



9-1-2009

# The Role of High School Experience in College Student Leadership Development

Susan R. Komives  
*University of Maryland*

Matthew Johnson  
*University of Maryland*

Follow this and additional works at: <https://newprairiepress.org/edconsiderations>



Part of the [Higher Education Commons](#)



This work is licensed under a [Creative Commons Attribution-Noncommercial-Share Alike 4.0 License](#).

---

### Recommended Citation

Komives, Susan R. and Johnson, Matthew (2009) "The Role of High School Experience in College Student Leadership Development," *Educational Considerations*: Vol. 37: No. 1. <https://doi.org/10.4148/0146-9282.1142>

This Article is brought to you for free and open access by New Prairie Press. It has been accepted for inclusion in Educational Considerations by an authorized administrator of New Prairie Press. For more information, please contact [cads@k-state.edu](mailto:cads@k-state.edu).

# The Role of High School Experience in College Student Leadership Development

Susan R. Komives  
and Matthew Johnson

Colleges and universities have long claimed student leadership development to be a desirable college outcome (Roberts, 2007). Until the latter quarter of the 20th century, college experiences that developed leadership outcomes were ill-structured, incidental or accidental, and largely only targeted students who held positional leadership roles (Komives, 1996). Little was understood by college leadership educators about how pre-college experiences influenced college leadership development, and little theory or research guided an understanding of how leadership may develop in adolescent and post-adolescent years.

This article explores the outcomes from high school extracurricular involvement and how high school and college experiences contribute to college leadership outcomes. The chapter then presents two studies that examine the role of high school and college experience in the development of college leadership outcomes: a grounded theory study that led to the leadership identity development theory (Komives, Owen, Longerbeam, Mainella, & Osteen, 2005) and preliminary findings from the Multi-Institutional Study of Leadership (Dugan & Komives, 2007).

---

**Susan R. Komives is Professor of college student personnel in the Department of Counseling and Personnel Services at the University of Maryland, and research and scholarship editor for the National Clearinghouse for Leadership Programs. She is a senior scholar with the James MacGregor Burns Academy of Leadership. Professor Komives is coauthor of *Exploring Leadership: For College Students Who Want to Make a Difference* (1998, 2007) and *Management and Leadership Issues for a New Century* (2000). She is coeditor of the *Handbook for Student Leadership Programs, Leadership for a Better World: Understanding the Social Change Model of Leadership Development* and currently serves as president of the Council for the Advancement of Standards in Higher Education.**

**Matthew Johnson is a doctoral student in college student personnel in the Department of Counseling and Personnel Services at the University of Maryland and a member of the Multi-Institutional Study of Leadership research team. He serves as graduate coordinator for leadership development programs at the University of Maryland. Previously, he was a research associate at the Kettering Foundation in Dayton, Ohio. He holds a Master's degree in college student personnel from Miami University.**

## High School Involvement

Until recently, leadership research on college students has largely ignored pre-college leadership experiences (Cress, Astin, Zimmerman-Oster, & Burkhardt, 2001; Dugan & Komives, 2007). High school educators and administrators facilitate student involvement in high school through a variety of outlets (e.g., sporting teams, community service, student government); and although involvement in extracurricular activities is considered inherently positive, the degree to which these activities facilitate specific desirable outcomes ranging from leadership to academic outcomes has only recently become a focus of research (Eccles, Barber, Stone, & Hunt, 2003; Mahoney, Larson, & Eccles, 2005). The relationship between high school involvements to various college outcomes remains largely unexplored for those high school students who go on to college outside of links between high school involvement and college enrollment (McNeal, 1995).

Eccles et al. (2003) explain the importance of understanding the nature of youth involvement activities because they provide opportunities to: acquire and practice specific social, physical, and intellectual skills that may be useful in a wide variety of settings including school, contribute to the well-being of one's community and to develop a sense of agency as a member of one's community, belong to a socially recognized and valued group, establish supportive social networks of peers and adults that can help in both the present and the future, and experience and deal with challenges. (p. 866)

Involvement in youth activities serves as an important developmental context for growth. Studies have shown positive linkages between extracurricular activities and such outcomes as academic performance (Eccles & Barber, 1999; Marsh, 1992), decreased likelihood to drop out of high school (Mahoney & Cairns, 1997; McNeal, 1995), increased civic engagement (Youniss, McLellan, Su & Yates, 1999), psychological health (Barber, Eccles, & Stone, 2001), and reduced substance abuse (Youniss, Yates, & Su, 1997). Some studies have shown that extracurricular involvement in high school gives students a chance to learn leadership skills (Glanville, 1999). These results have been corroborated by a national longitudinal study that showed consistent participation in extracurricular activities from 8th grade through 12th grade predicts academic achievement and pro-social behaviors in adolescents, even after accounting for individual, parent, peer, and school process variables (Zaff, Moore, Papillo, & Williams, 2003). Taken together, these studies empirically show that participation in various involvement activities in high school is associated with positive developmental outcomes.

### *Type of Involvement Activities*

Research suggests that the relationship between youth activities involvement and developmental outcomes vary as a function of the type and characteristics of the activities (Barber, et al., 2001; Bartko and Eccles, 2003; Eccles, Barber, Stone, & Hunt, 2003; McNeal, 1995; Rose-Krasnor et al., 2006). For instance, service-learning is a type of high school involvement that is receiving a lot of recent attention. Several studies have shown that participation in service-learning activities in high school relates to better academic achievement, higher self-esteem, reduced dropout rates, increased political participation, and increased volunteering (Mahoney, 2000; Mahoney & Cairns, 1997; Youniss, et al., 1999).

One type of involvement that has shown mixed results with developmental outcomes is sports. Participation in high school sports relates to higher likelihood of graduation and college attendance

(McNeal, 1995), with even greater likelihood for low-achieving and blue-collar male athletes (Gould & Weiss, 1987; Holland & Andre, 1987). Although participation in high school sports relates to higher academic performance, more engagement, and greater likelihood of attending post-secondary education, it is also related to increased alcohol consumption in high school and post-secondary education (Barber et al., 2001; Eccles & Barber, 1999).

#### *Characteristics of Involvement Activities*

Research also suggests that the specific characteristics of involvement activities matter. For instance, in a study of 10,944 8th grade students, Gerber (1996) found that school-based involvement activities are more positively associated with academic achievement compared to nonschool-based activities (Gerber, 1996). The peer group with which one associates in various high school involvement activities can also have implications on outcomes associated with the activity (Dishion, McCord, & Poulin, 1999; Eccles et al., 2003). Oversight of these various peer groups (e.g., parents, coaches, no oversight) mediates outcomes associated with these involvement experiences. Involvement activities that are highly competitive or overly demanding have also been shown to be related to higher levels of anxiety and stress among the participants (Scanlan, Babkes, & Scanlan, 2005).

#### **Studying Leadership in College Students**

High school extracurricular involvement is generally seen as positive and is widely supported by parents and educators. The same can be said for involvement at the college and university level (Kuh, Kinzie, Schuh, Whitt, & Associates, 2005; Pascarella & Terenzini, 2005). In his theory on college student involvement, Astin (1995) postulates that the greater the involvement of a student in college specifically time engaged in educationally purposeful activity, the greater that student's learning and development.

There is little known, however, about the relationship between various types of high school involvement and college learning outcomes – particularly those college outcomes associated with leadership. With a growing number of students attending postsecondary education with increasingly diverse backgrounds and experiences, it is important to study both the theoretical and empirical relationships between the role of extracurricular involvement in high school and leadership outcomes in college.

The role of high school extracurricular involvement has been examined in two recent college leadership studies by University of Maryland research teams. One study looks at a life span approach to the development of a leadership identity including pre-college experience; the second study examines the role of high school extracurricular involvement in specific college leadership capacities. Both studies are framed by contemporary leadership theory foundationally grounded in reciprocal, relational orientations to leadership. An overview of this approach to leadership is presented followed by the two studies.

#### *Shifting Leadership Perspectives*

Perspectives on leadership over the last century have evolved from examining “great men” theories (e.g., leaders are born) to leadership traits (e.g., intelligence) or leadership behaviors (e.g., democratic, authoritarian) exhibited by those in leadership positions to leadership behaviors or styles that vary contingent on the situation (Komives, Lucas, & McMahon, 2007; Rost, 1991). Conventional views on these managerial, leader-centric approaches (Rost, 1991) shifted with the

increased importance of the reciprocity of the follower role and the leader's responsibility to transform followers into leaders themselves (Burns, 1978). These contemporary reciprocal theories approach leadership as a process that is collaborative, relational, and ethical undergirded by the importance of authenticity as a root construct guiding an individual's involvement in the process of leadership (Avolio & Gardner, 2005; Gardner, Avolio, & Walumbwa, 2005). Two contemporary theories have been widely used in college student leadership development: relational leadership and the social change model of leadership development (Kezar, Carducci, & Contreras-McGavin, 2006).

Relational Leadership. Seeking to inform college students about contemporary approaches to leadership, college leadership educators Komives, Lucas, and McMahon (1998) published the first edition of *Exploring Leadership: For College Students Who Want to Make a Difference* presenting their relational leadership model of leadership. This theoretical model of leadership includes five elements: (1) purposeful – being about accomplishing something positive; (2) inclusive – open to diverse ideas and diverse people, seeking out shareholders and stakeholders to work collaboratively for change; (3) empowering – engaging all group members in ways that fully use their talents and perspective; (4) ethical – upholding both modal and end values, and expecting integrity, trust, character, and truthfulness among group members; and (5) process-oriented – attending to the normative practices of the group that bring people collaboratively together in community and shared leadership functions. The relational leadership theoretical model defines leadership as “a relational and ethical process of people together attempting to accomplish positive change” (Komives, et al., 2007, p. 74). These relational leadership elements apply to both group members as well as positional leaders when viewing leadership as a process.

Social Change Model of Leadership Development. The social change model of leadership development (Higher Education Research Institute [HERI], 1996) was developed by a nationally recognized group of leadership researchers (HERI, 1996). This theory “approaches leadership as a purposeful, collaborative, values-based process that results in positive social change” (Komives, Wagner & Associates, 2009, p. ii). This comprehensive theory conceptually integrates individual, group, and societal dimensions of leadership. The seven values are clustered along three dimensions designed to enhance effectiveness for accomplishing social change (Astin, 1996; HERI, 1996; Komives, et al., 2009):

- Individual: consciousness of self; congruence; and commitment
- Group: collaboration; common purpose; and controversy with civility
- Societal/community orientation: citizenship.

#### **Leadership Identity Development**

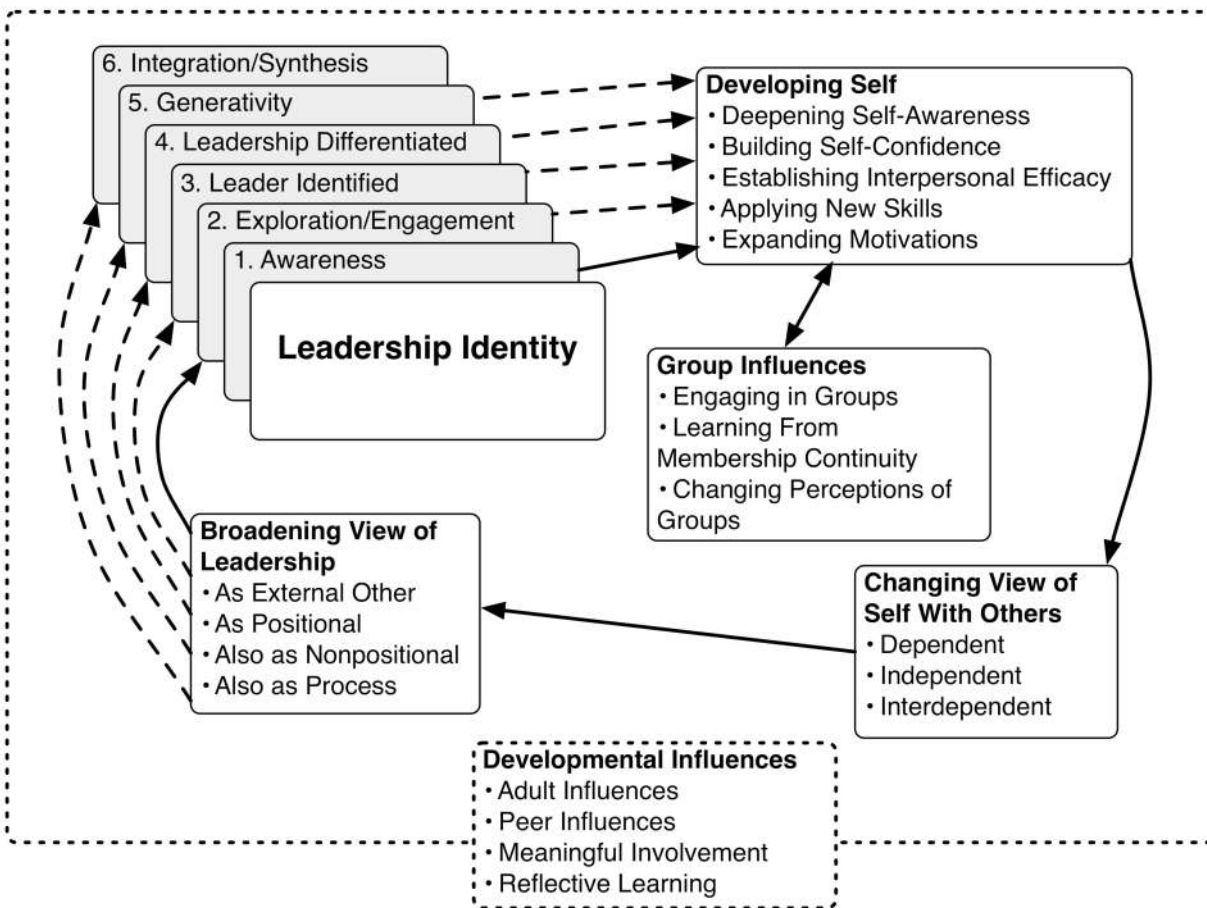
A small body of leadership developmental literature examines how leadership develops across the life span inclusive of pre-college years (Brungardt, 1996; Day, Harrison, & Halpin, 2009; Drath, 1998; Lord & Hall, 2005; Murphy & Reichard, in press). How one develops the capacity to implement the relational leadership theoretical model (Komives, et al, 1998) was the focus of a grounded theory inquiry in 2001-2002 (Komives, et al., 2005; Komives, Longerbeam, Owen, Mainella, & Osteen, 2006).

Grounded theory is an inductive research methodology that is generated from participant’s experiences that build toward general patterns or categories (Strauss & Corbin, 1988). Relying on intensity sampling strategies to identify participants who evidence the phenomenon being studied, expert nominators who observed students engaging in organizational settings were asked to nominate students who practice this relational leadership ability whether in positional or in non-positional roles. Those students selected engaged in intensive life-narrative interviews over a one-year period with members of the research team (Komives, et al., 2005).

The diverse group was comprised of five women and eight men including White, African American, African, and a student of middle Eastern heritage. Two students were recent alumni, nine were seniors, and two were sophomores. The research team employed constant comparative analysis and axial and selective coding with the data as well as member checking and peer debriefing for trustworthiness of the study. (For more detail on study methods, see Komives, et al., 2005).

The data led the researchers to identify a six-stage theory of leadership identity development (LID) (Komives, et al., 2005). As the students developed through each stage they were influenced by the developmental components of adult influences, peer influences, meaningful involvement, and reflective practices that helped them learn from their experiences. At each stage they heightened their self-awareness through their interaction with others in group or organizational settings. It is notable that they developed interpersonal efficacy of working with diverse others and were influenced by the continuity of group membership by sticking with one organization over time. This development of self and group influences changed how they viewed themselves in relation to others. While initially being dependent on others, then being independent, they came to an awareness of interdependence with others; interdependence grounded the final three stages of the theory. As noted in the Figure below, this changing view of themselves with others influenced their changing view of leadership, initially seeing leadership as a person external to themselves; then as positional (the behavior of a person

**Figure**  
**A Grounded Theory of Leadership Identity Development**



Source: Komives, Owen, Longerbeam, Mainella., & Osteen, 2005. Reprinted with permission from the American College Personnel Association (ACPA). Washington, DC: Center for Higher Education.

**Table**  
**Five-Year Data of Distribution of Institute Participants by College or Unit: Number and Percentage**

Stages								
	1	2	3	The Key	4	5	6	
	Awareness	Exploration/Engagement	Leader Identified	Transition	Leadership Differentiated	Generativity	Integration/Synthesis	
Key Categories	Transition	Transition	Emerging	Immersion	Emerging	Transition	Transition	
Stage Descriptions	<p>Recognizing that leadership is happening around you</p> <p>Getting exposure to involvements</p>	<p>Intentional involvements (sports, church, service, scouts, dance, SGA)</p> <p>Experiencing groups for the first time</p> <p>Taking on responsibilities</p>	<p>Trying on new roles</p> <p>Identifying skills needed</p> <p>Taking on individual responsibility</p> <p>Individual accomplishments important</p>	<p>Shifting order of consciousness</p> <ul style="list-style-type: none"> <li>Take on more complex leadership challenges</li> </ul>	<p>Joining with others in shared tasks/goals from positional or non-positional group roles</p> <ul style="list-style-type: none"> <li>Need to learn group skills</li> </ul> <p>New belief that leadership can come from anywhere in the group (not positional)</p>	<p>Seeks to facilitate a good group process whether in positional or non-positional leader role</p> <ul style="list-style-type: none"> <li>Commitment to community of the group</li> </ul> <p>Awareness that leadership is a group process</p>	<p>Active commitment to a personal passion;</p> <ul style="list-style-type: none"> <li>Accepting responsibility for the development of others.</li> <li>Promotes team learning</li> <li>Responsible for sustaining organizations</li> </ul>	<p>Continued self-development and life long learning.</p> <ul style="list-style-type: none"> <li>Striving for congruence and internal confidence</li> </ul>
Changing View of Leadership	<p>"I am not a leader"</p> <p>"Other people are leaders; leaders are out there somewhere"</p>	<p>"I want to be involved"</p>	<p>"A leader gets things done"</p>	<p>"Holding a position does not mean I am a leader"</p>	<p>"I need to lead in a participatory way and I can contribute to leadership from anywhere in the organization"; "I can be a leader without a title"; "I am a leader even if I am not the leader"</p>	<p>"I am responsible as a member of my communities to facilitate the development of others as leaders and enrich the life of our groups"</p>	<p>"I know I am able to work effectively with others to accomplish change from any place in the organization"; "I am a leader"</p>	

Continued on next page

Table continued  
 Five-Year Data of Distribution of Institute Participants by College or Unit: Number and Percentage

		Stages								
		1	2	3	The Key	4	5	6		
		Awareness	Exploration/Engagement	Leader Identified	Transition	Leadership Differentiated	Generativity	Integration/Synthesis		
Key Categories		Transition	Transition	Emerging	Immerision	Emerging	Transition	Transition		
<b>Developing Self</b>	<ul style="list-style-type: none"> <li>Becomes aware of national leaders and authority figures (e.g. the principal)</li> <li>Develop personal skills</li> <li>Identify personal strengths/weaknesses</li> <li>Prepare for leadership</li> <li>Build self confidence</li> </ul>	<ul style="list-style-type: none"> <li>Want to make friends</li> <li>Recognize personal leadership potential</li> <li>Motivation to change something</li> </ul>	<ul style="list-style-type: none"> <li>Positional leadership roles or group member roles</li> <li>Narrow down to meaningful experiences (e.g. church, sports, clubs, yearbook, scouts, class projects)</li> </ul>	<ul style="list-style-type: none"> <li>Models others</li> <li>Leader struggles with delegation</li> <li>Moves in and out of leadership roles and member roles but still believes the leader is in charge</li> <li>Appreciates individual recognition</li> </ul>	<p><b>Transition</b></p> <ul style="list-style-type: none"> <li>Recognition that I cannot do it all myself</li> <li>Learn to value the importance/talent of others</li> </ul>	<ul style="list-style-type: none"> <li>Learn to trust others and their involvement</li> <li>Openness to other perspectives</li> <li>Develop comfort leading as an active member</li> <li>Let go control</li> </ul>	<ul style="list-style-type: none"> <li>Learn about personal influence</li> <li>Effective in both positional and non-positional roles</li> <li>Praetices being engaged member</li> <li>values servant leadership</li> </ul>	<ul style="list-style-type: none"> <li>Sponsor and develop others</li> <li>Transforming leadership</li> <li>Concern for leadership pipeline</li> <li>Concerned with sustainability of ideas</li> </ul>	<ul style="list-style-type: none"> <li>Sees leadership as a lifelong developmental process</li> <li>Want to leave things better</li> <li>Am trustworthy and value that I have credibility</li> <li>Recognition of role modeling to others</li> </ul>	
<b>Group Influences</b>	<ul style="list-style-type: none"> <li>Uninvolved or "inactive" follower</li> <li>Want to get involved</li> <li>"Active" member</li> <li>Engage in diverse contexts (e.g. church, sports, clubs, class projects)</li> </ul>	Narrow interests	<ul style="list-style-type: none"> <li>Leader has to get things done</li> <li>Group has a job to do; organize to get tasks done</li> </ul>	<ul style="list-style-type: none"> <li>Involve members to get the job done</li> <li>Stick with a primary group as an identity base; explore other groups</li> </ul>	<ul style="list-style-type: none"> <li>Meaningfully engage with others</li> <li>Look to group resources</li> </ul>	<ul style="list-style-type: none"> <li>Seeing the collective whole; the big picture</li> <li>Learn group and team skills</li> </ul>	<ul style="list-style-type: none"> <li>Value teams</li> <li>Value connectedness to others</li> <li>Learns how system works</li> </ul>	<ul style="list-style-type: none"> <li>Value process</li> <li>Seek fit with organization vision</li> </ul>	<ul style="list-style-type: none"> <li>Sustaining the organization</li> <li>Ensuring continuity in areas of passion/focus</li> </ul>	<ul style="list-style-type: none"> <li>Anticipating transition to new roles</li> <li>Sees organizational complexity across contexts</li> <li>Can imagine how to engage with different organizations</li> </ul>

Continued on next page

**Table continued**  
**Five-Year Data of Distribution of Institute Participants by College or Unit: Number and Percentage**

Stages							
	1 Awareness	2 Exploration/Engagement	3 Leader Identified	The Key	4 Leadership Differentiated	5 Generativity	6 Integration/ Synthesis
Key Categories	Transition	Transition	Emerging	Transition	Emerging	Transition	Transition
Developmental Influences	<ul style="list-style-type: none"> <li>Observation/watching</li> <li>Recognition of adult sponsors</li> </ul>	<ul style="list-style-type: none"> <li>Affirmation of adults</li> <li>Attributions (others see me as a leader)</li> <li>Role models</li> <li>Older peers as sponsors</li> <li>Adult sponsors</li> <li>Assume positional roles</li> <li>Reflection/retreat</li> </ul>	<ul style="list-style-type: none"> <li>Take on responsibilities</li> <li>Model older peers and adults</li> <li>Observe older peers</li> <li>Adults as mentors, guides, coaches</li> </ul>	<ul style="list-style-type: none"> <li>Older peers as sponsors and mentors</li> <li>Adults as mentors and meaning makers</li> <li>Learning about leadership</li> </ul>	<ul style="list-style-type: none"> <li>Practicing in ongoing peer relationships</li> <li>Responds to meaning makers (student affairs staff, key faculty, same-age peer mentors)</li> </ul>	<ul style="list-style-type: none"> <li>Begins coaching others</li> <li>Responds to meaning makers (student affairs staff, key faculty, same-age peer mentors)</li> </ul>	<ul style="list-style-type: none"> <li>Shared learning</li> <li>Reflection/retreat</li> <li>Re-cycle when context changes or is uncertain (contextual uncertainty), enables continual recycling through leadership stages</li> </ul>
Changing View of Self with Others	Dependent	Dependent	Independent/Dependent	Independent/Dependent	Independent/Dependent	Interdependent	Interdependent

Source: Komives, Longenecker, Owen, Mainella, & Osteen, 2006. Reprinted with permission from the American College Personnel Association (ACPA), Washington, DC: Center for Higher Education.

who holds a positional leadership role); next as non-positional, and finally as a process.

The six sequential stages are also presented as a theoretical model designed to illustrate the aspects of the grounded theory categories and how they are evidenced at each stage in LID. (See Table). Each stage ends with a transition in which the student realizes that previous ways of thinking no longer apply, or there is recognition that the student is acting differently and makes meaning of that transition. Growth occurs in the transitions (Komives, et al, 2006).

Below is a description of the LID stages:

- In the awareness stage (stage one), leaders are perceived as distant others, particularly external adults, such as the president of the United States or the principal at elementary school. There is no awareness that the student is personally engaged in leadership or is a leader. Adults are seen to be supports and sponsors and begin getting the student involved in meaningful tasks and in group experiences.

- In the second stage, exploration/engagement, the student becomes interested in joining groups largely to form friendships. This stage helps students build relationship skills and explore interests; and they begin to become aware that groups have purposes and that there are roles people engage in within groups. Through such activities as church choir, the neighborhood swim club, scouts, or student council, they become aware that older peers are also leaders and increasing seek to engage in groups meaningful to them.

- As they develop more interests, they emerge into stage three, leader identified, aware that groups are comprised of leaders and followers. They are aware of the hierarchical nature of organizations. The leader is identified as the one doing leadership and others, as followers, are perceived to be working to support the leader to get the job done.

Many students experience a major transition out of stage three to see that groups are comprised of people who are interdependent on each other. This may happen when they learn the language of leadership and see its complexity, when they realize no one leader could accomplish everything in a group working independently, begin to value true teamwork, or when they experience a stage of consciousness shift to understanding interdependence (Kegan, 1994). The final three leader identity development stages are all grounded in interdependence – a state of being that recognizes the interdependency with others to accomplish goals.

- In stage four, leadership differentiated, students begin to see leadership as something also exhibited by those in non-positional roles (i.e., group members are doing leadership) and begin to view leadership as a process among those in a group or organization. At this stage students see they can be “a” leader even if they are not “the” leader. In this stage, positional leaders view themselves as facilitators of group work. They use terms like “we” instead of feeling in charge of the group and engage in shared or participative leadership valuing teamwork. In this fourth stage, students also begin to see that their groups or organizations are actually part of a bigger system of groups, and they see the interconnections among groups.

- As leadership identity develops further, students engage in the fifth stage, generativity, in which they engage with a passion and commitment to accomplish contributions that will last beyond their time in the organization. Further, they seek to develop the leadership in newer members in the group. They take on mentoring and teaching roles for younger or newer group members. Personal integrity and

acting on personal values emerges as critical to their relationships with others.

- In the sixth stage of the model, synthesis/integration, students have incorporated the identity of being a leader into their self-concept. They know they are doing leadership when working in groups even when not in a positional leader role and feel confident of their ability to handle the contextual uncertainty of group settings (Komives, et al., 2005). As one student summarized, “I see leadership now as an everyday thing.”

It is important to note that leadership identity development does not appear to be an age-based model; students developed through the stages at different paces (Komives et al, 2005). It is illuminating that students had to move past seeing leadership as the behavior of a person in a hierarchical setting to truly embrace leadership as a process evidenced by any individual in the group. The transcendent importance of recognizing one’s interdependence with others is critical to developing a relational leadership identity and could be enhanced by meaningful group experience. For applications of leadership identity development in curricular and co-curricular settings see Komives, Longerbeam, Mainella, Osteen, Owen, and Wagner (2009) and Komives et al. (2006).

### The Multi-Institutional Study of Leadership

The Multi-Institutional Study of Leadership (MSL) includes high school experience in a national study of college student leadership outcomes (Dugan et al., 2008). This study is designed to study the social change model of leadership development (HERI, 1996). A revised version of the Socially Responsible Leadership Scale (SRLS) (Tyree, 1997) was the foundation of the MSL (Dugan, Komives, & Owen, 2007). The SRLS was originally a 103 item instrument developed to measure the social change model and further factor analyzed to reduce the measure to fewer items while preserving scale validity and reliability. The revised SRLS used in the MSL is a 68 item measure using a Likert response option (strongly disagree [1] to strongly agree [5]) on items of knowledge, attitude, and skill on the values in the social change model. The MSL also includes a measure of self-efficacy for leadership (a measure of one’s confidence in one’s leadership ability) developed by the research team using a four point scale ranging from Not at All Confident (1) to Very Confident (4). In this cross sectional study, students were asked to retrospectively assess their various attitudes, involvements, and leadership behaviors prior to coming to college.

Over 150 postsecondary institutions responded to an email invitation in the summer of 2005 to be considered to participate in the national study. Participating campuses (n=52) were selected to represent diversity by region, size, and institutional type (e.g., community colleges, liberal arts) in public and private settings. Within those institutions, campuses with 4,000 or fewer students surveyed all their undergraduates and campuses over 4,000 drew a random sample drawn to study specifications (Dugan & Komives, 2007). In 2006, the MSL was administered in a web format on 52 college campuses to 155,716 students with responses from 56,854 participants reflecting a 37% response rate. This study used data from 50,378 students who completed 90% of the core instrument. Detailed procedures and methodology used in this national study can be found in Dugan, Komives and Segar (2008) and Dugan and Komives (2007).

Separate hierarchical multiple regressions were calculated for each of the seven outcome measures in the social change model, a



measure of openness to change, leadership efficacy, including their corresponding retrospective pretests. After controlling for inputs (e.g., gender, race), regression blocks included pre-college involvements, retrospective pre-test measures for each dependent variable, and a block of college involvement experiences including college service, leadership training, frequency and breadth of organizational involvement, and frequency of holding college positional leadership roles. VIF indicated no issues of multicollinearity.

Each of the MSL regression models was significant ( $p \leq .01$ ) and generally explained between 27% to 42% of the overall variance for the social change model of leadership development values and leadership self-efficacy. Student demographic characteristics and pre-college experiences explain the largest portion of the variance (10%-21%) on the leadership outcomes (Dugan, Komives, & Owen, 2007). Following the adage that past behavior predicts future behavior, student pre-college behaviors predict a great deal of their college leadership outcomes.

Key findings are that college students were highest in their capacity for commitment and congruence and lower in citizenship and openness to change. Women were significantly higher than men on seven of the eight social change model of leadership development measures, yet men were significantly higher than women in their leadership self-efficacy. It would appear women have developed more leadership skills than men, but men feel more confident in their ability to be leaders (Dugan & Komives, 2007).

After controlling for demographic characteristics such as gender and race, high school involvements, and pre-test measures, the college experience that contributed most to leadership development in college was the frequency of engaging in discussions of socio-cultural issues such as political, religious, social change, and other diverse views outside the classroom with peers. It may be that these kinds of discussions helped students see the points of view and positionality of others contributing to their ability to work with others more effectively in organizational settings. Ensuring students have similar experiences in high school may have the same influence.

MSL found that those who participated in college organizations (once to much of the time) or in any training activities (once to much of the time) were significantly higher in all leadership outcomes than those who were never involved; however, breadth of involvement (total number of organizations one participated in) was negatively related to leadership outcomes. Experiences in the college environment (i.e., involvement, leadership training) explained between 7%-14% of the variance on the seven social change model leadership outcomes (Dugan, Komives, & Owen, 2007). Faculty mentoring and college engagement in community service made significant contributions to growth in college leadership outcomes. Although the MSL did not inquire about mentoring in high school, the LID findings may indicate that mentors (adult sponsors and peer mentors) would matter to high school students' leadership development as well.

Studying college seniors would be useful as a longitudinal examination of the role of high school experience. Using this same MSL data set, a study of approximately 14,000 men and women as college seniors revealed that 10% of the variance in college leadership self-efficacy was significantly explained by high school involvements such as holding leadership positions in high school organizations. High school varsity club involvement was a significant positive predictor for men but not women. However, for both men and women, frequency of involvement in high school organizations was significantly

negatively related to college leadership self-efficacy (Dugan, Cilente, Calizo, & Komives, 2009). It is notable that holding positional leadership roles for high school students did contribute to their continuing leadership self-efficacy (Bandura, 1997), but that being engaged in too many organizations does not contribute to developing efficacy for leadership. Perhaps students who are stretched too thin develop less. It would be useful to determine if being highly involved in fewer organizations may be warranted.

## Conclusion

High school leadership experiences play a central role in contributing to college leadership outcomes. The two studies reported in this article show the importance of both high school organizational membership and the nature of leadership roles in the development of a relational leadership identity. Adult mentors and sponsors, peer role models, meaningful involvement, and purposeful reflection all contribute to the development of a leadership identity. National data from the Multi-Institutional Study for Leadership affirmed the importance of high school positional role experience in college leadership efficacy; however, high school educators might consider the nature of student group and organization membership. Breadth of involvement in both high school and college where the student may be spread too thin did not seem to develop leadership outcomes. The important role of high school experiences should be a consideration in studies of college student leadership and other college outcomes.

## References

- Astin, A.W. (1985). *Achieving educational excellence: A critical assessment of priorities and practice in higher education*. San Francisco: Jossey-Bass.
- Avolio, B.J., & Gardner, W.L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *Leadership Quarterly*, 16, 315-338.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman and Company.
- Barber, B.L., Eccles, J.S., & Stone, M.R. (2001). Whatever happened to the jock, the brain, and the princess?: Young adult pathways linked to adolescent activity involvement and social identity. *Journal of Adolescent Research*, 16, 429-455.
- Bartko, W.T., & Eccles, J.S. (2003). Adolescent participation in structured and unstructured activities: A person-oriented analysis. *Journal of Adolescent Research*, 32, 233-241.
- Brungardt, C. (1996). The making of leaders: A review of the research in leadership development and education. *Journal of Leadership Studies*, 3(3), 81-95.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Cress, C. M., Astin, H.S., Zimmerman-Oster, K., Burkhardt, J. C. (2001). Developmental outcomes of college students' involvement in leadership activities. *Journal of College Student Development*, 42, 15-27.
- Day, D.V., Harrison, M.M., & Halpin, S.M. (2009). *An integrative approach to leader development: Connecting adult development, identity and expertise*. New York: Routledge.

- Dishion, T. J., McCord, J., & Poulin, F. (1999). When interventions harm: Peer groups and problem behavior. *American Psychologist*, 54, 755-764.
- Drath, W. H. (1998). Approaching the future of leadership development. In C. D. McCauley, R. S. Mosley, & E. Van Velsou (Eds.), *Handbook of leadership development* (pp. 403-432). Center for Creative Leadership. San Francisco: Jossey-Bass.
- Dugan, J.P., Cilente, K., Calizo, L.H., & Komives, S.R., (2009). *Leadership self-efficacy and gender*. Unpublished paper. College Park, MD: National Clearinghouse for Leadership Programs.
- Dugan, J.P., & Komives, S.R., (2007). *Developing leadership capacity in college students: Findings from a national study*. College Park, MD: National Clearinghouse for Leadership Programs.
- Dugan, J. P., Komives, S. R., & Owen, J. E. (2007). *So what matters in the development of leadership?: More findings from the multi-institutional study of leadership*. International Leadership Association, Vancouver, BC, Canada.
- Dugan, J. P., & Komives, S. R. (2008). *Influences on college students' capacity for socially responsible leadership*. Unpublished paper. College Park, MD: National Clearinghouse for Leadership Programs.
- Dugan, J. P., Komives, S. R., & Segar, T. (2008). College student capacity for socially responsible leadership: Understanding norms and influences of race, gender, and sexual orientation. *NASPA Journal*, 45, 475-500.
- Eccles J.S., & Barber, B.L. (1999). Student council, volunteering, basketball, or marching band: What kind of extracurricular involvement matters? *Journal of Adolescent Research*, 14, 10-43.
- Eccles, J.S., Barber, B.L., Stone, M., & Hunt, J. (2003). Extracurricular activities and adolescent development. *Journal of Social Issues*, 59, 865-889.
- Gardner, W.L., Avolio, B.J., & Walumbwa, F. (Eds.). (2005). *Authentic leadership theory and practice: Origins, effects, and development*. San Diego: Elsevier.
- Gerber, S.B. (1996). Extracurricular activities and academic achievement. *Journal of Research and Development in Education*, 30, 42-50.
- Glanville, J.L. (1999). Political socialization or selection? Adolescent extracurricular participation and political activity in early adulthood. *Social Science Quarterly*, 2, 279-291.
- Gould, D., & Weiss, M.R. (Eds.). (1987). *Advances in pediatric sport sciences. Vol. 2: Behavioral issues*. Champaign, IL: Human Kinetics.
- Higher Education Research Institute [HERI] (1996). *A social change model of leadership development (Version III)*. Los Angeles: University of California Los Angeles Higher Education Research Institute.
- Holland, A., & Andre, T. (1987) Participation in extracurricular activities in secondary school: What is known, what needs to be known? *Review of Educational Research*, 57, 437-466.
- Kegan, R. (1994). *In over our heads: The mental demands of modern life*. Cambridge, MA: Harvard University Press.
- Kezar, A. J., Carducci, R., Contreras-McGavin, M. (2006). Rethinking the "L" word in higher education: The revolution in research on leadership. *ASHE Higher Education Report* 31(6). San Francisco: Jossey-Bass.
- Komives, S.R. (1996). A call to collaborative leadership. *About Campus: Enhancing the Student Learning Experience*, 1, 2-3.
- Komives, S. R. (in press). College student leadership identity development. In S.E. Murphy & R.J. Reichard. (Eds.) *Early development and leadership: Building the next generation of leaders*. New York: Psychology Press/Routledge.
- Komives, S.R., Owen, J.E., Longerbeam, S.D., Mainella, F.C., & Osteen, L. (2005). Developing a leadership identity: A grounded theory. *Journal of College Student Development*, 46, 593-611.
- Komives, S.R., Longerbeam, S.D., Owen, J.E., Mainella, F.C., & Osteen, L. (2006). A leadership identity development model: Applications from a grounded theory. *Journal of College Student Development*, 47, 401-420.
- Komives, S. R., Longerbeam, S. D., Mainella, F., Osteen, L., Owen, J. E., & Wagner, W. (2009) Leadership identity development: Challenges in applying a developmental model. *Journal of Leadership Education*, 8 (1), 11- 47.
- Komives, S.R., Lucas, N., & McMahon, T.R. (1998). *Exploring leadership: For college students who want to make a difference*. San Francisco: Jossey-Bass.
- Komives, S.R., Lucas, N., & McMahon, T.R. (2007). *Exploring leadership: For college students who want to make a difference* (2nd ed.). San Francisco: Jossey-Bass.
- Komives, S. R., Wagner, W., & Associates. (2009). *Leadership for a better world: Understanding the social change model of leadership development*. A publication of the National Clearinghouse for Leadership Programs. San Francisco: Jossey-Bass.
- Kuh, G. D., Kinzie, J., Schuh, J. H., Whitt, E. J., & Associates. (2005). *Student success in college: Creating conditions that matter*. San Francisco: Jossey-Bass.
- Lord, R. G. & Hall, R. J. (2005). Identity, deep structure and the development of leadership skill. *The Leadership Quarterly*, 16, 591-615.
- Mahoney, J. L., & Cairns, R. B. (1997). Do extracurricular activities protect against early school dropout? *Developmental Psychology*, 33, 241-253.
- Mahoney, J. L., Larson, R. W., & Eccles, J. S. (Eds.). (2005). *Organized activities as contexts of development: Extracurricular activities, after-school and community programs*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Mahoney, J. L. (2000). School extracurricular activity participation as a moderator in the development of anti-social patterns. *Child Development*, 71(2), 502-516.
- Marsh, H. W. (1992). Extracurricular activities: Beneficial extension of the traditional curriculum or subversion of academic goals? *Journal of Educational Psychology*, 84, 553-562.

McNeal, R. B. (1995). Extracurricular activities and high school drop-outs. *Sociology of Education*, 68, 62-81.

Murphy, S. E., & Reichard, R. J. (Eds.) (in press). *Early development and leadership: Building the next generation of leaders*. New York: Psychology Press/Routledge.

Pascarella, E., & Terenzini, P. (2005). *How college affects students: A third decade of research, Volume 2*. San Francisco: Jossey-Bass.

Roberts, D. C. (2007). *Deeper learning in leadership: Helping college students find the potential within*. San Francisco: Wiley.

Rose-Krasnor, L., Busseri, M.A., Willoughby, T., & Chalmers, H. (2006). Breadth and intensity of youth activity involvement as contexts for positive development. *Journal of Youth and Adolescence*, 35, 385-499.

Rost, J. (1991). *Leadership for the twenty-first century*. New York: Praeger.

Scanlan, T.K., Babkes, M.L., & Scanlan, L.A. (2005). Participation in sport: A developmental glimpse at emotion. In J.L. Mahoney, R.W., Larson, & J.S. Eccles (Eds.), *Organized activities as contexts of development: Extracurricular activities, after-school and community programs* (pp. 275-311). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research* (2d ed.). Newbury Park, CA: Sage.

Tyree, T. M. (1998). *Designing an instrument to measure socially responsible leadership using the Social Change Model of Leadership Development*. Unpublished doctoral dissertation, University of Maryland, College Park.

Youniss, J., McLellan, J. A., Su, Y., & Yates, M. (1999). Religion, community service, and identity in American youth. *Journal of Adolescence*, 22, 243-253.

Youniss, J., Yates, M., & Su, Y. (1997). Social integration: Community service and marijuana use in high school seniors. *Journal of Adolescent Research*, 12, 245-262.

Zaff, J.F., Moore, K.A., Papillo, A.R., & Williams, S. (2003). Implications of Extracurricular Activity Participation During Adolescence on Positive Outcomes. *Journal of Adolescent Research*, 22, 599-630.