricular Involvement**

Extra-curricular/co-curricular involvement positively impacts student outcomes in college (Astin, 1993; Kuh, 2003; Pascarella & Terenzini, 2005; Zacherman & Foubert, 2014). In addition, Brown (2011) completed a study of extracurricular activity and its effect on CE, and found that across all controls and at all levels, "participation in extracurricular activities has a significant positive effect on civic involvement during young adulthood" (p. 89). The present study explores a variety of extra- and co-curricular involvements, focusing on the nature of the involvement and how it relates to student perception of personal civic responsibility.

**Significance of Study**

Billings and Terkla (2011) contend that colleges and universities must educate students beyond classroom learning to shape the "whole" student into an actively engaged citizen of her or his community. Institutionalization of CE into the curriculum creates an environment of civic expectation, encourages moral growth and helps to create a mindset of civic responsibility for students (Billings & Terkla, 2011; Boyd & Brackmann, 2012; Kanter & Schneider, 2013; McLellan & Youniss, 2003; Moore, 2012). Ostrander (2004) argues that if colleges and universities fail to address real-world issues and instead focus resources only toward traditional academic pursuits, they risk becoming irrelevant, unjustified financial burdens for their communities. A failure by higher education to institutionalize CE through intentional curricular and co-curricular development would represent a significant missed opportunity to address current social justice crises (Boyd & Brackmann, 2012; DePaola, 2014; LEAP, 2007) and at a more fundamental level, to establish a foundation of shared civic values that supports long-term community strength (Bringle, Studer, Wilson, Clayton, & Steinberg, 2011; DePaola, 2014).

The University of Kansas positions itself as a "major international research university" (KU Mission, 2015), and its strategic plan, *Bold Aspirations,* suggests that KU will bring "multidisciplinary solutions to global problems," and that it will "Engage Scholarship for Public Impact" as one of six primary areas of focus (KU Bold Aspirations, 2015). To fulfill these goals, new programs have been developed and the organization continues to evolve as outcomes are assessed. The present study identifies characteristics of the KU institutional environment that predict greater student perception of personal civic responsibility, but rather than assess the availability of programs, activities and resources, the study evaluates student interactions with existing resources to determine how well they do or do not predict the dependent variable outcome.

Ultimately, the results of the study will help KU to assess how student interactions with specific components of the KU environment may contribute to student civic engagement outcomes as well as measure how well KU, a state-supported and community embedded institution, operationalizes the community engagement goals in its mission. While the present study focuses specifically on data for students at the University of Kansas, the university is not completely unique in its mission, goals and institutional characteristics. The results of this study could also be used by other, similar institutions (e.g., public, four-year or research institutions) in identifying environmental components that might be related to the desired CE outcomes or in suggesting areas for additional study.

## CHAPTER TWO: Literature Review and Theoretical Framework

This chapter provides an overview of the theoretical frameworks used for the study and offers literature-based context and historical background for college student civic engagement, civic-mindedness and student perception of personal civic responsibility.

### Theoretical Framework: Literature Review

The present study has three theoretical frameworks. The input-environment-outcome (I-E-O) model is the central construct, and student involvement theory and student engagement theory provide secondary support.

**Input-Environment-Outcome Model**

Astin's (1991, 1993) I-E-O model is the primary framework for the present study. Often used as a theoretical foundation for student success research, Pascarella and Terenzini (2005) describe the I-E-O model as one that explores the interactions between inputs (student demographic characteristics as well as their pre-college experiences), environment (the actual college experience, including the different people and experiences that students encounter on and off campus), and outcomes (the resulting skills, attitudes, beliefs and behaviors that students possess upon departure).

Originally developed by Astin to assess outcomes for a graduate program (York, Gibson, & Rankin, 2015), the model has proven versatile and effective across multiple types of assessments. It operationalizes a system of evaluation that accounts for the power of student inputs in addition to institutional efforts when assessing student outcomes (Thurmond & Popkess-Vawter, 2015). The present study explicitly seeks to determine the impacts of student interaction with institutional environments in assessing outcomes, and the I-E-O model is appropriate in that it asserts the essential need to control for student inputs when measuring

environment influences (Astin, 1993; Terenzini & Reason, 2005; Thurmond & Popkess-Vawter, 2015).

**Student Involvement Theory**

Astin's (1984, 1999) *Theory of Student Involvement* is the first of two theoretical foundations that support the over-arching I-E-O framework and provide secondary support to the present study. Astin defines student involvement as "the amount of physical and psychological energy that the student devotes to the academic experience" (1999, p. 518). He suggests that involvement, by this definition, includes not only the classroom engagement of the student, but also the related pursuits of studying, participation in student organizations, and interaction with other students and faculty. The theory is behavioral more than motivational in nature, and is defined by five "postulates" regarding the nature of the involvement: 1) student investment of physical and psychological energy; 2) a "continuum" of level of involvement over time; 3) qualitative and quantitative aspects to the involvement; 4) student learning outcomes and their directly proportional relationship to quality and quantity of student involvement; and 5) the ability of institutional policy to increase student involvement (Astin, 1984, 1999).

Astin (1984, 1999) next contends that three traditional pedagogical theories are linked together into the theory of student involvement. First, he describes the *Resource Theory of Student Learning*, which suggests that student learning depends heavily on the libraries, physical facilities, financial resources and other resources available to support student learning (p. 520). Next, he explains the *Subject Matter Theory*, which suggests that student learning is heavily dependent upon "exposure to the right subject matter" (p. 520). Finally, he outlines the *Individualized (Eclectic) Theory*, which suggests that each student learns by individual means, and that the best approach to support student learning is to adapt instructional methods and

content to the individual needs of the student learner (p. 521). The theory of student involvement is fundamentally focused on how students become actively engaged in learning rather than passively absorbing knowledge as delivered from a separate authority.

**Student Engagement Theory**

Engagement theory suggests that the institutional role is critical in supporting student outcomes, and that the engagement activities are empirically designed to achieve institutional student outcomes (Kuh, 2009). Student engagement requires that institutional best practices are developed and implemented based upon assessment of student outcomes related to their engagement (Wolf-Wendel, Ward & Kinzie, 2009), and that engagement opportunities are "educationally purposeful" (p. 413). Astin's (1984, 1999) theory of student involvement offers an empirical foundation to the student-driven portion of engagement. Involvement theory tells us that a student must choose to become involved in an activity and must invest both time and resources (physical and psychological energy) into the involvement. Student engagement theory is not represented by a single theory; rather, it is composed of ongoing research by multiple experts. Kuh (2009) offers a definition of student engagement as provided in Chapter 1, and Wolf-Wendel, Ward, and Kinzie (2009) provide a more concise statement defining engagement: "Engagement is about two elements: what the student does and what the institution does" (p. 413). In short, where student *involvement* measures a student's participation in an activity or activities (both curricular and extra-curricular), student *engagement* assesses student participation in educationally purposeful activities that are specifically designed to support student educational outcomes (Kuh 2008, 2009; Wolf-Wendel, Ward, & Kinzie, 2009).

The concept of student engagement can be operationally explained through Kuh's (2008) "high-impact educational practices." These active-learning activities are empirically tested and

can be administered in multiple formats (Kuh, 2008), and have been shown to improve multiple student learning outcomes (Brownell & Swaner, 2009; Kuh, 2008). They include first-year seminars and experiences, common intellectual experiences such as a core curriculum, learning communities, writing-intensive courses, collaborative assignments and projects, undergraduate research, diversity and global learning, internships, and capstone courses/projects (Kuh, 2008). Kuh suggests that students should participate in at least two of these high-impact educational activities during college (Brownell & Swaner, 2009; Gonyea et al., 2008; Kuh, 2008). The present study explores outcomes related to two of Kuh's high-impact activities: undergraduate research, and community-based and service learning. Though not included in Kuh's (2008) original high-impact educational practices, other focus areas of the present study such as faculty mentorship, leadership training, and community service are also find empirical support for their contributions to positive outcomes and are discussed later in this chapter.

It is important to note the distinction between the different usages of the term "engagement" here. For purposes of this study, *student engagement* specifically references those interactions between the student and the institution as defined above. The term *civic engagement* uses a slightly different interpretation of the word "engagement," and does not necessarily require the same level of two-way "agreement" that Wolf-Wendel, Ward, & Kinzie (2009) suggest is central to the concept of student engagement with the higher education institution.

### Civic Engagement Context

The present study examines institutional predictors of student civic-mindedness, so before moving ahead, a discussion of the context of civic engagement is necessary. This context is used to better understand how the KU institutional environment contributes to student perceptions of personal civic responsibility. At a national level, an informed citizenry that is

engaged with the day-to-day functioning of the community helps its government to more effectively function (Bringle & Steinberg, 2010; Boyd & Brackmann, 2012; Wandersman & Florin, 1999). According to Liberal Education and America's Promise (LEAP), civic learning should be included in the core educational outcomes for all higher education institutions (DePaola, 2014; LEAP, 2007). Further, the American Association of Colleges and Universities (AACU) contends that colleges and universities are responsible not only for producing employable graduates, but also that they must produce graduates prepared to become active citizens (AACU, 2012, as cited in DePaola, 2014, p. 37). In addition to providing vocational and professional training, colleges and universities prepare students to enter their communities following graduation with employment skills and concepts of civic and moral responsibility (Colby, Beaumont, & Stephens, 2003; Lott, 2013). Bringle and Steinberg (2010) and Bringle et al. (2011, p. 152) define the concept of the "civic-minded graduate" as follows:

> *"...a person who has completed a course of study…and has the capacity and desire to work with others to achieve the common good. 'Civic-mindedness' refers to a person's inclination or disposition to be knowledgeable of and involved in the community, and to have a commitment to act upon a sense of responsibility as a member of that community."*

They further suggest that involvement such as service learning, political engagement, volunteer service and other curricular and co-curricular activities are responsible for the development of civic-mindedness and a sense of personal civic responsibility.

The importance of civic engagement and responsibility is not new. One visible expression of its value during the last century came with the President's Commission on Higher Education in 1947 that stated, in part, "Perhaps [higher education's] most important role is to serve as an instrument of social transition, and its responsibilities are defined in terms of the kind

of civilization society hopes to build" (as cited in Moore, 2012, p. 70). Civic engagement is not a single action or activity; rather, it is composed of a variety of individual and collective actions designed to improve one's community in some way (APA Online, 2015; Bowman & Brandenberger, 2012; Ehrlich, 2000; Jugert et al., 2013). AACU's "VALUE" Rubric (2010) suggests that, in addition to civic behaviors, civic engagement is also composed of a "commitment to and valuation of social action, social justice orientation, leadership skills, perspective taking, and intercultural knowledge and understanding" (Bowman 2010, p. 30). Civic engagement empowers citizens to create beneficial changes in their communities that support a more democratic and inclusive system (Boyd & Brackman, 2012). Ostrander (2004) contends that a true civic-engagement perspective requires research and teaching to "engage with issues and questions that people in communities off campus name as important" rather than solely focusing on the subject matter that the academy itself deems relevant (p. 77). This suggests the importance of an institution's recognition of and engagement with community issues in addition to pure academic pursuits.

Civic engagement most obviously benefits the communities in which students are engaged and active. In some cases, these benefits are derived through direct community interaction and partnership, such as Drexel University's Dornsife Center for Neighborhood Partnerships (Britton & Aires, 2014), built for the express purpose of community outreach, engagement and improvement. Centers like this not only create intentional programming that improves the relationship between the university and the community, they also serve as a hub and resource for existing engagement and outreach programs.

Other important community and institutional benefits arise from civic engagement. Effective civic engagement experiences such as service learning are shown to increase students'

motivation for and commitment to further service and engagement (Glass, 2012; Kanter &

Schneider, 2013) as well as promote higher civic values overall (Lott, 2013). Students share an

increased sense of civic responsibility (Bringle & Hatcher, 1995; Godfrey, Illes, & Berry, 2005;

Weiler et al., 2013), and in one example, reported increased affinity toward their university as

result of service learning experience participation (Wilder, Berle, Knauft, & Brackmann, 2012).

Community engagement by colleges and universities has a measurable economic impact

(Drucker & Goldstein, 2007; Dubb & Howard, 2007; Moore, 2012). In the earlier example of

Drexel University's Dornsife Center for Neighborhood Partnerships, some benefits came in the

form of tangible community benefits of economic improvement and citizens' access to additional

services in the surrounding neighborhood (Britton & Aires, 2014). In another example, students

created a tourism program for a nearby town that was struggling economically (Deale, 2009).

Yet another initiative involved the City of Omaha and local universities, designed to create

programs to combat youth violence and crime in the community, build neighborhood

associations, and revitalize targeted communities (Fahey & Landow, 2005). An initiative in rural

areas of Idaho was designed to provide development and support for small towns that generally

lacked sufficient resources of their own (Laninga, Austin, & McClure, 2011). Miolo and Parys

(2012) reported significant improvements in community literacy and the establishment of

tutoring programs as a result of other college and university civic engagement initiatives.

The benefits of civic engagement extend beyond tangible outcomes within the

community and at the national level, however, to include many positive outcomes for students,

themselves. Students engaged in service learning have shown improvement in problem-solving

skills as well as self-esteem (Weiler et al., 2013). Critical thinking improved (Bowie, 2009;

Bringle & Steinberg, 2010; Kanter & Schneider, 2013) and even reported levels of racism were

reduced more for students who had participated in service learning (Bringle & Steinberg, 2010; Myers-Lipton, 1996). In another project, student participants achieved a greater sense of both individual and social responsibility as well as higher levels of "cultural knowledge and competence" (Miolo & Parys, 2012, p. 64).

Students' personal beliefs, values and previous experiences predict subsequent civic engagement (Bringle & Steinberg, 2010; Bringle et al., 2011, Cooper et al., 2013; Lott, 2013; Middaugh & Kahne, 2013). A student's civic mindset is shaped and formed by previous experiences as well as those occurring while in college (Bringle &Steinberg, 2010; Bringle et al., 2011; Hellman et al., 2006) and is also predictive of civic engagement. Getto and Rivait (2012) describe this combination of experiences and values as student "civic histories," contending that they have significant importance not only in predicting subsequent engagement, but also to help institutions craft engagement opportunities that are meaningful and will provide positive experiences to encourage future engagement. Notably, students whose previous experiences with civic engagement or community service were positive are more likely to engage later than students whose experiences were less positive (Jugert et al., 2013). Negative prior service experiences may have a negative effect on a students' self-efficacy for CE or intention to civically engage later. The present study does not capture whether or not students' prior civic engagement experiences were perceived positively or negatively, and this limitation is discussed in Chapter 3.

## Institutionalization of Civic Engagement

Institutionalization of civic engagement is the idea that the institution itself has incorporated civic engagement into its mission (sometimes literally) and that the campus culture receives deserved attention as a central influence on student outcomes (Billings & Terkla, 2011;

Hoffman, 2006). The present study explores multiple components of the institutional environment that represent the level to which KU has institutionalized the concept of civic engagement—explicitly and otherwise—and how the indicators of that institutionalization relate to student perception of personal civic responsibility.

McLellan and Youniss (2001, 2003) suggest that institutions that develop coordinated, planned opportunities for service may stimulate student interest in civic engagement. Billings and Terkla (2011) note that the campus culture affects "students' civic values and beliefs, which can in turn affect their level of civic engagement activities," (p. 96). By constructing a campus culture that values active citizenship and promotes civic-mindedness in students, institutions can increase actual civic engagement (Billings & Terkla, 2011; Boyd & Brackmann, 2012; McLellan & Youniss, 2003) as well as boost students' self-efficacy for engagement and intent to become civically engaged (Billings & Terkla, 2011).

The American Association of Colleges and Universities (AACU) produced a publication entitled *A Crucible Moment: College Learning and Democracy's Future,* suggesting the importance of civic learning in creating graduates who are not simply employable, but who will become civically engaged (DePaola, 2014; AACU, 2012). Prior to the AACU publication, Liberal Education and America's Promise (LEAP) stated it more bluntly: "…civic engagement in higher education is crucial to addressing real, ongoing crises in social justice that threaten to destabilize the vitality of American democracy" (DePaola, 2014, p. 38; LEAP, 2007). Interwoven with an institutional culture of responsibility is the importance of the availability of culturally diverse interactions for students (Bowman, 2010; Bowman & Brandenberger, 2012; Gurin et al., 2002). Student attitudes and perceptions are influenced by college diversity experiences, and while larger numbers of diverse students at an institution does improve civic

interest on the whole, that positive impact still depends on the number of encounters with diversity that students actually experience (Bowman, 2010, p. 32; Chang, Astin, & Kim, 2004; Gurin, 1999).

Institutionalization of civic engagement and responsibility manifests itself within classroom teaching and pedagogy (Glass, 2012). Students gave greater value to engaged citizenship "when higher education faculty members used pedagogical strategies that addressed broad social concerns and particular political problems on a local level…" (p. 41). Again, as students were shown the value of civic engagement through the actions of the institution (in this case, the faculty), they attached greater importance to a civic engagement mindset. Direct civics education is also important in developing civic-minded graduates who are engaged in their communities (Ahranjani et al., 2013; DePaola, 2014; Kanter & Schneider, 2013). Unfortunately, in the wake of new education standards that shift the focus from critical thinking to standardized testing, schools have made civic education a lower priority (Ahranjani et al., 2013; Guardian of Democracy, 2011; Guisbond et al., 2012).

### Student Perception of Personal Civic Responsibility

The present study uses correlational analysis to evaluate relationships between independent variable predictors and student perception of personal civic responsibility, also referred to as civic-mindedness. This dependent variable construct is used as a proxy for actual civic engagement because this study is not longitudinal, and therefore cannot measure the actual effects of the independent variables. Civic-mindedness can be established, however, using outcomes for related metrics. First, prior research suggests that students who express greater self-efficacy for engagement are more likely to become civically engaged (Ahranjani et al., 2013; Barry, 2011; Billings & Terkla, 2011; Bringle & Steinberg, 2010; Cooper et al., 2013; Glass,

2012; Hellman et al., 2006; Jugert et al., 2013). Self-efficacy may be developed through self-reflection as part of service learning (Barry, 2011; Glass, 2012), programming that creates civic-mindedness among students and graduates (Bringle & Steinberg, 2010; Bringle et al., 2011) and through institutionalization of the value of civic engagement itself (Billings & Terkla, 2011). Billings and Terkla (2011) suggest that strong student self-efficacy for civic engagement may serve as a powerful motivator for ongoing civic engagement. They also note the importance of the development of students' leadership abilities as a tool for creating empowerment and boosting self-efficacy (p. 95). Conversely, Glass (2012) noted that students who had less confidence or self-efficacy were less likely to take on leadership roles in political activity, but that civic reflection following engagement may help to improve confidence levels. If faculty "used pedagogical strategies that addressed broad social concerns and particular political problems on a local level, students came to attach significant value to engaged citizenship" (p. 41). Kanter and Schneider (2013) echo the importance of incorporating civic engagement into the fabric of all academic programs, regardless of the ultimate vocation. Effective instruction in government and civics improves student self-efficacy (Ahranjani et al., 2013) as does participation in service learning (Cooper et al., 2013). Finally, McLellan and Youniss (2003) suggest that student participation in service is not a random action, but rather occurs as the result of available resources and skills (self-efficacy) as well as social capital.

Bringle and Steinberg (2010) and Bringle et al. (2011) describe the civic-minded graduate as a student who manifests a level of competence in the following seven areas: 1) Academic knowledge and technical skills, 2) knowledge of volunteer opportunities and nonprofit organizations, 3) knowledge of contemporary social issues, 4) listening and communication skills, 5) diversity skills, 6) self-efficacy and 7) behavioral intentions. (Bringle & Steinberg,

2010; Bringle et al., 2011). These components form the foundation for the creation of the dependent variable construct in the present study, though the study was designed neither as a direct test nor an assessment of Bringle and Steinberg's civic-mindedness concept.

The seventh component of civic-mindedness concept, behavioral intention, is where civic-minded students not only express intentions to engage, but also become civically engaged. Students' personal values tend to be inconsistent with their actions during this stage of development (Glass, 2012), but in general, those who express an intention to engage civically are also more likely to follow through and become engaged (Bringle & Steinberg, 2010; Hellman et al., 2006; Jugert et al., 2013). Ajzen's (1988, 1991) theory of planned behavior helps to explain how behavioral norms influence students' intentions; that is, the expectations of their colleagues, mentors and the institution itself influence the nature of their ultimate intentions to take action. Hellman et al. (2006) found that students who felt most connected to their communities were most likely to express intention to participate in community service. Jugert et al. (2013) note the importance of positive previous experience with service and engagement as a powerful predictor of intentions to serve in the future. Again, the present study uses student intentions and ability to become civically engaged, as measured by civic-mindedness and perception of personal civic responsibility, as a proxy for predicting actual civic engagement later.

**Student Interaction with the KU Institutional Environment**

Student interaction with components of the institutional environment may correlate with higher levels of student perception of personal civic responsibility. This section describes the literature pertaining to those environmental components of interest for the present study: Faculty/Staff Mentoring Relationships, Undergraduate Research, Student Involvement, and Community Service and Service Learning. The fifth component, General Civic Engagement, was

thoroughly addressed in the earlier section regarding Civic Engagement Context and is therefore not addressed again here.

One of the key independent variables used in this study is faculty/staff mentoring relationships. Campbell and Campbell (1997) described mentoring as "a situation in which a more-experienced member of an organization maintains a relationship with a less-experienced, often new member to the organization and provides information, support, and guidance so as to enhance the less-experienced member's chances of success in the organization…" (p. 727). This definition is business-oriented in its wording, but still provides the basic foundation for the concept as applied in the present study as well as existing literature. According to the MSL survey, a mentor is defined as "a person who intentionally assists your growth or connects you to opportunities for career or personal development" (MSL, 2015)

Mentoring relationships during college have been shown to improve student outcomes (Campbell et al., 2012; Cohen, 1993; Crisp & Cruz, 2009) though less research exists on outcomes other than student persistence and academic grade point averages (Crisp & Cruz, 2009) and psychosocial or career benefits (Campbell et al., 2012; Kram, 1985). The researcher was unable to find any existing research exploring links between faculty and staff mentoring relationships and students' perceptions of personal civic responsibility.

The relationship between undergraduate research and student perception of personal civic responsibility is another focus of the present study. Undergraduate students actively participating in research with faculty is on the rise (Hu et al., 2007) and has been associated with persistence and likelihood to pursue graduate study (Hathaway, Nagda, & Gregerman, 2002; Hu et al., 2007; Nagda, Gregerman, Jonides, Hippel, & Lerner, 1998; Pascarella &Terenzini, 2005). Undergraduate research experiences have also been linked to later success in graduate school

(Nnadozie, Ishiyama, & Chon, 2001). Overall student satisfaction positively correlates with undergraduate research experience (Hu et al., 2007; Justice et al., 2007; Pascarella & Terenzini, 2005; Volkwein & Carbone, 1994) as well as greater clarity for student educational and career options (Hu et al., 2007; Hu, Scheuch, Schwartz, Gayles & Li, 2008; Hu, Scheuch, & Gayles, 2009; Nagda et al., 1998). Students in a recent study indicated that their undergraduate research experiences improved their higher-order thinking ability as well as admissibility to graduate degree programs (Johnson Schmitz & Havholm, 2015).

Undergraduate research is included as one of ten best practices in higher education (Kuh, 2008), with multiple benefits, including practical and applied learning experience and skills development. As with other types of involvement, Hu et al. (2007) caution that the positive outcomes for undergraduate research are also dependent upon the nature of the research experience, and whether or not the student perceived the experience to be positive. In addition, the development of the research experience must be completed such that both the student and the faculty member are comfortable with expected outcomes and have sufficient commitment (Mancha & Yoder, 2014). While undergraduate research has been shown to have positive outcomes, it has not been studied in relation to future civic engagement, self-efficacy for civic engagement, or intentions to become civically engaged. Because of its inclusion in the KU strategic plan, however, and based upon the researcher's individual interest, the present study explores the relationship between undergraduate research participation and student civic-mindedness.

Much of the literature related to civic engagement is connected to community service and service learning. This study specifically explores the relationship between student community service/service learning participation and student perception of personal civic responsibility. The

MSL instrument does not specifically distinguish between service learning and general community service, and although one of the variables selected for assessment is closely related to service learning as a component of classroom curriculum, the present study generally evaluates community service and service learning together as a single construct. Limitations of this approach are discussed later.

McLellan and Youniss (2003) studied different types of service, such as "functional," that included menial task work (cleaning, packing boxes, etc.) with which there was no direct interaction with the recipients of the service. The other end of the spectrum included direct interactive service activities such as volunteering at a nursing home to work directly with residents for whom the need was readily apparent (p. 50). They found that development of student self-efficacy is generally greater if previous service is direct and interactive, and when the needs of those "receiving" the service are evident (McLellan & Youniss, 2001; McLellan & Youniss, 2003; Youniss & Yates, 1997). Differences also exist in student outcomes based upon whether or not the service or engagement is compulsory or voluntary (McLellan & Youniss, 2003), though the present study does not specifically measure whether or not service experiences were voluntary or compulsory. For example, voluntary service suggests that the student could choose not to participate and would experience no negative consequences such as a reduced letter grade or expulsion from a club or organization. It cannot be assumed that service undertaken as part of a class was compulsory, or that service undertaken individually was also inherently voluntary.

Many outcomes for service learning and community service are similar (Astin, Vogelgesang, Ikeda, & Yee, 2000; Vogelgesang & Astin, 2000), though service learning is differentiated from typical community service by its incorporation of service reflection and/or

academic integration of classroom learning as an essential component of the experience (Cooper et al., 2013; Donahue, 1999; Jacoby, 1996). Rather than performing service solely to provide a benefit to the community, service learning is structured so that the activity or service is built within an instructional framework (a credit-bearing course, for example) that includes reflection and integration of knowledge (Bringle & Hatcher, 1995; Cooper, 2014; Jacoby, 1996; McDonald & Dominguez, 2015; Weiler et al., 2013). While one important goal of service learning is to fulfill a community need (Barry, 2011; McDonald & Dominguez, 2015; Weiler et al., 2013), perhaps the most important goal of service learning is to create civic-minded graduates (Bringle et al., 1999, Bringle & Steinberg, 2010; Fenzel & Peyrot, 2005; Weiler et al., 2013) and to "connect students to their communities as engaged citizens who advance their own learning of relevant content knowledge with skills and value development in extended learning activities outside of the classroom" (Mann et al., 2015, p. 58).

Service learning has been incorporated into the curriculum in a variety of ways. Barry (2011) describes a project through which students in a research course were instructed to provide research for a local non-profit, resulting in both benefit to the non-profit agency as well as engaged learning for the students. Project FOCUS (Fostering Our Community's Understanding of Science) was implemented at the University of Georgia, and results indicated that students who participated in the program showed a greater likelihood for ongoing community and civic engagement (Wilder et al., 2012, p. 126). Boyer's (1996) concept of "scholarship of engagement" was applied to another service learning program in which students at a local college collaborated with the community to develop a tourism and marketing project designed to help lift the community from economic depression (Deale, 2009). With this and the other service learning initiatives, the benefit of the experience went both directions: the community benefitted

from the volunteer assistance, and the students benefitted by learning more about the subject matter and social cause through reflection.

Several studies suggest that service learning is a powerful predictor for later civic engagement and is linked to student self-efficacy for engagement (Astin et al., 2000; Barry, 2011, Cooper et al., 2013; Glass, 2012) as well as creating a civic identity of engagement (Middaugh & Kahne, 2013) and overall propensity for increased civic engagement (Barry, 2011; Boyd & Brackman, 2012; Cooper, 2014; Weiler et al., 2013; Wilder et al., 2012). Service learning is a powerful pedagogical tool for students to become better engaged in the classroom as well as build and improve a sense of civic responsibility. (Cooper et al., 2013; Cooper, 2014, p. 415; Ehrlich, 2000; Furco & Root, 2010; McDonald & Dominguez, 2015). Furthermore, multiple studies suggest that service learning provides benefits above and beyond those of traditional community service (Astin et al., 2000; Fenzel & Peyrot, 2005; Howard, 2001; Jacoby, 1996; Warchal & Ruiz, 2004).

To develop a civic mindset, students must first have an awareness of community service opportunities available (Bringle & Steinberg, 2010). Students who have participated in community service previously, and whose experiences were positive, are more likely to participate again (Bringle & Steinberg, 2010; DePaola, 2014; Getto & Rivait, 2012; Jugert et al., 2013; McLellan & Youniss, 2003; Weiler et al., 2013). Bringle et al. (2011) note that student volunteering is highest during high school, but drops off during college. Even so, previous community service is a strong predictor for subsequent engagement (Bringle & Steinberg, 2010; Getto & Rivait, 2012; Jugert et al., 2013; Weiler et al., 2013; DePaola, 2014). For example, Getto and Rivait (2012) note that students who have previously engaged in traditional community service are more likely to engage again, and likewise, students who engaged in

service learning were significantly more likely to become civically engaged later (Miolo &

Parys, 2012; Weiler et al., 2013). More broadly, participation in either general community

service or service learning have been shown to promote civic responsibility (Astin & Sax, 1998;

Aston, Sax, & Avalos, 1999) and improve attitudes regarding social issues as well as predict

subsequent community service following graduation (Fenzel & Peyrot, 2005).

Finally, the present study explores relationships between civic-mindedness and the types

of on-campus activities in which students are involved. Brown's (2011) study of extracurricular

involvement and its effect on civic engagement suggested a clear, positive relationship between

the two. In general, student involvement has been shown to have positive effects on general

student outcomes (Astin, 1984, 1999; Brown, 2011; Terenzini & Reason, 2005; Zacherman &

Foubert, 2014), though over-involvement has also been shown to have deleterious effects on

academic performance (Kuh et al., 2008).

<h2 style="text-align:center">Student Demographic Considerations</h2>

Student civic-mindedness may be related to demographic characteristics and other types

of "inputs" over which the institution has little control, though outcomes in prior research tend to

vary. The present study controls for these variables as a way to better isolate the true relationship

with the independent variables also being studied. Demographic control variables included in the

study are gender, race, year in school, college academic performance, parent educational

attainment, and pre-college civic engagement.

Brown (2011) found no significant differences with regard to gender and civic

engagement, but Ferrari et al. (2014) noted statistically significant differences in propensity

toward volunteering by women versus men. The scope of the present study is broader than pure

volunteerism, but the demographic variable was still considered. High school and college

academic performance as well as college program of study may predict civic engagement

through volunteerism (Cruce & Moore III, 2007; Ferrari, Haq, & Williams, 2014) though the

existing research is very limited. The present study focused on current college academic

performance, but high school academics as well as current academic program in college were not

included due to insufficient data collected in the study. Finally, parental education level and

overall social capital have been shown to have a positive effect on student civic involvement

(Brown, 2011).

**Summary**

A review of the literature about civic engagement and responsibility provides insight into

relationships between student civic responsibility and participation with institutional

environmental factors such as faculty/staff mentoring relationships, undergraduate research,

community service and service learning, general civic engagement, and co- and extra-curricular

involvement. The present study seeks to provide additional insight specifically related to the

nature of these relationships for KU students.

**CHAPTER THREE: Methodology**

**Overview and Dataset**

The purpose of this study is to explore the relationship between student perception of

personal civic responsibility and student participation and interaction with specific institutional

environmental contexts at KU. This study provides a secondary analysis of data using results

from the 2015 Multi-Institutional Study of Leadership (MSL), which "is an annual, national

survey of leadership development among college students" that "examines the role of higher

education in developing leadership capacities with a focus on specific environmental conditions

that foster leadership development" (MSL Overview, p. 1). The MSL measures indicators of

student leadership, and is designed to help institutions assess not only what kinds of leaders their

students are, but also how their students compare to other institutions in the study. Individually,

institutions may use the data to explore relationships and correlations between student input

factors, institutional environmental interventions, and student leadership outcomes.

The MSL instrument has been administered since 2006, and is based upon the Social

Change Model of Leadership Development (HERI, 1996). In 2015, 97 schools participated in

data collection resulting in more than 311,000 student responses (MSL, 2015). To date, more

than 90 publications, from peer-reviewed articles to theses and dissertations, have referenced the

MSL or used data from the study in subsequent research (MSL, 2015).

The present study uses MSL study data for The University of Kansas (KU), a large,

public, research extensive institution in Lawrence, Kansas. The MSL instrument was

administered electronically. One invitation email and up to four follow-up reminder emails were

sent between February and April of 2015. Of a total of 4,000 KU students solicited for

participation in the survey, 2,387 students submitted partial or completed surveys. Missing data

were accounted for and are discussed later in this chapter. Females composed 64% of KU

respondents (compared with 50.5% female in the general KU population), and 76% were White

(compared with 69.7% in the general KU population). The percentage of students under the age

of 24 was 81.3%, and just over one-third lived on campus. Most students were enrolled full-time

(93%) and more than a quarter (27%) transferred into KU rather than beginning at KU. The

sample set was somewhat representative of the KU student population with regard to racial

classification, with some exceptions as shown in pages 3-4 of Chapter 1. A detailed overview of

respondent characteristics is provided in the descriptives section of Chapter 4.

### Research Questions

The research questions for the present study are restated here to provide an overall guide

to the variables studied:

1) *Based upon MSL survey results, how frequently do undergraduate KU students report*
*that faculty and staff mentors assist them with their personal development, participate in*
*research with faculty, participate in community service and/or service learning, become*
*civically engaged, and participate in activities and organizations focused on academic*
*interests, student leadership, multi-cultural interests, general interests, social fraternities*
*and sororities, sports and recreation, and service and advocacy?*

2) *What are KU undergraduate students' perceptions of their own civic responsibility?*

3) *How do gender, year in school, parent educational attainment, student college academic*
*performance, and pre-college experience with civic engagement relate to undergraduate*
*KU students' perceptions of personal civic responsibility?*

4) *To what extent do faculty/staff mentorship, undergraduate research, community*
*service/service learning, general civic engagement during college, and type of*

*involvement in student organizations or activities individually correlate with*

*undergraduate KU students' perceptions of personal civic responsibility?*

5) *Controlling for relevant demographic variables, to what extent are undergraduate KU*

*students' perceptions of personal civic responsibility predicted by faculty/staff*

*mentorship, undergraduate research, community service/service learning, general civic*

*engagement during college, and type of involvement in student organizations or*

*activities?*

## Variables

The MSL collects self-reported student responses to measure a variety of student leadership outcomes, including many related to civic engagement and community service. It uses multiple data points, some of which are grouped into conceptual constructs through the use of composite variables. Alpha reliability analyses were completed on composite variable sets where appropriate, and scores (reported in each section below) suggest high internal consistency and reliability for each composite variable.

### Dependent Variable

The MSL instrument does not ask questions that directly measure student intention to become civically engaged. Rather, it asks questions that infer student intention based upon self-assessment of personal civic responsibility. For example, one question that is included in the dependent variable composite asks the respondent to what extent she/he agrees with the statement "It is important to me that I play an active role in my communities." Each of the variables used in the dependent variable composite similarly tracks student perception and intention.

The dependent variable construct was created by combining six variables that represent the level to which a student has expressed her or his perception of personal civic responsibility. Cronbach's Alpha (α) was used to determine the level to which the component variables were internally consistent with each other, and a mean value was calculated across the variables (α = .91) to create the composite: *Student Perception of Personal Civic Responsibility*. Each question employed a Likert Scale of five values for measurement: "Strongly Disagree," "Disagree," "Neutral," "Agree" and "Strongly Agree."

- I work with others to make my communities better places.

- I participate in activities that contribute to the common good.

- I believe my work has a greater purpose for the larger community.

- I believe I have responsibilities to my community.

- I value opportunities that allow me to contribute to my community.

- It is important to me that I play an active role in my communities.

**Independent Variables**

As outlined in Chapter 2, the literature suggests factors that may predict student perceptions of personal civic responsibility, including self-efficacy for civic engagement (Ahranjani et al., 2013; Barry, 2011; Billings & Terkla, 2011; Bringle & Steinberg, 2010; Cooper et al., 2013; Glass, 2012;, Hellman et al., 2006; Jugert et al., 2013), and an expressed intention to become civically engaged (Bringle & Steinberg, 2010; Hellman et al., 2006, Jugert et al., 2013). The following independent variables and constructs were selected for evaluation based upon existing literature that suggests relationships with the dependent variable, institutionally-specific interests within the University of Kansas, and reliability assessment of variables using Cronbach's alpha.

**Faculty & Staff Mentoring**

The MSL instrument defines a mentor as "a person who intentionally assists your growth or connects you to opportunities for career or personal development." Mentoring data were collected using four questions designed to capture student perceptions 1) whether or not they have faculty or staff mentors, and 2) if yes, how those mentors have contributed to their success during college. The MSL instrument collected additional mentor "types," including employer, community member, parent/guardian or other student, but the present study focused only on "Faculty/Instructor" or "Academic or Student Affairs Professional Staff."

- *Mentor Type:* Since you started at your current college/university, have you been mentored by the following types of people (Yes/No):

    o   Faculty/Instructor

    o   Student/Academic Affairs Professional Staff

- *Mentor Assistance:* Since you started at your current college/university, how often have the following types of mentors assisted you in your growth or development? (Likert Scale of four options: "Never, "Once," "Sometimes" and "Very Often")

    o   Faculty/Instructor

    o   Academic or Student Affairs Professional Staff

It is important to note that student respondents were not presented with the second *Mentor Assistance* question unless they had responded affirmatively to the presence of a mentor in the *Mentor Type* variable. As a result, in the final analysis, only the *mentor assistance* variable was used, since it was assumed that any response to that question implied the existence of that type of mentor. This is explained further in Chapter 4.

**Undergraduate Research**

The undergraduate research component was measured by a single question in the MSL instrument which may provide additional support for the value of these research opportunities at KU as they relate to CE outcomes. The following question is used to address undergraduate research experience:

- *Undergraduate Research:* Check all of the following activities you engaged in during your college experience:
    - Research with a faculty member (Yes/No)

**Community Service and Service Learning Participation**

Community service and service learning participation data were collected using the next set of variables that are focused on the nature of the individual service, and include additional measures for total time contributed (including for off-campus or non-institutional service). These variables, evaluated individually, explore student participation in community service on a monthly basis as well as through Alternative Spring Break programs. Note that student participation in community service was separately included in the Student Extracurricular Involvement section as part of an overall assessment of student involvement through grouped variable constructs.

- *Monthly Community Service:* In an average month, do you engage in any community service? (Yes/No)

- *Alternative Spring Break:* Since starting college, to what degree have you been involved in the following types of leadership training or education? (Likert Scale of four options: "Never, "Once," "Sometimes" and "Often")

o    Short-Term Service Immersion (e.g., alternative spring break, January term

service project)

The next question involves time committed to community service, splits service into five

categories based upon how the service was coordinated (part of class, on your own, etc.).

Responses to this question are measured using the following response options: "None," "1-5

hours," "6-10 hours," "11-15 hours," "16-20 hours," "21-25 hours," "26-10 hours," and "31

hours or more." Note that community service "as part of a class" is generally considered to be

service learning, but the present study did not explicitly describe this category as such. Each of

these variables were considered individually in later analysis.

- *Community Service Hours:* In an average month, approximately how many hours do you

  engage in community service…

  o    As part of a class?

  o    As part of a work study experience?

  o    With a campus student organization?

  o    As part of a community organization unaffiliated with your school?

  o    On your own?

**General Civic Engagement Participation**

General student civic engagement was measured using the next three variable constructs.

Instead of individually evaluating each variable response, composite variables were constructed.

The first question related to civic engagement uses a frequency scale of four values: "Never,"

"Once," "Sometimes," and "Often," to measure level of participation in several activities. The

composite variable contains 10 items ($\alpha = .91$). The mean response was derived across all 10

items to create a single, recoded variable for *Civic Engagement Frequency* where at least six of

the ten component variables had student responses. While this reduced the number of available responses for the composite variable, this helped to ensure that the composite variable value was less likely to create a skewed response.

- How often have you engaged in the following activities during your college experience?
    - Performed community service
    - Acted to benefit the common good or protect the environment
    - Been actively involved with an organization that addresses a social or environmental problem
    - Been actively involved with an organization that addresses the concerns of a specific community (e.g., Academic council, neighborhood association)
    - Communicated with campus or community leaders about a pressing concern
    - Took action in the community to try to address a social or environmental problem
    - Worked with others to make the campus or community a better place
    - Acted to raise awareness about a campus, community, or global problem
    - Took part in a protest, rally, march or demonstration
    - Worked with others to address social inequality

The next two variables assess frequency of involvement with specific types of off-campus community organizations, through both general participation as well as leadership positions. Both questions measure responses using a Frequency Scale of five values: "Never," "Once," "Sometimes," "Many Times," and "Much of the time." The two variables were combined into a single composite variable ($\alpha = .79$). The mean response was derived across both items to create a single, recoded variable for *Community Organization Involvement*.

- Since starting college, how often have you:

o Been an involved member in an off-campus community organization(s) (e.g.,

Parent-Teacher Association, Church group)?

o Held a leadership position in an off-campus community organization(s) (e.g.,

Officer in a club or organization, leader in youth group, chairperson of

committee)?

The final question in the civic engagement section measures the extent to which students

engage in discussion surrounding major social issues. This variable was measured using a

frequency scale of four values: "Never," "Sometimes," "Often," and "Very Often" and was

analyzed individually (*Discussion of Major Social Issues).*

- During interactions with other students outside of class, how often have you done each of

the following in an average school year?

o Discussed major social issues such as peace, human rights, and justice

**Co- and Extracurricular Involvement**

Data regarding student involvement in clubs and organizations was analyzed in two

ways. The first part of the analysis involved a simple count of the total number of different types

of activities students selected. A new, composite count variable was created from this total

(*Involvement Total Count*) by summing the "yes" responses for each activity. This total count

was used for informational purposes only, and was not included in subsequent correlation or

regression analysis. Next, activities were grouped into seven categories based on similarity of the

type of activity. For example, two separate variable responses for activities relating to sports

were grouped into a single composite to evaluate general sports and recreation participation. A

"yes" response to either or both of the two component items resulted in a "yes" value for the

composite. The following two questions provide the data for these variables, each soliciting yes/no responses:

- Have you been involved in the following kinds of student groups during college?

- Check all of the following activities you engaged in DURING your college experience:

It is important to note that the general involvement categories listed next were created by the researcher, and were not available to the students responding to the survey instrument. The survey instrument simply asked for student involvement from a large list of options; the researcher grouped the options into themed categories during analysis. In addition, some types of involvement could have reasonably been assigned to more than one category. In these instances, the researcher assigned the item to the grouping that seemed *most* appropriate. The involvement constructs and included questions are listed below:

*Academic Interest*

- Academic/Departmental/Professional (e.g., Pre-Law Society, an academic fraternity, Engineering Club)

- Learning community or other formal program where groups of students take two or more classes together

- Practicum, internship, field experience, co-op experience, or clinical experience

- Honor Societies (e.g., Omicron Delta Kappa [ODK], Mortar Board, Phi Beta Kappa)

*Student Leadership*

- Student Governance (e.g., Student Government Association, Residence Hall Association, Interfraternity Council)

- New Student Transitions (e.g., Admissions ambassador, orientation advisor)

- o Peer Helper (e.g., Academic tutors, peer health educators)

*Multi-Cultural*

- o Identity-Based/Multicultural Organizations (e.g., racial/ethnic groups, LGBT groups, women's groups)

- o Multi-Cultural Social Fraternities and Sororities (e.g., National Pan-Hellenic Council [NPHC] groups such as Alpha Phi Alpha Fraternity Inc., or Latino Greek Council groups such as Lambda Theta Alpha)

*General Interest*

- o Arts/Theater/Music (e.g., Theater group, marching Band, Photography Club)

- o Campus-Wide Programming (e.g., Program board, film series board, multicultural programming committee)

- o Military (e.g., ROTC, cadet corps)

- o Media (e.g., Campus Radio, Student Newspaper)

- o Political (e.g., College Democrats, College Republicans, Libertarians)

- o Religious (e.g., Fellowship of Christian Athletes, Hillel)

- o Social/Special Interest (e.g., Gardening Club, Sign Language Club, Chess Club)

- o International Interest (e.g., German Club, Foreign Language Club)

*Social Fraternities and Sororities*

- o Social Fraternities or Sororities (e.g., Panhellenic or Interfraternity Council groups such as Sigma Phi Epsilon or Kappa Kappa Gamma)

*Sports and Recreation*

- o Sports-Intercollegiate or Varsity (e.g., NCAA Hockey, Varsity Soccer)

- o Recreational (e.g., Climbing Club, Hiking Group)

*Service and Advocacy*

- o   Advocacy (e.g., Students Against Sweatshops, Amnesty International)

- o   Service (e.g., Circle K, Habitat for Humanity)

**Demographic Variables**

Prior research suggests relationships between student civic engagement and other factors such as academic performance and college program of study (Cruce & Moore III, 2007; Ferrari et al., 2014), parental education level and overall social capital (Brown, 2011), and gender (Ferrari et al., 2014). Race and ethnicity data were included in the study for informational purposes, though no prior research has suggested any relationship between race and civic engagement or responsibility. Other factors such as sexual orientation, transgender identity, age and ability/disability were excluded from individual analysis in the present study because sample sizes were insufficient for statistically significant and/or generalizable results. Demographic and control variables that have been included in analyses are listed in the following section. In some cases, the sample size was nearly insufficient for effective analysis, and these occurrences will be noted in Chapter 4. Sample size will be discussed further in the Limitations section of this chapter.

**Pre-College Community Service Experience**

Pre-college community service experience is a strong predictor of subsequent service during college (Astin & Sax, 1998). While not a "demographic" variable, it is included here as an important control variable as pre-college service does have the potential to affect study results. The following questions are used to assess pre-college service and engagement, and are measured on a frequency scale of four values: "Never," "Sometimes," "Often," and "Very

Often." The mean response was derived across all four variables, described below, to create a new *Pre-College Engagement* composite ($\alpha = .76$).

- Looking back to before you started college, how often did you engage in the following activities:
  - Performed community service
  - Participated in community or work-related organizations (e.g., church group, scouts, professional associations)
  - Took leadership positions in community organizations or work-related groups (e.g., union leader, PTA president)
  - Worked with others for change to address societal problems (e.g., rally, protest, community organizing)

**Year in School**

Undergraduate students are the focus of the present study, and student year in school was measured using the following response options: "Freshman/First-Year," "Sophomore," "Junior," and "Senior-4th year and beyond." Survey responses for all other categories, including any surveys where year in school was "missing," were removed from the data set and were not considered in the present study.

- *Year in School:* What is your current class level? (Choose One)

**Academic Performance**

Students' academic performance in college up to the point of the survey was collected using six GPA response options: "3.50-4.0," "3.00-3.49," "2.50-2.99," "2.00-2.49," "1.99 or less," and "No college GPA." These variables were treated as ordinal, with the exception of "no college GPA," which was treated as missing.

- *Academic Performance:* What is your best estimate of your grades so far in college? (Choose One; Assume 4.0 = A)

**Gender**

Gender is measured with three possible response options: "Female," "Male," and "Transgender." The response rate for "Transgender" was too small for individual analysis (*n* = 12) so gender was controlled only based upon responses of "Female" or "Male." A new variable was created that coded transgender responses as "missing." The following question is included to measure gender:

- *Gender:* What is your gender? (Response options include "Female," "Male" and "Transgender")

**Race/Ethnicity**

Race and ethnicity data were collected using the following questions:

- *Race:* Please indicate your broad racial group membership (mark all that apply)

- *Ethnicity:* Please indicate your ethnic group memberships (mark all that apply)

Because the sample size was insufficient for individual analysis of each race category (see Table 4.1 on page 56 in the following chapter), they were grouped and recoded into two broad racial categories: *Non-White* and *Caucasian/White*. Ethnic group memberships were similarly limited by small sample sizes, so the present study includes only the broad racial classifications in later analysis as a control variable.

**Parent Educational Attainment and First-Generation College Status**

Parent educational attainment was captured using a scale of eight response options: "Less than high school diploma or less than a GED," "High school diploma or a GED," "Some College," "Associates degree," "Bachelor's degree," "Master's degree," "Doctorate or

professional degree (e.g., JD, MD, PhD)," and "Don't know." Responses of "Don't know"

recoded as "missing."

- *Parent Educational Attainment:* What is the HIGHEST level of formal education

    obtained by any of your parents or guardians?

First Generation Status was derived from the student response to parent education and

was not presented to the student as a question on the actual survey. Three response options were

derived: "Yes," "No," and "Don't know." Because this variable was derived from the prior

parent educational attainment variable, it was included only for descriptive/informational

purposes, and was not used as a control in any analysis.

- *First Generation Student Status* (derived from previous question).

<center>**Variable Summary**</center>

The present study includes a significant number of variables to be explored, both individually and in variable constructs. This section represents a brief summarization.

**Table 3.1. Variable Summary**

| Variable | Code | Type[1] | Composite[2] | α |
|---|---|---|---|---|
| Student Perception of Personal Civic Responsibility | CIVIC_RESP_RAW | D | Yes-6 | .91 |
| Faculty/Instructional Staff Mentoring | ENV8B1 | I | No | |
| Student/Academic Affairs Staff Mentoring | ENV8B2 | I | No | |
| Undergraduate Research | ENV4E | I | No | |
| Community Service: Monthly Frequency | ENV3 | I | No | |
| Community Service: Alt. Spring Break | ENV10A10 | I | No | |
| Community Service: Class | ENV3A | I | No | |
| Community Service: Work-Study | ENV3B | I | No | |
| Community Service: Student Organization | ENV3C | I | No | |
| Community Service: Community Organization | ENV3D | I | No | |
| Community Service: On Your Own | ENV3E | I | No | |
| Civic Engagement Frequency | ENGAGE_FREQ_SIX_MIN | I | Yes-10 | .91 |
| Community Organization Involvement | COMM_ORG_INVOLVE | I | Yes-2 | .79 |
| Discussion of Major Social Issues Outside Class | ENV9C | I | No | |
| Academic Involvement | INVOLVEMENT_ACADEMIC | I | Yes | NA[4] |
| Leadership Involvement | INVOLVEMENT_LEADERSHIP | I | Yes | NA[4] |
| Cultural Involvement | INVOLVEMENT_CULTURAL | I | Yes | NA[4] |
| General Interest Involvement | INVOLVEMENT_GENERAL | I | Yes | NA[4] |
| Social Fraternities and Sororities | ENV7Q | I | No | |
| Recreation Involvement | INVOLVE_RECREATION | I | Yes | NA[4] |
| Service and Advocacy Involvement | INVOLVMENT_SERVICE_ADVOCACY | I | Yes | NA[4] |
| Pre-College Engagement | PRE_COLL_ENGAGEMENT | C | Yes-4 | .76 |
| Year in School | DEM3 | C | No | |
| Academic Performance During College | DEM13 | C | No | |
| Gender | DEM7_1_FEMALE_YN | C | No | |
| Race/Ethnicity | DEM10C_WHITE | C | No | |
| Parent Educational Attainment | DEM14 | C | No | |
| First Generation Status[3] | DEM14_1 | C | No | |

[1]I = Independent Variable, D = Dependent Variable, C = Control Variable
[2]If a composite variable, the number of included component variables is also listed.
[3]First Generation Status variable was included in initial analysis for informational purpose only and was not include in final regression.
[4]Student involvement variables were combined without analysis using Cronbach's Alpha.

**Method of Analysis**

This study explores relationships and determines correlations between KU students' perceptions of personal civic responsibility and students' interactions with specific components of the KU institutional environment. To achieve this, the following analyses were performed:

**Analysis 1: Independent Variable Descriptive Analysis**

To answer the first research question, a series of descriptive analyses were performed using the independent variables outlined earlier in this chapter. Unless otherwise noted, descriptive statistics included actual response counts (*n*), minimum, maximum, mean, median and standard deviation for each variable. Individual component variables were evaluated first to provide baseline statistics. Some were then grouped and evaluated using Cronbach's Alpha (α) and combined into new composite variables so descriptive statistics could be run on each new composite variable.

**Analysis 2: Dependent Variable Descriptive Analysis**

To answer the second research question, specific survey questions that address students' perceptions of civic responsibility were identified and Cronbach's Alpha was used to determine the level to which the individual variable components were correlated. Next, descriptive statistics were run on the dependent variables independently, and again using the new composite to assess students' perceptions of personal civic responsibility.

**Analysis 3: Demographic/Control Variable Predictor Analysis**

The third analysis explores relationships between demographic and control variables, and answers the third research question. These control variables were shown in the literature to correlate with student civic engagement, but are not directly controlled by the institutional environment. Astin's (1984, 1999) I-E-O model is based upon the importance of controlling for

student input variables when assessing the impact of environmental interactions. In some cases, responses were grouped into broader categories when individual response rates were insufficient for effective analysis. Each such instance is described in chapter 4.

**Analysis 4: Individual Predictor Correlation Analysis**

To answer the fourth research question, bivariate relationships were explored between the independent variables and the dependent variable through the completion of correlation tables. Individual relationships were evaluated for statistically significant results, and out of this analysis, individual variables and composites were identified for inclusion in (or exclusion from) the multiple regression model in the next analysis stage.

**Analysis 5: Combined Predictor Multiple Regression Analysis**

To answer the fifth and final research question, the outcomes of the fourth analysis were used to construct a multiple regression model using those independent variables that had been shown to significantly correlate with the dependent variable, controlling for the specified demographic variables. Based upon the results of the multiple regression model, the researcher determined the predictive power of the collection of independent variables and isolated those independent variables that contributed most to the variance in the model.

<div align="center">

**Missing Data**

</div>

Missing data were common with the MSL dataset. The survey was administered electronically, allowing the instrument to employ "skip-logic," where certain questions were only presented if the respondent had previously responded in a specific way. For example, specific Asia-based ethnicity options (e.g., Vietnamese, Japanese, etc.) were only presented to students who had first selected "Asian-American" as their broad racial group. In other instances, respondents simply did not respond to all questions on the survey and were allowed to submit

regardless. Most questions did not require a response. When building composite variables, missing data elements were addressed through the use of person-mean imputation (Enders, 2010). Using this method, mean values for the composite variable are substituted in place of missing values within the composite when a minimum number of component variable responses were available

## Methodological Limitations

The present study used an existing data set to evaluate relationships between student perception of personal civic responsibility and a collection of independent variables suggested by prior research. Several limitations should be considered before findings can be generalized to the KU student population. Because the study is not longitudinal, hypotheses must be generated based on a snapshot of students at multiple levels in their degree programs. The study design is not experimental, so causation cannot be established. The purpose of the present study is solely to determine what statistically significant relationships exist between the suggested predictors and the civic engagement outcome. The presence of these relationships can then be used in the development of further research that may provide clues as to how KU might influence an important part of social competence for its graduates, but the relationships cannot be used to infer causation or effect.

The overall undergraduate KU dataset ($n = 2250$) is sufficient for effective analysis of some outcomes, but there were insufficient responses on some questions to allow for adequate evaluation and statistically significant results. In some instances, composite variables were developed to allow sufficient sample size for analysis. Unfortunately, grouping variables in this way diminishes the capacity to study specific dimensions of some variables. For example, the variable that collected student race information had to be recoded into a dichotomous variable

with only White and Non-White as responses to ensure a sufficient sample size for analysis. Recoding a variable that has multiple response values into a new variable with only two responses greatly diminishes the richness of the data and reduces the amount of information that can be drawn from the results. Use of the complete national data set would resolve most sample size concerns, but would not address institutionally-specific concerns.

Measurement for student academic performance presents another limitation for the study. Prior research suggests that as student academic achievement increases, so does volunteerism and community service (Cruce & Moore III, 2007; Ferrari, Haq, & Williams, 2014) but a direct correlation with overall civic engagement is not clear. In addition, how academic achievement is measured in the current study presents concerns. The MSL instrument measures solely through the student self-reported GPA rather than a broader collection of academic indicators. Finally, rather than allowing for a continuous numerical value for the GPA to be entered (e.g., 3.15), the instrument only allowed students to select a grouping category (e.g., 3.00-3.49). This approach limited the researcher's ability to analyze subtle variations in GPA and how those may have been related to the dependent variable.

Another limitation of the present study is the nature of the data collection. All data in the study was self-reported, and although responses cannot be attached to specific student identities, the nature of self-reported information does have limitations. Bowman (2010) notes that self-reported data has recently come under some scrutiny, and that the results of some studies have shown starkly different results depending on how the data were measured (Anaya, 1999; Bowman, 2010; Bowman, 2010b; Bowman & Brandenberger, 2012; Whit et al., 1999) According to the MSL instrument overview, however, self-reported data can provide accurate information depending on the nature of the collection process (Anaya, 1999; Astin, 1993; Bauer,

1992; Gonyea, 2005; Pace et al., 1985; Pike, 1995), and the instrument has undergone field-testing in several other studies (Dugan, 2006; Dugan, 2006b; Dugan & Komives, 2007; Gehrke, 2008; Humphreys, 2007; Meixner, 2000; Morrison, 2001; Rickets et al., 2008; Rubin, 2000).

Astin suggests another limitation of this kind of study regarding students' inclinations to participate in service, suggesting that simply having that inclination may impact outcomes later (Astin & Sax, 1998). This type of inclination to participate in community service is very difficult to measure using the MSL instrument, and should be considered when assessing the results. Astin and Sax (1998) also suggest caution when considering results that, while statistically significant, also have very small effect sizes. This will be discussed with the results in Chapter 4.

Low personal satisfaction with prior community service experiences can have a negative impact on future self-efficacy and intention (Astin et al., 2000), but the MSL instrument does not measure student satisfaction as a component of the prior service. As a result, the relationship between prior community service and the dependent variable outcome may be skewed because the present study could not control for the student's positive or negative level of satisfaction with that prior service. Furthermore, as mentioned earlier, there are distinct differences in the student outcomes for community service versus service learning (Bringle & Hatcher, 1995; Cooper et al., 2013; Cooper, 2014; Donahue, 1999; Jacoby, 1996; McDonald & Dominguez, 2015; Weiler et al., 2013), and the present study does not split these service concepts out for explicit study. While students who participate in community service as part of a classroom requirement can be assumed to be participating in a form of service learning, that assumption cannot be verified through the available MSL data.

**Summary**

This chapter has provided a methodological outline for the present study. A listing of control, independent and dependent variables was provided, along with an explanation of methods for creating multiple variable constructs. The study did encounter missing data, and methods for responding to these occurrences were provided. Finally, several important limitations were discussed regarding the present study, providing context for later results discussion as well as foundation for future research. The following chapter provides the results of the study.

**CHAPTER FOUR: Results**

This study explores the ways in which undergraduate students' experiences at The

University of Kansas relate to student perception of personal civic responsibility. Data from the

2015 Multi-Institutional Study of Leadership (MSL) provide the foundation for the study. A total

of 2,250 undergraduate KU students submitted complete or partial responses to the MSL survey,

which was designed to assess multiple dimensions of student leadership.

**Analysis**

Five analyses were conducted to explore relationships between student perception of

personal civic responsibility and a series of independent variables as described earlier. This

chapter first describes the student demographic characteristics of the sample and provides results

for each of the five analyses.

**Demographic Overview**

Descriptive characteristics were calculated for student gender, race, year in college,

college academic performance and parental education as shown in Table 4.1. Gender information

was collected through three possible responses: "male," "female" or "transgender/gender non-

conforming." Of 1,497 valid gender responses, only twelve indicated "transgender/gender non-

conforming." Because this number was insufficient for focused analysis in the present study,

these responses were recoded as "missing." Females accounted for nearly two-thirds of valid

responses ($n = 974$) and males accounted for the remaining third ($n = 511$).

Racial group membership included nine possible response categories: White/Caucasian,

Middle Eastern/Northern African, African American/Black, American Indian/Alaska Native,

Asian American, Native Hawaiian/Pacific Islander, Latino/Hispanic, Multiracial and "Race Not

Listed." Because responses for individuals reporting categories other than White/Caucasian were

individually insufficient for effective analysis, these responses were grouped into a single category for people of color/non-white respondents ($n = 355$, 23.8%).

Students were asked to characterize their current academic levels in school. Because the focus of the present study was undergraduate students, only surveys for which a response was received, and for which the response was one of the four undergraduate categories were counted in further analysis (total $n = 2250$). Students selected one of four undergraduate categories: Freshman/First Year ($n = 400$, 17.8%), Sophomore ($n = 485$, 21.6%), Junior ($n = 541$, 24.0%) and Senior/4th year and beyond ($n = 824$, 36.6%). Students also characterized their overall academic performance while in college using a standard 4.0 scale. Nearly half of respondents ($n = 712$) reported a college GPA of 3.5 to 4.0, with another third of students ($n = 500$) reporting 3.0 to 3.49. Of the remaining students, 14.7% ($n = 219$) reported between 2.5 and 2.9, 3.2% ($n = 47$) reported a GPA between 2.0 and 2.49, and less than 1% ($n = 13$) reported a GPA of lower than 2.0.

Parent educational attainment was assessed using eight different categories, including "Don't Know." The variable was recoded to reclassify "Don't Know" responses as "missing." More than three-quarters of students ($n = 1148$) reported at least one parent with a college degree, and nearly 40% ($n = 568$) reported that at least one parent had earned a graduate or professional degree. The MSL instrument used responses from this question to create a new variable for first-generation status. Students who responded "Less than High School or GED" or "High School Diploma or GED" were categorized as first-generation ($n = 166$, 11.2%), and remaining students were categorized as non-first generation ($n = 1316$, 88.8%). Because first-generation status and parent educational attainment were collected using responses from the same variable, only responses from the original educational attainment variable were used in the

final analysis. First generation status, as determined through the computation of the new variable, was provided here for informational purposes only.

**Table 4.1. Background and Demographic Characteristics of the Study Sample**

| Variable | *n* | Valid % | Total % |
|---|---|---|---|
| Gender | | | |
| Female | 974 | 65.1% | 43.3% |
| Male | 511 | 34.1% | 22.7% |
| Transgender / Gender Non-Conforming[1] | 12 | 0.8% | 0.5% |
| Missing | 753 | | 33.5% |
| Race/Ethnicity | | | |
| White/Caucasian | 1139 | 76.2% | 50.6% |
| Middle Eastern/Northern African | 3 | 0.2% | 0.1% |
| African American/Black | 49 | 3.3% | 2.2% |
| American Indian/Alaska Native | 5 | 0.3% | 0.2% |
| Asian American | 62 | 4.1% | 2.8% |
| Native Hawaiian/Pacific Islander | 1 | 0.1% | 0.0% |
| Latino/Hispanic | 54 | 3.6% | 2.4% |
| Multiracial | 149 | 10.0% | 6.6% |
| Race Not Listed | 32 | 2.1% | 1.4% |
| Missing | 756 | | 33.6% |
| Year in School | | | |
| Freshman/First Year | 400 | 17.8% | 17.8% |
| Sophomore | 485 | 21.6% | 21.6% |
| Junior | 541 | 24.0% | 24.0% |
| Senior (4th year and beyond) | 824 | 36.6% | 36.6% |
| Missing | 0 | | 0% |
| Self-Reported College Academic Performance (4.0 scale) | | | |
| 3.50-4.00 | 712 | 47.8% | 31.6% |
| 3.00-3.49 | 500 | 33.5% | 22.2% |
| 2.50-2.99 | 219 | 14.7% | 9.7% |
| 2.00-2.49 | 47 | 3.2% | 2.1% |
| 1.99 or less | 13 | 0.9% | 0.6% |
| Missing | 759 | | 33.7% |
| Highest level of education completed by either parent | | | |
| Less than high school diploma or GED | 27 | 1.8% | 1.2% |
| High school diploma or GED | 139 | 9.4% | 6.2% |
| Some College | 169 | 11.4% | 7.5% |
| Associates degree | 94 | 6.3% | 4.2% |
| Bachelor's degree | 485 | 32.7% | 21.6% |
| Master's degree | 368 | 24.8% | 16.4% |
| Doctorate or professional degree | 200 | 13.5% | 8.9% |
| Unknown/Missing | 768 | | 34.1% |

[1]Transgender / Gender Non-Conforming responses were recoded as missing for later analysis, but were included in this table for reference purposes.

Students were asked to describe some of the civic engagement activities in which they had participated prior to coming to KU. Four types of activities were evaluated for frequency of participation using a four-point scale: 0 ("Never"), 1 ("Sometimes"), 2 = ("Often"), and 3 =

("Very Often"). The results indicate that students reported pre-college participation in general community service or involvement in community organizations at a rate of "sometimes" to "often," but reported taking leadership positions in those organizations less frequently: "never" to sometimes" (see Table 4.2). Students also reported "working [pre-college] with others for change to address societal problems" less frequently. A Pre-College Engagement Composite variable was created using the mean value across the four individual variables ($\alpha = .76$) and was used as a control in later analysis. Table 4.2 illustrates the results of the individual and composite variable analyses.

**Table 4.2. Pre-College Engagement.** *Looking back to before you started college, how often did you engage in the following activities?*

| Variable | n | Min | Max | Mean | Median | Std. Dev. |
|---|---|---|---|---|---|---|
| Pre-College Engagement Composite[1,2] | 2015 | 0 | 3 | 1.16 | 1 | .767 |

[1]Pre-College Engagement Composite calculated from the average of the responses to the four pre-college service questions. See Appendix 5 for component variables.
[2]The following values were used to measure the range of responses for these variables: 0 = Never, 1 = Sometimes, 2 = Often, 3 = Very Often

**Analysis 1: Descriptive Analysis of Independent Variables**

To answer the first research question, a series of descriptive analyses were performed for each of the independent variables and variable constructs outlined in the previous chapter. This provides a general overview of student responses for each independent variable and independent variable construct.

Respondents were asked to share whether they had faculty or staff mentors, and if they did, to also assess the extent to which those mentors assisted the students with their development. Table 4.3a shows that most students reported having faculty/instructor mentors since starting college ($n = 1180$) while roughly half reported having a mentor who was "Academic or Student Affairs Professional Staff" ($n = 841$). Students were further asked to report how frequently their mentors assisted them in their growth or development, using a four-point scale: 0 ("Never"), 1

("Sometimes"), 2 ("Often") and 3 ("Very Often"). They reported that faculty/instructor mentors

assisted in their growth and development between "sometimes" and "often" (*mean* = 1.61) while

academic/student affairs professionals generally assisted "sometimes" (*mean* = 1.02), as shown

in Table 4.3b.

**Table 4.3a. Mentorship.** *Since you started at your current college/university, have you been mentored by the following types of people?[1]*

| Variable | *N* | Yes | No | Yes % |
|---|---|---|---|---|
| Had a Faculty/Instructor Mentor | 1673 | 1180 | 493 | 70.5% |
| Had an Academic/Student Affairs Professional Mentor | 1674 | 841 | 833 | 50.2% |

[1]The mentorship variable is provided for informational purposes only. It is not included in further analysis.

**Table 4.3b. Mentor Assistance.** *Since you started at your current college/university, how often have the following types of mentors assisted you in your growth or development?*

| Variable | *n* | Min | Max | Mean | Median | Std. Dev. |
|---|---|---|---|---|---|---|
| Faculty/Instructor[1] | 1663 | 0 | 3 | 1.61 | 2 | 1.193 |
| Academic or Student Affairs Professional Staff[1] | 1667 | 0 | 3 | 1.02 | 0 | 1.170 |

[1]The following values were used to measure the range of responses for these variables: 0 = Never, 1 = Once, 2 = Sometimes, 3 = Very Often

Respondents were asked several questions about participation in undergraduate research,

monthly community service or formalized leadership training. Nearly 20% (*n* = 421) had

completed some form of research with a faculty member outside of class, almost half of

respondents (*n* = 1,098) reported engaging in some community service in a typical month, and

more than a third (*n* = 587) reporting completing some formalized leadership training during

college. Table 4.4 summarizes these findings, providing an additional portion of the answer to

research questions 1.

**Table 4.4. Undergraduate Research, Monthly Community Service & Leadership Training**

| Variable | *n* | Yes | No | Yes % |
|---|---|---|---|---|
| Completed Research with Faculty Outside of Class | 2162 | 421 | 1741 | 19.5% |
| Engage in Community Service in the Average Month | 2211 | 1098 | 1113 | 49.7% |
| Completed Leadership Training or Leadership Education | 1644 | 587 | 1057 | 35.7% |

Students were asked to report hours devoted to community service each month based upon the venue through which the service was completed: "As part of a class," "as part of a work study experience," "with a campus student organization," "as part of a community organization," or "on your own." Actual hours were not reported; rather, students selected one of eight categories: 0 ("none"), 1 ("1-5 hours), 2 ("6-10 hours"), 3 ("11-15 hours"), 4 ("16-20 hours"), 5 ("21-25 hours"), 6 ("26-30 hours") or 7 ("31 hours or more"). This reporting approach eliminated the option to use a continuous variable for monthly community service hours, limiting the researcher's ability to perform some analyses. Mean values for all five variables were very low considering the highest value was .47 on a scale of 0-7. Median values were zero for all five variables. Most students who did report participating in monthly community service either participated on their own or as part of a campus student organization, while very few reported participating as part of a class or work-study experience. On average, students reported in participating in these monthly community service activities between zero and 1-5 hours per week, as shown in Table 4.5, providing additional information for research question 1. As discussed in Chapter 3, community service "as part of a class" could be considered service learning, though participation rates were still very low for this category (*mean* = .15).

**Table 4.5. Average Hours of Community Service Participation Per Month**

| Variable | $n$ | Min[1] | Max[1] | Mean[1] | Median[1] | Std. Dev. [1] |
|---|---|---|---|---|---|---|
| As part of a class[2] | 2179 | 0 | 7 | .15 | 0.00 | .636 |
| As part of a work-study experience[2] | 2175 | 0 | 7 | .08 | 0.00 | .510 |
| With a campus student organization[2] | 2188 | 0 | 7 | .47 | 0.00 | .814 |
| As part of a community organization[2] | 2180 | 0 | 7 | .28 | 0.00 | .760 |
| On your own[2] | 2182 | 0 | 7 | .37 | 0.00 | .788 |

[1]Note that the min, max, mean and median scores are not actual hours spent, as suggested by the question, but rather represent categories of hours as explained in the preceding text.
[2]The following values were used to measure the range of responses for these variables: 0 = Never, 1 = Once, 2 = Sometimes, and 3 = Often.

The present study focused on ten specific questions to evaluate students' general levels of civic engagement during college. Individual analysis of each component variable suggests

students are more likely to report participating in more generic forms of engagement such as community service, but are less likely to participate in more specific and personally "risky" engagement activities such as protests or direct communications for a specific problem or concern. Cronbach's Alpha was used to evaluate how closely the ten variables related to each other. The value for this group of variables was high ($\alpha = .91$) so a composite variable for General Civic Engagement frequency was constructed using person-mean imputation where at least six of the ten individual variables had responses. Table 4.6 provides descriptive results for the ten individual variables and the composite variable which provides additional response to the first research question.

**Table 4.6. General Civic Engagement Frequency.** *How often have you engaged in the following activities during your college experience?*

| Variable | n | Min | Max | Mean | Median | Std. Dev. |
|---|---|---|---|---|---|---|
| Engagement Frequency Composite[1,2] | 1728 | 0 | 3 | 1.12 | 1.00 | .790 |

[1]Engagement Frequency Composite calculated from the average of the responses to the ten engagement questions where at least six of ten responses were available. See Appendix 3 for component variables.
[2]The following values were used to measure the range of responses for the composite variable and its component variables: 0 = None, 1 = 1-5 hours, 2 = 6-10 hours, 3 = 11-15 hours, 4 = 16-20 hours, 5 = 21-25 hours, 6 = 26-30 hours, and 7 = 31 hours or more.

Student involvement in campus-based clubs and organizations was initially measured in two ways. The first part of the analysis involved a simple count of the total number of different types of activities students selected. These include activities such as campus-wide programming boards, social fraternities and sororities, student organizations, intramural sports and other types of on-campus involvement. A new, composite count variable was created from this total. Students with valid responses (*n*=1688) indicated participation in as many as 22 and as few as zero of the listed involvement opportunities. The median response was 3 and the mean was 3.88, with only 3 respondents indicating more than 14 involvements from the categories listed.

In the second part of the analysis, activities were grouped into seven categories based on the general nature of the group or organization. For example, two separate variable responses for

activities relating to sports were grouped into a single construct to evaluate general sports and recreation participation. A "yes" response to either of the two items within the construct resulted in a "yes" value for the group construct. Table 4.7 provides the results of this analysis, which responds to the remaining portion of research question 1. Most respondents indicated participation in academic-related activities as well as the "general" category. Most respondents also reported not having participated in the other five categories, with the fewest reporting "cultural" involvements.

Note that, because the Involvement Count variable was derived from the same involvement variables used in creating the seven constructs, both the Involvement Count and the constructs could not be used together in the final regression analyses. While both sets of information were interesting, the *nature* of the involvement was more relevant to the present study than the *frequency* of involvement. Therefore, the researcher selected the seven composite variables for further analysis and considered the Involvement Count for informational purposes only.

**Table 4.7. Involvement in Campus Clubs, Organizations and Activities**

| Variable | *n* | Yes | No | Yes % |
|---|---|---|---|---|
| Academic Involvement[1] | 1686 | 1163 | 526 | 69.0% |
| Leadership Involvement[1] | 1681 | 500 | 1181 | 29.7% |
| Cultural Involvement[1] | 1687 | 289 | 1398 | 17.1% |
| General Involvement[1] | 1678 | 1029 | 649 | 61.3% |
| Social Fraternities and Sororities[2] | 1693 | 446 | 1247 | 26.3% |
| Recreation Involvement[1] | 1682 | 428 | 1254 | 25.4% |
| Service and Advocacy Involvement[1] | 1688 | 501 | 1187 | 29.7% |

[1]Components of each composite variable are provided in Chapter 3.
[2]Social Fraternities and Sororities was not a composite variable, but rather a single variable response.

Data regarding off-campus involvement and leadership with community organizations were collected through two questions. The first asked how frequently students had been involved in such organizations and the second asked how frequently they held leadership positions in

these organizations. Both questions were asked using a five-point scale: 0 ("Never"), 1 ("Once"), 2 ("Sometimes"), 3 ("Many Times) and 4 ("Much of the Time"). As might be expected, more students reported simply participating in off-campus organizations than reported taking leadership roles in those off-campus organizations. It would be interesting to explore the effects of leadership roles in off-campus organizations, but that was outside the scope of the present study so these questions were also grouped into a single Community Organization Composite variable ($\alpha = .79$).

Students were further asked to report how frequently they had discussed major social issues with other students outside of class using a four-point response scale: 0 ("Never"), 1 ("Sometimes"), 2 ("Often") and 3 ("Very Often"). They also reported how frequently they participated in short-term service immersion projects using a slightly different four-point response scale: 0 ("Never"), 1 ("Once"), 2 ("Sometimes") and 3 ("Often"). Students generally reported discussing major social issues between "Sometimes" and "Often," and that they had participated in short-term service immersion activities between "Once" and "Sometimes." Again, students were more likely to report participation activities that were less personally involved, such as discussions or general membership involvement in organizations, than they were to report participation in activities that required more significant engagement of time and personal energy, such as leadership positions or immersion experiences. Results of these analyses are found in Table 4.8.

**Table 4.8. Off-Campus Community Involvement**

| Variable | *n* | Min | Max[2] | Mean | Median | Std. Dev. |
|---|---|---|---|---|---|---|
| Been an involved member in an off-campus community or work-based organization(s) unaffiliated with your campus[2] | 1713 | 0 | 4 | 1.14 | 0 | 1.422 |
| Held a leadership position in an off-campus community or work-based organization(s) unaffiliated with your campus[2] | 1713 | 0 | 4 | .66 | 0 | 1.218 |
| Community Organization Involvement Composite[1,2] | 1714 | 0 | 4 | .90 | 0 | 1.204 |
| Discussed major social issues such as peace, human rights, and justice[3] | 1647 | 0 | 3 | 1.65 | 2 | 1.010 |
| Participated in Short-Term Service Immersion (e.g., Alternative Spring Break) [3] | 1638 | 0 | 3 | .23 | 0 | .643 |

[1]Community Organization Involvement Composite calculated from the average of the responses to the two Off-Campus Community Involvement questions.
[2]These variables were measured using the following scale: 0 = Never, 1 = Once, 2 = Sometimes, 3 = Many times, 4 = Much of the time
[3]These variables were measured using the following scale: 0 = Never, 1 = Once, 2 = Sometimes, and 3 = Often.

**Analysis 2: Descriptive Analysis of KU Student Civic-Mindedness**

The second analysis explores the baseline values for the dependent variables and responds to the second research question. Six dependent variables representing different dimensions of student perception of personal civic responsibility, or civic-mindedness, were selected for analysis (see Table 4.9). Responses for each question were scored using a five-point scale: 1 ("Strongly Disagree"), 2 ("Disagree"), 3 ("Neutral"), 4 ("Agree"), and 5 ("Strongly Agree"). Results indicate that students generally agree with each of the self-perception measures, suggesting general agreement that they do have some degree of civic responsibility for their communities. The median response across all questions was 4 ("Agree") and most respondents responded either "Agree" or "Strongly Agree" (57.5%).

A composite variable was created through person-mean imputation where at least four of six responses were provided ($\alpha = .91$). This composite variable created a "score" for student perception of civic responsibility based upon students' responses to the following six statements: "I work with others to make my communities better places," "I participate in activities that contribute to the common good," "I believe my work has a greater purpose for the larger

community," "It is important to me that I play an active role in my communities," and "I value opportunities that allow me to contribute to my community."

Consistent with earlier findings, those variables which expressed a more active approach to civic engagement (e.g., "I work with others…" and "I play an active role") had slightly lower mean values than the more passive responses. Median scores were 4 for all variables, however, and the Cronbach's Alpha of .91 provides strong support for creating the composite variable. Table 4.9 provides the results of this analysis, responding to the second research question.

**Table 4.9. Dependent Variable: Student Perception of Personal Civic Responsibility**

| Variable | *n* | Min | Max | Mean | Median | Std. Dev. |
|---|---|---|---|---|---|---|
| Civic Responsibility Composite[1,2] | 1591 | 1 | 5 | 3.96 | 4 | .728 |

[1]Civic Responsibility Composite calculated from the average of the responses to the six Civic Engagement questions. See Appendix 1 for component variables.
[2]The following values were used to measure the range of responses for this variable: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree.

**Analysis 3: Relationships Between Dependent and Control Variables**

The literature reviewed in Chapter 2 suggests relationships between student civic engagement and demographic characteristics that are beyond the control of the institution. Seven of these demographic characteristics were measured by the MSL instrument: student's academic level (freshman, sophomore, etc.), pre-college level of civic engagement, academic performance during college, gender, race, parent educational attainment and first-generation status. Pre-college civic engagement was measured through the creation of a composite variable as discussed earlier, and the remaining characteristics were measured using individual variables. As explained earlier, the first-generation status variable was removed from final analysis and is included in Table 4.10b for informational purposes only.

Students' academic class level, pre-college levels of civic engagement and current academic performance were correlated with the dependent variable, student perception of

personal civic responsibility, using a correlation table. Academic class level showed a weak but

positive correlation with the dependent variable ($r = .085$, $p = .001$) while current college

academic performance, measured by the self-reported GPA, showed a negative relationship with

the dependent variable ($r = -.126$, $p < .001$). The pre-college civic engagement composite,

however, had the strongest, positive relationship with the dependent variable, with a Pearson

correlation of .325 ($p < .001$). Parent education level, reported on a seven-point scale from "less

than high school diploma or GED" through "doctorate or professional degree" did not show a

statistically significant correlation with student perception of personal civic responsibility.

Results of this analysis are found in Table 4.10a, and provide a portion of the response to the

third research question.

**Table 4.10a. Demographic Predictors of Student Perception of Personal Civic Responsibility (Correlation Analysis)**

| Variable | $r$ | $p$ | $n$ |
|---|---|---|---|
| Academic Class Level (DEM3) | .085** | .001 | 1591 |
| Pre-college Civic Engagement Composite[1] | .325** | .0001 | 1591 |
| Current College GPA (DEM13) | -.126** | .0001 | 1491 |
| Parent Education Level (DEM14) | .033 | .198 | 1491 |

*$p < .05$
** $p < .001$.
[1]Pre-College Engagement Composite calculated from the average of the responses to the four pre-college service questions.

      Independent samples t-tests were completed to compare means between the dependent

variable and the control variables for gender, race, and first-generation college status. For

gender, results showed a statistically significant mean difference between males and females,

$t(896.46) = -4.041$, $p < .001$. The mean value for males was 3.86 and the value for females was

4.03, suggesting females were slightly more likely than males to exhibit a higher perception of

personal civic responsibility. Neither first-generation status nor the respondent's race exhibited

statistically significant differences in mean values. Table 4.10b provides the results for the

independent samples t-test analyses, providing the remaining responses to the third research

question.

**Table 4.10b. Demographic Predictors of Student Perception of Personal Civic Responsibility (Independent Samples T-Tests)**

| Variable | Mean(0) | Mean(1) | $t$ | df | $p$ |
|---|---|---|---|---|---|
| Gender (Male = 0, Female = 1) | 3.86 | 4.03 | -4.041** | 896.46 | .0001 |
| Race (Non-White = 0, White = 1) | 4.00 | 3.96 | .769 | 1489 | .442 |
| First Generation College Student Status[1] (Non-First Gen = 0, First Gen = 1) | 3.96 | 4.00 | -.552 | 1478 | .581 |

*$p < .05$
** $p < .001$.
[1]First-generation status was provided here for informational purposes only. The element was excluded from subsequent analyses as explained earlier.

## Analysis 4: Correlation and T-Test Analysis for Independent Variables

In the fourth analysis, correlations between student perception of personal civic

responsibility and the independent variables were explored. This analysis directly responds to the

fourth research question, and the results of this stage were used to determine which independent

variables would be included in the multiple regression model completed for the fifth and final

stage of analysis.

Faculty and staff mentorship was evaluated using two variables as shown in Table 4.11.

Students who had reported having faculty or staff mentors were then asked the extent to which

those mentors had assisted them in their development while in college. There was a high

correlation between the "existence" and "assistance" variables for faculty (*Have you been*

*mentored by this person*, and *Has this mentor assisted in your development*), with a Pearson

Correlation of .875 ($p < .001$). The same was true for the corresponding variables for the

Academic/Student Affairs professionals, where the Pearson Correlation was .872 ($p < .001$). The

results suggest strong correlation between the variable measuring *the existence of a particular*

type of mentor and the corresponding variable measuring the extent to which that mentor assisted

in growth or development. Because the second question only collected a value if the student had

responded "yes" to the first question, any response to the second question essentially provided information for both purposes. As a result, the first mentor "existence" variables were excluded from the correlation and regression analyses.

Results suggest that as students reported higher levels of mentor assistance with growth or development (for all mentors), they also showed increases in their perceptions of personal civic responsibility. The correlation between the dependent variable and the faculty/instructor variable was stronger, though both had Pearson correlations of greater than .20 ($p < .001$).

**Table 4.11. Civic-Mindedness Related to Mentor Assistance with Growth or Development**

| Variable | r | p | n |
|---|---|---|---|
| Faculty or Instructor Mentors | .222** | .0001 | 1590 |
| Academic/Student Affairs Professional Staff Mentors | .204** | .0001 | 1591 |

*$p < .05$
** $p < .001.$

Data were collected regarding student participation in undergraduate research, monthly community service, general leadership training and participation in short term service immersion opportunities. Results of the individual correlation analyses for each are found in Table 4.12, and suggest that each of the individual correlations with the dependent variable are positive and statistically significant ($p < .05$). Participation in short term service immersion(s) and leadership training are more strongly correlated with the dependent variable, and participation in monthly community service has the strongest correlation of the five variables ($r = .346$, $p < .001$).

**Table 4.12. Civic-Mindedness Related to Research, Monthly Service, Leadership Training and Short-Term Service Immersion**

| Variable | r | p | n |
|---|---|---|---|
| Conducted Research with a Faculty Member Outside of Class | .097** | .0001 | 1588 |
| Engaged in Monthly Community Service | .346** | .0001 | 1590 |
| Participate in Leadership Training | .248** | .0001 | 1591 |
| Participation in Short-Term Service Immersion(s) | .192** | .0001 | 1591 |

*p < .05
** p < .001.

Monthly community service participation was further explored in terms of the venue through which the student completed the service. Frequency analyses for these variables were conducted earlier (see Table 4.5 on page 58) and suggested that some of the categories had very low rates of participation at the monthly level. As shown in Table 4.13, individual correlation analyses confirmed that one of the categories, participation as part of a work-study experience, did not have sufficient participation for a statistically significant relationship. Participation through an outside community organization or on one's own time showed moderate correlation with the dependent variable, while participation through a campus student organization showed the strongest correlation of the five. Participation as part of a class (service learning) had a statistically significant, though weak correlation with student perception of personal civic responsibility.

**Table 4.13. Civic-Mindedness Related to Monthly Community Service by Venue**

| Variable | r | p | n |
|---|---|---|---|
| As Part of a Class | .053* | .035 | 1586 |
| As Part of a Work Study Experience | .039 | .117 | 1582 |
| With a Campus Student Organization | .292** | .0001 | 1587 |
| As Part of a Community Organization Unaffiliated with the University | .180** | .0001 | 1583 |
| On Your Own | .209** | .0001 | 1583 |

*p < .05
** p < .001.

As noted earlier, general engagement frequency was measured using a composite variable constructed from responses to ten questions ($\alpha = .91$) where at least six responses were received from the respondent. Students were also asked how often they discussed major social issues such

as peace, human rights and social justice with other students outside of class. The relationship

between student perception of personal civic responsibility and these independent variables was

relatively strong, and both results were statistically significant ($p < .001$), as shown in Table

4.14. These results suggest that students who are generally more engaged civically, and who

more frequently discuss major social issues outside of class, also have higher perceptions of their

personal civic responsibility.

**Table 4.14. Engagement Frequency Composite and Social Issues Discussion**

| Variable | *r* | *p* | *n* |
|---|---|---|---|
| Engagement Frequency Composite[1] | .524** | .0001 | 1589 |
| Discussion of Major Social Issues Outside of Class | .337** | .0001 | 1591 |

*$p < .05$
** $p < .001$.
[1]Engagement Frequency Composite calculated from the average of the responses to the ten engagement questions where at least six of ten responses were available.

Student involvement in campus-based extra-curricular activities was evaluated by

grouping activities in to specific involvement composite variables, as outlined earlier. Individual

correlation analyses were completed for each of the involvement composites, and results are

found in Table 4.15. Results indicate that each category had statistically significant results,

though the strength of the correlation was not particularly large for any single category.

Leadership Involvement as well as the General Involvement categories had correlation

coefficients greater than .21 ($p < .001$), and the Service and Advocacy Involvement category had

the highest correlation of the composite categories ($r = .296, p < .001$).

**Table 4.15. Civic-Mindedness Related to Student Involvement**

| Variable | $r$ | $p$ | $n$ |
|---|---|---|---|
| Academic Involvement[1] | .165** | .0001 | 1586 |
| Leadership Involvement[1] | .219** | .0001 | 1590 |
| Cultural Involvement[1] | .149** | .0001 | 1589 |
| General Involvement[1] | .226** | .0001 | 1587 |
| Social Fraternities and Sorority Invovlement[2] | .110** | .0001 | 1590 |
| Recreation Involvement[1] | .057* | .022 | 1591 |
| Service and Advocacy Involvement[1] | .296** | .0001 | 1590 |

*$p < .05$
** $p < .001$.
[1]Components of each composite variable are provided in Chapter 3.
[2]Involvement: Greek Life variable not a composite variable but is an individual variable directly from the instrument

## Analysis 5: Combined Analysis of Dependent, Independent and Control Variables

Based upon the results of the fourth stage of analysis, independent variables were selected for inclusion in a multiple regression model along with the six control variables. Results of this analysis are found in Table 4.16, and respond to the fifth and final research question. Independent variables were only included in the model if they had correlation coefficients with the dependent variable of absolute value of .141 or greater. This value corresponds with an R-square value of approximately .02, suggesting 2% of the variance in the dependent variable can be explained by the independent variable in the individual correlation model. The multiple regression model explained about one-third of the variance in the dependent variable (*adjusted R-square* = .340, $p < .001$), with 22 individual variables and composites included.

As shown in Table 4.16, two control variables showed statistically significant, positive relationships with the dependent variable in the multiple regression model: the pre-college engagement construct variable, $\beta = .132$, $p < .001$; and gender, $\beta = .045$, $p < .05$. These results indicate that students who were civically engaged prior to coming to KU, and female students were more likely to report greater perceptions of personal civic responsibility. On the other hand, a significant, but negative relationship was found between the dependent variable and parent educational attainment, $\beta = -.051$, $p < .05$, suggesting that higher parent educational attainment

may result in lower student perception of personal civic responsibility. These results are discussed further in Chapter 5.

Four of the non-control, independent variables also showed statistically significant, positive results: faculty mentor assistance with personal development, $\beta = .056$, $p < .05$; monthly community service participation, $\beta = .114$, $p < .001$; discussion of major social issues outside of class, $\beta = .148$, $p < .001$; and the student engagement frequency composite variable, $\beta = .314$, $p < .001$. This suggests that students who had reported that faculty/instructors had assisted with their personal development, students who engaged in monthly community service during college, students who engaged in discussion of major social issues outside of class, and students who scored higher on the engagement frequency composite were also more likely to report higher perceptions of personal civic responsibility. Interestingly, the multiple regression analysis did not find statistically significant relationships between the dependent variable and several independent variables that had previously shown strong correlations when evaluated individually, including all seven student involvement composites. This result is discussed further in Chapter 5.

**Table 4.16. Multiple Regression[1] (All correlates)**

| Variable/Variable Construct | $\beta$ | $p$ |
|---|---|---|
| Current Academic Level (Freshman-Senior) (dem3) (Control) | .008 | .737 |
| Pre-College Engagement Composite[4] (Control) | .132** | .0001 |
| Current College Academic Performance (dem13) (Control) | -.036 | .124 |
| Gender (dem7_1_female_yn) (Control) | .045* | .042 |
| Race (dem10c_white) (Control) | -.006 | .799 |
| Parent Education Level (dem14_recode_missing) (Control) | -.051* | .023 |
| Faculty or Instructors helped in personal development (env8b1) | .056* | .020 |
| Acad. or Student Affairs Prof. Staff helped with personal dev. (env8b2) | .037 | .121 |
| Engaged in Monthly Community Service (env3) | .114** | .0001 |
| Participate in Leadership Training (env10) | .026 | .333 |
| Participation in Short-Term Service Immersion(s) (env10a10) | -.042 | .102 |
| CS with Campus Student Organization (env3c) | .013 | .629 |
| CS As Part of a Community Org. Unaffiliated with the Univ. (env3d) | .032 | .179 |
| CS On Your Own (env3e) | .033 | .190 |
| Engagement Frequency Composite[3] | .314** | .0001 |
| Discussion of Major Social Issues Outside of Class (env9c) | .148** | .0001 |
| Academic Involvement[2] | -.018 | .460 |
| Leadership Involvement[2] | .014 | .570 |
| Cultural Involvement[2] | -.023 | .338 |
| General Involvement[2] | .043 | .063 |
| Social Fraternities and Sorority Involvement (env7q) | -.026 | .275 |
| Service and Advocacy Involvement[2] | .014 | .600 |

*$p < .05$
** $p < .001$.
[1]$F(22)=34.466, p=.0001$
[2]Components of each composite variable are provided in Chapter 3.
[3]Engagement Frequency Composite calculated from the average of the responses to the ten engagement questions where at least six of ten responses were available.
[4]Pre-College Engagement Composite calculated from the average of the responses to the four pre-college service questions.

Of the four variables in the model with statistically significant relationships with the DV, one was the composite variable for frequency of student engagement. Because the beta value far surpassed any of the other four variables ($\beta = .314, p < .001$), the researcher decided it would be beneficial to re-examine the component variables of the composite. A multiple regression model was constructed to evaluate each of the component variables in relation to the dependent variable. Table 4.17 provides results of this analysis. Six of the ten component variables had statistically significant relationships with the dependent variable: performed community service, acted to benefit the common good or protect the environment, active involvement with an organization that addresses a social or environmental problem, active involvement with an organization that addresses the concerns of a specific community, working with others to make

the campus or community a better place, and taking part in a protest, rally, march or demonstration. The individual relationships between the six independent variable components and the dependent variable were weak to moderate, and the model R-square of .301 ($p < .001$) suggests that controlling for other variables in the primary multiple regression model (see Table 4.16) slightly strengthens the relationship between the engagement frequency composite and the dependent variable.

**Table 4.17. Multiple Regression[1] (Engagement Frequency Composite Variable Components)**

| Component Variable | $\beta$ | $p$ |
|---|---|---|
| Performed Community Service | .162** | .000 |
| Acted to benefit the common good or protect the environment | .138** | .000 |
| Actively involved with an organization that addresses a social or environmental problem | .084* | .011 |
| Actively involved with an organization that addresses the concerns of a specific community (e.g., Academic council, neighborhood association) | .062* | .042 |
| Communicated with campus or community leaders about a pressing concern | .048 | .105 |
| Took action in the community to try to address a social or environmental problem | .054 | .117 |
| Worked with others to make the campus or community a better place | .103* | .003 |
| Acted to raise awareness about a campus, community, or global problem | .071 | .053 |
| Took part in a protest, rally, march, or demonstration | -.061* | .025 |
| Worked with others to address social inequality | .047 | .147 |

*$p < .05$
** $p < .001$.
[1]$F(10)=67.947, p=.0001$

## Summary

The results of analysis were mixed, some differing considerably from the expected findings based upon the literature, and some confirming prior research. For KU students, the pre-college civic engagement factor proved to be a significant predictor of student perception of personal civic responsibility. Once at KU, moderate relationships were found with students who reported engaging in monthly community service as well as by students who reported that faculty mentors had assisted them in their personal growth and development during college. Stronger relationships to civic-mindedness were shown by students who have had discussions about social issues outside of class, suggesting the importance of non-classroom interaction in shaping

student perception of personal civic responsibility. The strongest predictor, however, was frequency of participation in general civic engagement activities as measured by the engagement frequency composite variable, suggesting that students who are more civically engaged are also more likely to perceive a greater level of personal civic responsibility. A complete discussion of the results is included in the following chapter.

**CHAPTER FIVE: Discussion and Conclusions**

This study was designed to assess relationships between student perception of personal civic responsibility (dependent variable) and their interactions with specific components of the KU institutional environment (independent variables). The selection of the independent variables for the present study was based upon prior research on student civic engagement at the college level. Using Astin's (1993) I-E-O Model as the primary theoretical framework, the study used data collected from students at the University of Kansas (KU) through the 2015 Multi-Institutional Study of Leadership (MSL). This chapter discusses the results of the study, provides policy and practical implications, reviews important limitations and suggests future research.

## Discussion of Findings

The study found statistically significant, positive relationships between student perception of personal civic responsibility and four of the independent variables included in the study: faculty mentor assistance with personal development, monthly community service participation, general civic engagement frequency, and discussion of major social issues outside of class. In addition, the study confirmed prior research regarding two control variables: pre-college civic engagement level and gender, while parent educational attainment was found to have the opposite relationship than had been suggested by prior research. Each of these findings is discussed in detail later.

### Demographic/Control Variable Findings

The study controlled for six different variables. The strongest relationship for control variables was found with the Pre-College Engagement composite variable, confirming findings in prior literature that students who had been civically engaged in high school were more likely to be engaged in college or have higher perceptions of personal civic responsibility (Bringle &

Steinberg, 2010; Getto & Rivait, 2012; Jugert et al., 2013; Weiler et al., 2013; DePaola, 2014). The result for gender both confirmed and failed to confirm prior research, depending on which study is referenced. The present study showed that women were slightly more likely than men to exhibit higher perceptions of personal civic responsibility, which is consistent with findings by Ferrari et al. (2014) in which women were more likely than men to volunteer. Brown (2011), however, did not find any statistically significant differences between men and women related to civic engagement. This finding is interesting, and merits additional study to determine if the result was an anomaly, or if not, what compels women at KU to express higher levels of civic-mindedness than men.

One control variable, parental educational attainment, did not respond as Brown (2011) suggested it would.  Specifically, the variable showed a small, statistically significant, but negative relationship to student perception of personal civic responsibility. Although the expectation based upon Brown's (2011) study was that students with more highly educated parents would also have a greater sense of personal civic responsibility, the relationship was actually the opposite. It is unclear why this relationship occurred, but the nature of the parent educational attainment variable could have created unexpected results when the variable was recoded into a dichotomous variable. As noted before, creating the recoded variable with only two possible responses ("some parent college education" and "no parent college education") eliminated the ability to explore individual relationships. Another explanation could be that the sample sizes for the individual components of this variable were simply too small for effective analysis. On the other hand, perhaps students with less-educated parents have a greater sense of the importance of education in creating opportunity, as well as the tangible community benefits that come with civic engagement—through personal experience, in some cases. Students with

more highly-educated parents may have difficulty conceptualizing the importance of civic engagement from which they may never have knowingly benefited. Additional study is needed, but the finding is certainly worth careful consideration as more and more students arrive on campus from college-educated families. Will it be more difficult to convince these students to be more civically-minded?

Control variables measured elements that were outside the direct control of the institution, including race, gender, student academic level and performance, parent educational attainment, and student pre-college civic engagement. In the present study, only gender, student pre-college engagement and parent educational attainment were significantly correlated with the dependent variable. Student academic level, student academic performance, and student racial classification did not correlate with the student perception of personal civic responsibility. Multiple scenarios may explain why these control variables did not predict the dependent variable outcome. First, student academic performance was measured by self-reported GPA. Prior research did not specifically suggest that student GPA predicted civic engagement; rather, it suggested that students who perform better academically were more likely to become civically engaged through volunteerism (Cruce & Moore III, 2007; Ferrari, Haq, & Williams, 2014). The definition of academic "performance" could include more than simply a GPA calculation, and even within that calculation, typical GPA achievement may vary depending on academic discipline. Academic major should be controlled to explore GPA variability between programs, but due to sample size, the present study could not effectively analyze using this variable.

Prior literature does not suggest any relationships between race and student civic responsibility, and the present study found no new outcomes. Race as a variable in the present study was also difficult to incorporate due to sample size, and because the variable was recoded

into two categories (white and non-white) to compensate for small sample sizes, the variable essentially asked only if there was a difference between white students and non-white students. This broad re-grouping eliminated the ability to assess subtle differences between racial designations, and operates under an assumption that all non-white racial groups perceive civic responsibility in the same way. The multiple dimensions of race and ethnicity could therefore not be captured, and any relationships based upon this variable were not evident.

The final control variable that failed to exhibit a statistically significant relationship with the dependent variable was year in school. Although the present study could not verify any prior research to suggest a relationship between civic-mindedness and year in school, the variable was included based upon the results of individual correlation analysis that did suggest higher academic class level predicted greater civic-mindedness. When considered along with the other control and independent variables, however, the relationship disappeared. Sample sizes were sufficient for a reasonable analysis, but the results for KU students were inconclusive.

**Independent Variable Findings**

When controlling for the relevant demographic characteristics, four independent variables showed statistically significant relationships to the dependent variable. KU students who were more frequently civically engaged during college also reported higher levels of personal civic responsibility. For this study, civic engagement frequency was measured using students' involvement with general community service, involvement with community or campus-based organizations that address social issues, taking actions to benefit the environment, participating in rallies or protests, or otherwise taking action in the community to address social inequality or a pressing social need. The relationship between civic engagement frequency and student perception of personal civic responsibility was the strongest correlation found in the present

study, and clearly aligns with prior research indicating a strong relationship between civic-mindedness and actual civic engagement (Bringle & Steinberg, 2010; Hellman et al., 2006; Jugert et al., 2013). The result shows that KU students who are more engaged civically also have higher perceptions of their own civic responsibility as well as the overall importance of civic engagement, and that being civically engaged predicts a greater perception of personal civic responsibility. This result is completely logical, and explained in a different context, one might say that the act of voluntarily mopping the floor ascribes some level of perceived importance to having a clean, mopped floor. This finding is also encouraging because it supports Juggert et al.'s (2013) assertion that students who feel connected to their communities and have had positive experiences previously (as illustrated by their ongoing civic engagement) are more likely to become engaged again.

Because the engagement frequency variable was a construct built from ten individual variables, it was also broken down to its component parts for further study. From a practical implications standpoint, this is beneficial for effectively exploring specific environmental components related to civic engagement that predict KU student civic-mindedness. Results suggest that students who performed community service, acted to benefit the common good or protect the environment, actively engaged with organizations that address social or environmental problems, actively engaged with organizations that address the concerns of a specific community (e.g., neighborhood association), or worked with others to make the campus or community a better place, were more likely to express a greater sense of personal civic responsibility.

Students who indicated that they typically engaged in community service at least once in the average month had greater perceptions of personal civic responsibility. Monthly community

service as measured by this variable in the MSL instrument includes both typical community service as well as service learning, and multiple studies suggest that civic-mindedness and civic responsibility are predicted by community service (Bringle & Steinberg, 2010; Bringle et al., 2011; Hellman et al., 2006) and by service learning (Bringle et al., 1999, Bringle & Steinberg, 2010; Fenzel & Peyrot, 2005; Weiler et al., 2013). The present study validates prior research on the benefits of community service participation as a solid predictor of student civic-mindedness.

Students who engaged in discussion of major social issues outside of class were also more civic-minded. The literature does not directly connect discussion of major social issues with student civic responsibility, and while self-efficacy for civic engagement was not measured in the MSL, this type of non-classroom student discussion constitutes a form of self-reflection, which the literature suggests contributes to self-efficacy for civic engagement (Barry, 2011; Glass, 2012). Self-efficacy for civic engagement, in turn, has been shown to predict actual civic engagement (Ahranjani et al., 2013; Barry, 2011; Billings & Terkla, 2011; Bringle & Steinberg, 2010; Cooper et al., 2013; Glass, 2012; Hellman et al., 2006; and Jugert et al., 2013). From an institutional perspective, this finding underscores the importance of out-of-classroom learning and engagement opportunities for students, while suggesting the need for additional research that directly studies possible civic engagement outcomes for out-of-class discussion and interaction.

Students who reported that they had faculty mentors who had assisted them with their personal development had higher perceptions of personal civic responsibility. Cohen (1993) and Crisp and Cruz (2009) suggest many positive outcomes for students with mentors in college, though prior research did not specifically explore relationships between faculty mentorship and student civic-mindedness. Student affairs and academic affairs staff mentoring relationships, however, did not exhibit the same civic-mindedness outcomes, and this will be discussed later in

this chapter. The relationship between faculty mentoring relationships and the dependent variable suggests the possibility of additional student benefits from faculty mentorship as well as an important direction for future study of faculty mentoring relationships in general. For KU, specifically, the results suggest that faculty and instructional staff mentoring is related to an important student civic engagement outcome, and may be worthy of inclusion in future strategic planning efforts.

This study provides interesting results not only for the relationships that were found, but also for those that were not found. Twelve independent variables included in the final regression model did *not* exhibit statistically significant relationships with student perception of personal civic responsibility as expected based on prior literature. While students who reported that faculty mentors contributed to their development were also more likely to report greater civic-mindedness, the corresponding student/academic affairs staff mentorship variable did not provide the same result. It's not clear why there was a difference between the two mentor types, but fewer students reported having a student/academic affairs mentor in the first place, which may have contributed. The literature about mentorship and civic engagement is sparse, and this mixed result for the present study suggests the need for additional research regarding mentorship outcomes.

Community service participation also showed mixed outcomes. On one hand, students who report participation in monthly community service of some kind were statistically more likely to have higher perceptions of personal civic responsibility. But when community service participation was evaluated based upon the source of the activity, no conclusive results were found. Participation in short-term service immersions, community service as part of a student or community organization, and community service on the student's own time all correlated with

the dependent variable when analyzed individually. Once added to the combined model, however, the relationships disappeared. Sample sizes for each of these categories were relatively small, which may have contributed to inconclusive results. As has been noted previously, additional research using larger samples may yield more useful data.

Perhaps the most surprising results came with the student involvement and leadership variables. The present study found no significant relationships between any of the seven categories of student involvement or leadership participation and student perception of personal civic responsibility. This does not suggest that involvement in general does not contribute to the dependent variable outcome; rather, it indicates that the *type* of involvement is not related to KU students' perceptions of personal civic responsibility. Brown (2011) suggests that students who are more involved during college are also more likely to be civically engaged, and prior studies consistently point to positive effects of student involvement on student outcomes (Zacherman & Foubert, 2014) but not specifically on student civic-mindedness. For the present study, the researcher chose to study the relationship between *kinds* of student involvement rather than *frequency of* involvement, since studying both in the same model created a risk for "double-counting" the impact of involvement. This presents a significant opportunity for future research that focuses on overall student involvement frequency and how it might be related to civic-mindedness.

**Study Limitations and Future Research**

Recent KU initiatives such as *Bold Aspirations* (KU Bold Aspirations, 2015) may positively impact student civic engagement outcomes, though at the time of data collection for the 2015 MSL study, many had not yet been implemented or had only recently been established. As a result, analysis of data from 2015 did not reflect relationships between these new KU

initiatives and student outcomes. This presents an opportunity for future research through comparative analysis of outcomes between the results of the 2015 MSL instrument and the next assessment. Though it would not be possible to make longitudinal inferences, comparative analysis of specific responses might yield interesting relationships based upon independent variables which have changed over time as a result of new initiatives like *Bold Aspirations*. Using the relevant goals and strategies related to civic engagement outcomes, KU could use the MSL study as one level of assessment.

The MSL allows individual schools to submit institution-specific questions for the survey instrument, providing the opportunity to directly assess student perceptions of KU-specific characteristics. In 2015, KU took advantage of this option to ask questions about students' interest in leadership development and preferred methods for communication regarding leadership opportunities. This feedback is excellent, but is not designed to assess performance metrics. Instead of (or in addition to) collecting generic leadership interest information, the institution could collect student responses specific to stated institutional goals and objectives. For example, the fourth goal of KU's strategic plan, *Bold Aspirations*, states that the university will "engage scholarship for public impact" (KU Bold Aspirations, 2015). In measuring the effectiveness of the strategies associated with this goal, KU could add questions to the MSL instrument that gauge student perceptions of progress using specific examples. The results of these questions could then be used to explore new or re-tooled strategies and build specific plans for improvement or further study.

Many of the predictors suggested by prior literature did not have statistically significant relationships with the dependent variable in the present study. This does not necessarily indicate the lack of a relationship, but may instead indicate a lack of sufficient data to do determine those

relationships. Use of only the KU-specific data creates of limitations not only for sample size, but also for generalization to a broader population. Future studies might explore the same questions for a larger subset of the data, such as a particular institutional type or a category of students (e.g., 4th year undergraduates or first-generation students). A larger dataset would allow for deeper analysis of specific elements with reduced need to recode variables to accommodate low sample sizes. While use of the complete dataset could be useful for some research questions, KU might instead choose to study a peer-institution subset of the data that better resembles the student profile at KU.

Civic-mindedness and student perception of personal civic responsibility should, themselves, be the subjects of additional study. Prior research provides considerable support for the importance of civic-mindedness and civic responsibility in leading students to become more civically engaged (Billings & Terkla, 2011; Boyd & Brackmann, 2012; Bringle & Steinberg, 2010; Hellman et al., 2006; Jugert et al., 2013; McLellan & Youniss, 2003), but what other outcomes are predicted by this "mindset?" Longitudinal studies could provide valuable assessments of civic engagement outcomes through better understanding of how institutional programs and resources impact students after graduation. The present study wholly focused on a snapshot of student civic responsibility as it relates to KU environmental predictors, but the ability to draw direct correlations between specific institutional environmental components and *actual* civic engagement later requires longitudinal assessment. The results of such a study could provide critical support for continued allocation of resources to maintain the desired outcomes of civic responsibility *and* actual civic engagement after college.

**Implications for Policy and Practice**

As outlined briefly in the first chapter, KU already has programs that directly impact student civic engagement and civic-mindedness. Nonetheless, the results of the present study do have important implications for KU practice. First, the results of this study underscore the value of community service in establishing student civic responsibility. KU provides opportunities for students to participate in community service and service learning through multiple venues, and the institution should continue to provide support for existing programs as well the creation of new opportunities that might reach students otherwise not involved.

Mentoring relationships are beneficial to students (Cohen, 1993; Crisp & Cruz, 2009) and this study verifies that KU students who indicate that faculty/instructor mentors have contributed to their personal development are also more likely to have a greater sense of personal civic responsibility. Mentoring is not an intuitive practice, however, and faculty time and resources are always stretched thin. KU should provide continued support and allocate resources to mentoring initiatives, such as faculty training and development. Research is also needed to determine additional benefits of mentoring as well as explore the most meaningful ways for faculty to engage with students.

Facilitating student discussion of major social issues outside of class is something the institution might achieve in several ways. The MSL instrument does not collect details about where students discussed the issues "outside of class," so additional research is warranted to identify what kinds of spaces are most effective for students to gather together for study and discussion. Next, the institution can provide resource support for coordinated discussion opportunities for students, such as the "Voices of Discovery" (VOD) Program at Arizona State University. VOD was designed to facilitate dialogue through the creation of moderated but free-

form discussions where students could talk about social issues in a non-threatening, supportive atmosphere (Treviño, 2001). Finally, faculty and instructional staff might consider incorporating outside discussion opportunities into the course itself. This could include encouraging students to attend interactional events or lectures, or incorporating service learning into the curriculum. It is important to note that some of these opportunities, while outside of the classroom, are still course-related, and additional study should be completed to determine whether or not the relationships with civic-mindedness are consistent.

Of the predictors explored in this study, the strongest relationship to the dependent variable was found with the engagement frequency composite variable. Essentially, this suggests that KU students who are more frequently civically engaged are also more likely to express higher perceptions of personal civic responsibility. As is clear from this study, civic engagement is a concept that encompasses many different activities. Knowing that students who are more civically engaged ultimately have higher perceptions of personal civic responsibility suggests that KU should support opportunities for students to become civically engaged as a way of encouraging the development of civic-mindedness. Specifically, the present study suggests that civic engagement activities such as community service, active involvement in both on- and off-campus social equity-focused organizations, and involvement with campus and community improvement efforts, all contribute to civic responsibility. Institutional support, including resource allocations where appropriate, is critical to maintaining an environment in which students not only have opportunities for civic engagement, but also active support and encouragement by the institution to become engaged.

**Conclusions**

This study provided analysis of predictors of student perception of personal civic responsibility. Using the 2015 Multi-Institutional Study of Leadership (MSL) data for the University of Kansas, the study attempted to determine how students' interactions with specific components of the KU environment predicted their perceptions of personal civic responsibility. The results of the study provided support for prior research on predictors of student civic engagement, and created a foundation for future research on the subject. Results suggest that there are specific environmental interactions that predict desired civic engagement outcomes for KU students, including general participation in community service, frequency of civic engagement during college, participation in out-of-class discussion about social issues, and the existence of supportive faculty mentors. Prior research supports these findings, and KU already provides significant support and infrastructure to efforts that support these predictive outcomes. The present study was broad in scope, exploring a variety of possible predictors as they related to KU students. Future research should drill further in to these predictors, particularly those predictors that prior research suggested would be related to the dependent variable, but for which the present study results were inconclusive. KU already provides an environment that is supportive of many predictors studied here, but in a funding climate that doggedly seeks new opportunities for budget savings, the institution must continue to allocate resources in a manner that supports its full mission, and that recognizes the many proven benefits of student civic engagement.

# Appendices

## Appendix 1. Dependent Variable Codes

| Category | Description (Code)[1] |
|---|---|
| Civic Responsibility | Civic Responsibility Composite Variable (civic_resp_raw) |
| Civic Responsibility | I work with others to make my communities better places. (srls40)[2] |
| Civic Responsibility | I participate in activities that contribute to the common good. (srls47)[2] |
| Civic Responsibility | I believe my work has a greater purpose for the larger community. (srls71)[2] |
| Civic Responsibility | I believe I have responsibilities to my community. (srls33)[2] |
| Civic Responsibility | I value opportunities that allow me to contribute to my community. (srls66)[2] |
| Civic Responsibility | It is important to me that I play an active role in my communities. (srls69)[2] |

[1]Dependent variables were measured using the same scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree.
[2]This component variable was used to create the composite variable. Component variables were not used in individual analysis, but are included here for informational purposes.

## Appendix 2. Independent Variable Codes: Mentoring, Undergraduate Research, Community Service, Community Organization Participation and Social Issues Discussion

| Category | Description (Code) | Scale Values |
|---|---|---|
| Mentoring | Type: Faculty/Instructor (env8a1) | Yes/No |
| Mentoring | Type: Student Affairs Professional Staff (env8a2) | Yes/No |
| Mentoring | Assistance: Faculty/Instructor (env8b1) | 0 = Never, 1 = Once, 2 = Sometimes, 3 = Very Often |
| Mentoring | Assistance: Student Affairs Professional Staff (env8b2) | 0 = Never, 1 = Once, 2 = Sometimes, 3 = Very Often |
| Undergraduate Research | Completed Research with Faculty Member (env4e) | Yes/No |
| Community Svc. | Monthly Community Service Participation (env3) | Yes/No |
| Community Svc. | Alternative Spring Break Participation (env10a10) | 0 = Never, 1 = Once, 2 = Sometimes, 3 = Often |
| Community Svc. | Community Service as part of a Class (env3a) | See Note[1] |
| Community Svc. | Community Service as part of Work Study (env3b) | See Note[1] |
| Community Svc. | Community Service as part of a Student Org. (env3c) | See Note[1] |
| Community Svc. | Community Service as part of a Community Org. Unaffiliated with your school. (env3d) | See Note[1] |
| Community Svc. | Community Service "On Your Own." (env3e) | See Note[1] |
| Community Org. | Been an involved member in an off-campus community or work-based organization(s) unaffiliated with your campus. (env6a) | See Note[2] |
| Community Org. | Held a leadership position in an off-campus community or work-based organization(s) unaffiliated with your campus. (env6b) | See Note[2] |
| Community Org. | Community Organization Involvement Composite. (comm_org_involvement) | See Note[2] |
| Social Issues | During interactions with other students outside of class, how often have you … discussed major social issues such as peace, human rights, and justice? (env9c) | See Note[1] |

[1]These variables were measured using the following scale: 0 = Never, 1 = Once, 2 = Sometimes, 3 = Often.
[2]These variables were measured using the following scale: 0 = Never, 1 = Once, 2 = Sometimes, 3 = Many times, 4 = Much of the time

**Appendix 3. Independent Variable Codes: General Civic Engagement Frequency**

| Description (Code) | Scale Values |
| --- | --- |
| Frequency: Performed community service. (env5a) | See Note[1] |
| Frequency: Acted to benefit the common good or protect the environment. (env5b) | See Note[1] |
| Frequency: Been actively involved with an organization that addresses a social or environmental problem. (env5c) | See Note[1] |
| Frequency: Been actively involved with an organization that addresses the concerns of a specific community (ex. academic council, neighborhood association). (env5d) | See Note[1] |
| Frequency: Communicated with campus or community leaders about a pressing concern. (env5e) | See Note[1] |
| Frequency: Took action in the community to try to address a social or environmental problem. (env5f) | See Note[1] |
| Frequency: Worked with other to make the campus or community a better place. (env5g) | See Note[1] |
| Frequency: Acted to raise awareness about a campus, community or global problem. (env5h) | See Note[1] |
| Frequency: Took part in a protest, rally, march, or demonstration. (env5i) | See Note[1] |
| Frequency: Worked with others to address social inequality. (env5j) | See Note[1] |

[1]These variables were measured using the following scale: 0 = None, 1 = 1-5 hours, 2 = 6-10 hours, 3 = 11-15 hours, 4 = 16-20 hours, 5 = 21-25 hours, 6 = 26-30 hours, and 7 = 31 hours or more.

**Appendix 4. Independent Variable Codes: Co-/Extra-Curricular Involvement[1]**

| Category | Description (Code) |
| --- | --- |
| Academic | Academic/Departmental/Professional (env7a) |
| Academic | Learning community or other formal program where groups of students take two or more classes together. (env4c) |
| Academic | Practicum, internship, field experience, co-op experience, or clinical experience. (env4b) |
| Academic | Honor Societies (env7f) |
| Student Leadership | Student Governance (env7w) |
| Student Leadership | New Student Transitions (env7i) |
| Student Leadership | Peer Helper (env7k) |
| Multi-Cultural | Identity-based/Multicultural Organizations (env7d) |
| Multi-Cultural | Multi-Cultural Social Fraternities and Sororities (env7p) |
| General | Arts/Theater/Music (env7b) |
| General | Campus-Wide Programming (env7c) |
| General | Military (env7h) |
| General | Media (env7g) |
| General | Political (env7m) |
| General | Religious (env7n) |
| General | Social/Special Interest (env7v) |
| General | International Interest (env7e) |
| Social Fraternities and Sororities | Social Fraternities and Sororities (env7q) |
| Sports and Recreation | Sports-Intercollegiate or Varsity (env7r) |
| Sports and Recreation | Recreational (env7u) |
| Service and Advocacy | Advocacy (env7l) |
| Service and Advocacy | Service (env7o) |

[1]NOTE: All variables in this table were measured as either "Yes" or "No."

**Appendix 5. Demographic/Control Variables**

| Category | Description (Code) | Scale Values |
|---|---|---|
| Pre-College Service | Pre-College Community Service Composite (pre_coll_engagement) | 0 = Never, 1 = Sometimes, 2 = Often, 3 = Very Often |
| Pre-College Service | Frequency: Participated in Community Service (pre4a) | 0 = Never, 1 = Sometimes, 2 = Often, 3 = Very Often |
| Pre-College Service | Frequency: Participated in community or work-related organizations (pre4c) | 0 = Never, 1 = Sometimes, 2 = Often, 3 = Very Often |
| Pre-College Service | Frequency: Took leadership positions in community organizations or work-related groups (pre4d) | 0 = Never, 1 = Sometimes, 2 = Often, 3 = Very Often |
| Pre-College Service | Frequency: Worked with others for change to address societal problems (pre4f) | 0 = Never, 1 = Sometimes, 2 = Often, 3 = Very Often |
| Year in School | What is your current class level? (dem3) | 1 = Freshman/First-year, 2 = Sophomore, 3 = Junior, 4 = Senior (4th year and beyond) |
| Academic Performance | What is your best estimate of your grades so far in college? (dem13) | 0 = 3.50-4.00, 1 = 3.00-3.49, 2 = 2.50-2.99, 3 = 2.00-2.49, 4 = 1.99 or less |
| Gender | What is your gender? (dem7, dem7_1_female_yn) | 1 = Male, 2 = Female, 3 = Transgender / Gender non-conforming[1] |
| Race | Recoded Race variable to determine White/Caucasian or non-White. (dem10c_white) | 0 = Non-White, 1 = White / Caucasian |
| Parental Education Attainment | What is the highest level of formal education obtained by any of your parents or guardians? (dem14) | See Note[2] |
| First Generation Status | Recoded variable[3] from the Parental Educational Attainment variable. (dem14_1) | 0 = Non-First Generation, 1 = First Generation |

[1]The value of "Transgender / Gender non-conforming" was treated as missing in the study, but the values are listed here for informational purposes.

[2]These variables were measured using the following scale: 1 = Less than high school diploma or less than GED, 2 = High school diploma or GED, 3 = Some college, 4 = Associates degree, 5 = Bachelor's degree, 6 = Master's degree, 7 = Doctorate or professional degree, 8 = Don't know. Values of "Don't Know" were recoded as missing, but are listed here for informational purposes.

[3]This variable was not included in final analysis, but the values are listed here for informational purposes.

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