



USING SEM TO DESCRIBE THE INFUSION OF CIVIC ENGAGEMENT INTO THE CAMPUS CULTURE

Presented by:

Meredith S. Billings & Dawn Geronimo Terkla

Tufts University

Office of Institutional Research & Evaluation (OIR&E)

NEAIR 37th Annual Conference, November 2010

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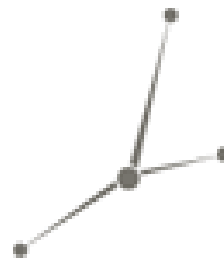
AIR 50th Annual Forum, June 2010

- ◆ Background/Introduction
- ◆ Theoretical Framework
- ◆ Participants & Instrument
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 - ◆ Factor Analysis
 - ◆ Structural Equation Model
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- ◆ Research University – Very high activity
 - ◆ 4-year Liberal Arts & Engineering undergraduate schools
 - ◆ 5,224 undergraduates; 5,256 graduate/professional students; 10,480 total enrollment



- ◆ Tisch College of Citizenship & Public Service
 - ◆ Tisch College prepares young people to be lifelong active citizens and creates an enduring culture of active citizenship.
 - ◆ Tisch offers courses, civic engagement programs, and supports faculty research.
 - ◆ Active citizenship means building stronger, healthier, and safer communities. Active citizens come from all backgrounds and experiences, but share a commitment to actively engaging in their communities.



“...As an institution, we are committed to improving the human condition through education and discovery. Beyond this commitment, we will strive to be a model for society at large.”

We want to foster an attitude of “giving-back” and understanding that active citizen participation is essential to freedom and democracy; and a desire to make the world a better place...”

- ◆ Cultivate & sustain a supportive campus culture for civic engagement
 - ◆ “Civic engagement must be woven into the fabric of the institution if it is to be successful over time.”
(Jacoby & Hollander, 2009)
- ◆ Suggestions:
 - ◆ Develop campus-wide infrastructure for civic engagement
 - ◆ Provide access and opportunity for all students
 - ◆ Demonstrate the long term effects of CE to the individual and society

Theoretical Framework

- ◆ Institutions that emphasize character development as a priority were more successful in developing the desired impact in their students (Kuh, 2000).
- ◆ This finding conflicts with previous research that found where students go to college makes little or no difference in their development. Student effort (not the environment) was more important (Pascarella & Terenzini, 1991; Pace, 1990).

Theoretical Framework

- ◆ We use Kuh's finding as the basis for our research study and hypothesize that the campus culture will affect civic engagement outcomes because Tufts has a supportive campus environment for civic engagement.

Objectives of Study

- ◆ Assess the effectiveness of institutional mission of active citizenship
- ◆ Provide empirical evidence that a supportive campus culture can affect civic engagement outcomes



Research Questions

- ◆ How does the campus environment affect the civic attitudes and beliefs of students?
- ◆ How does the campus environment affect the civic engagement activities of students?
- ◆ Does the campus culture have a different impact on male and female students? or on students of color and white students?

Senior Survey

- ◆ Typically 95% of the graduating class completes the Senior Survey
- ◆ Encompasses a variety of topics:
 - ◆ Academic advising; Curriculum; Faculty; Post-baccalaureate plans; Campus services; Extra-curricular activities
- ◆ One section focuses on community service and civic engagement (See handout for specific questions).

Senior Survey Civic Engagement Questions

- ◆ Senior Survey- Civic engagement data collection began in 2003
- ◆ Items were a subset of the Civic and Political Activities and Attitudes Survey (CPAAS)
- ◆ Items measured include:
 - ◆ Satisfaction with service opportunities at Tufts
 - ◆ Attitudes regarding importance/value of service activities
 - ◆ Types of service/activities participated in
 - ◆ Reason(s) for involvement
 - ◆ Relationship of Tufts education to awareness of social problems and interest in effecting change
 - ◆ Plans for community and public service after graduation

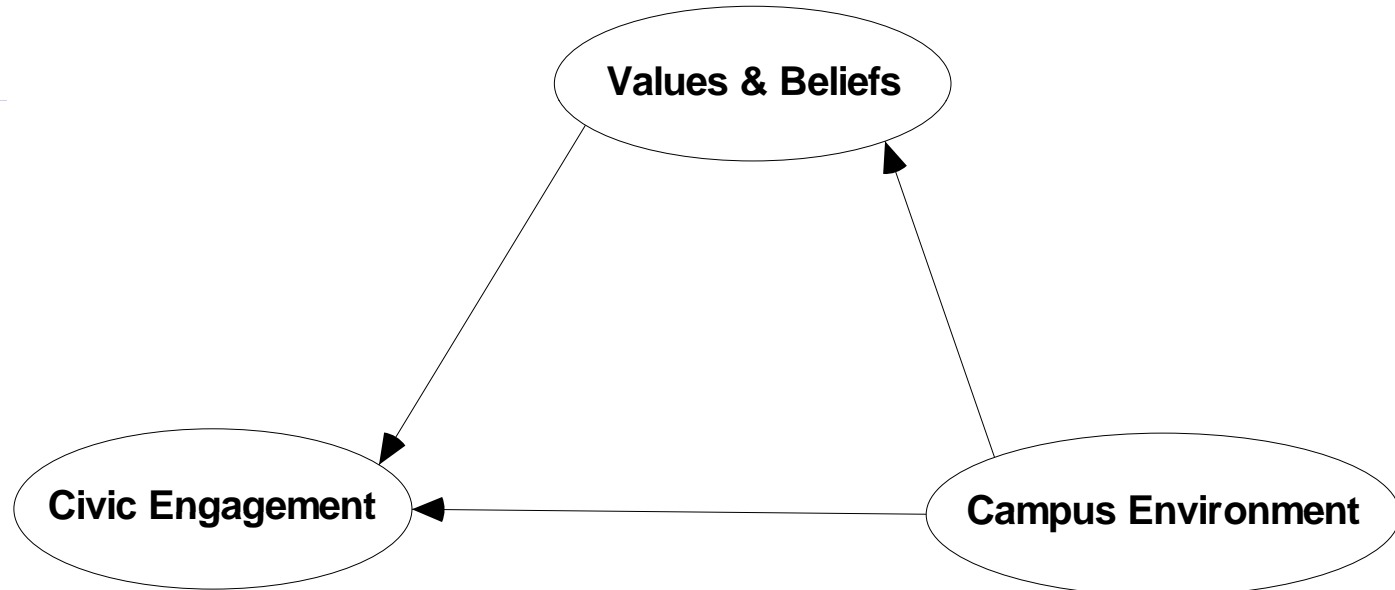
Participants

- ◆ Four graduating classes of Tufts Seniors (Classes of 2005- 2008), N = 4,118
- ◆ Demographics
 - ◆ 55.9% Female, 44.1% Male
 - ◆ 66.0% White, 12.4% Asian, 6.9% Latino, 6.4% Black, 1.5% Multiracial, 5.6% International (Remaining 1.1% is missing or unknown)
 - ◆ 85.9% Liberal Arts, 14.1% Engineering
 - ◆ Mean GPA: 3.38
 - ◆ 7% of the participants were transfer students
 - ◆ 47.7% Studied Abroad

Senior Survey Methodology

- ◆ Factor Analysis
 - ◆ Exploratory Factor Analysis (EFA)
 - ◆ N = 2043
 - ◆ Confirmatory Factor Analysis (CFA)
 - ◆ N = 2075
- ◆ Structural Equation Model (SEM)
 - ◆ Maximum Likelihood Estimation
 - ◆ AMOS 17.0
 - ◆ Goodness of fit: $RMSEA \leq 0.05$, $CFI > 0.95$, and $SRMR < 0.10$ is an excellent fit of the model to the data (Meyers et al., 2006; Kline, 2005)

Proposed Conceptual Model



Final Factor Structure

Latent Variable	Factor	N of Items
Values & Beliefs	Self-Efficacy	5
Values & Beliefs	Leadership Ability	3
Values & Beliefs <u>and</u> Campus Environment	Community Connectedness	5
Campus Environment	Satisfaction with Tufts	4
Campus Environment	Support for Multicultural Competency	2

Values & Beliefs

- ◆ **Self-efficacy** (alpha = 0.89)
 - ◆ An undergraduate education should equip students with the skills and knowledge they need to make political and social change
 - ◆ Being involved in making change in my community is an important responsibility I have
 - ◆ Community service is an effective way to create change
 - ◆ Political service is an effective way to create change
 - ◆ Being engaged in politics is an important responsibility I have

Values & Beliefs and Civic Engagement

- ◆ Leadership ability (alpha = 0.82)
 - ◆ How important to you personally is: Becoming a community leader?
 - ◆ How important to you personally is: Participating in a community action program?
 - ◆ How important to you personally is: Helping others who are in difficulty?

Values & Beliefs and Campus Environment

- ◆ **Community connectedness (alpha =0.85)**
 - ◆ My Tufts education helped me to become more aware of my responsibility to serve my community
 - ◆ My Tufts education increased my interest in making change in my community
 - ◆ Service to others is valued at Tufts University
 - ◆ During your time at Tufts, how would you rate your improvement in your understanding of: the problems facing your community?
 - ◆ During your time at Tufts, how would you rate your improvement in your understanding of: social problems facing our nation?

- ◆ **Satisfaction with Tufts (alpha = 0.72)**
 - ◆ Overall, how satisfied have you been with your undergraduate education at Tufts?
 - ◆ If you had the chance to relive your college experience, would you choose to attend Tufts again?
 - ◆ To what extent have your expectations been met?¹
 - ◆ How would you rate your academic experience at Tufts?

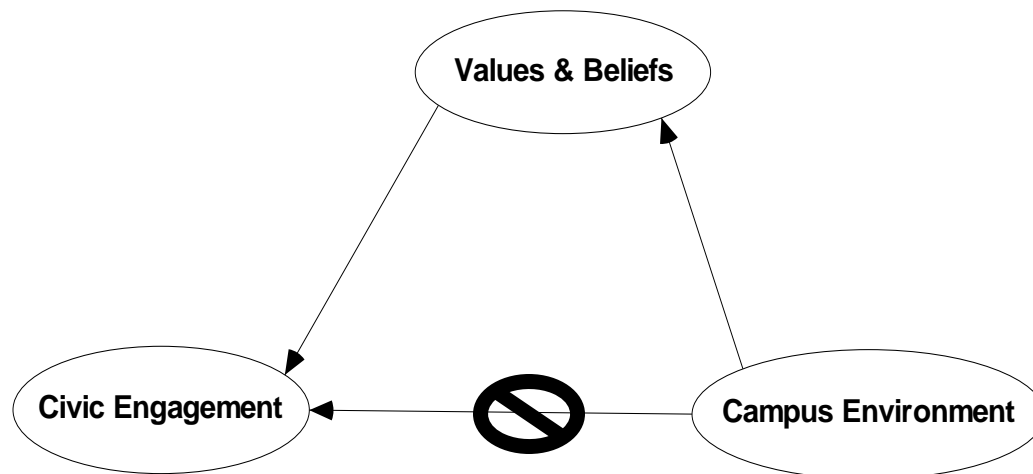
¹ Asked in response to, "When you first matriculated, you had certain expectations about your Tufts experience. Please briefly describe them."

- ◆ Support for multicultural competency (alpha = 0.57)
 - ◆ My extracurricular activities at Tufts prepared me to function well in a multicultural society
 - ◆ My Tufts curriculum prepared me to function well in a multicultural society.

Outcome Variable

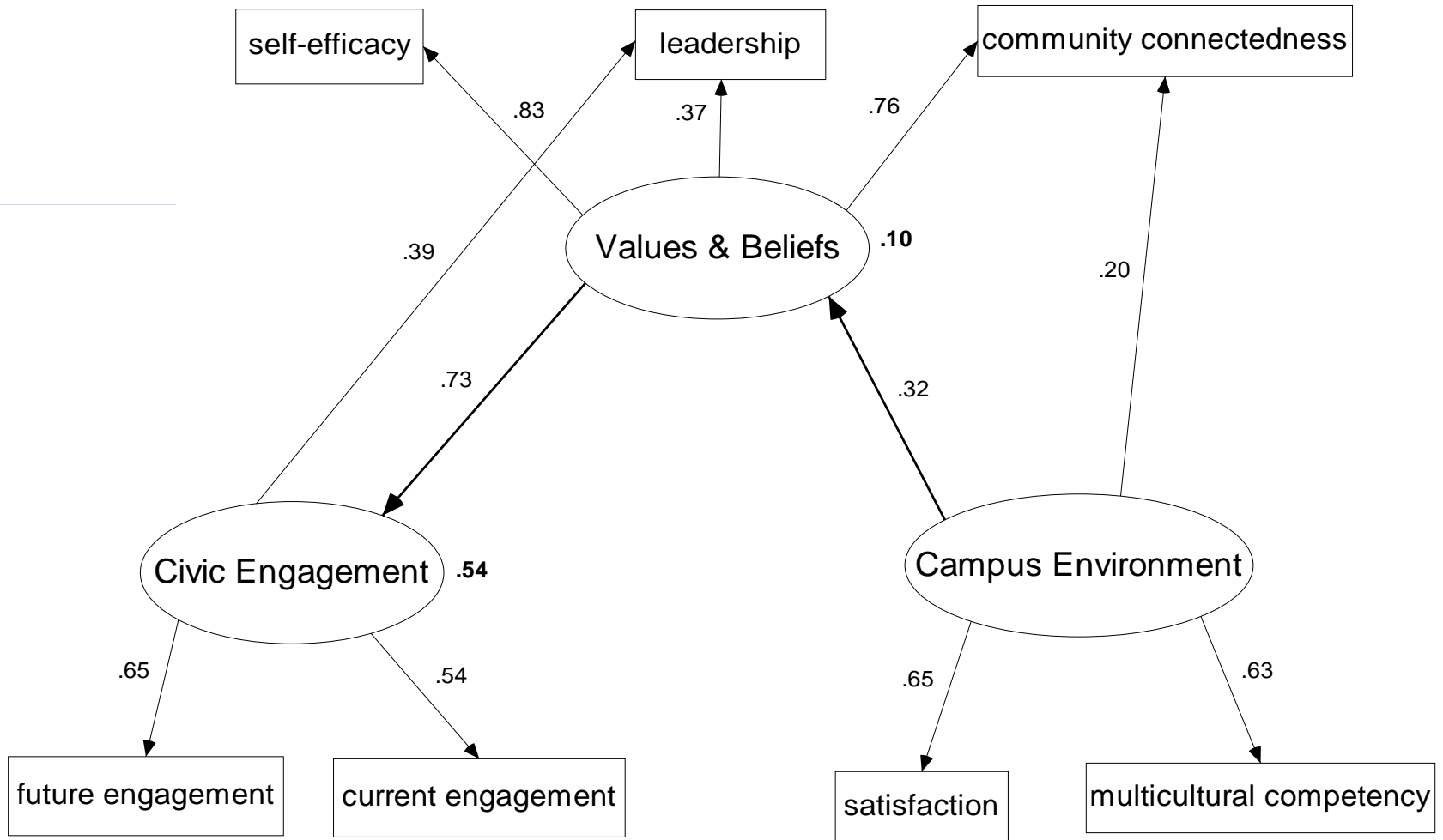
- ◆ Outcome variable: Civic Engagement
 - ◆ Composites comprised of two sets of questions that were summed separately
 - ◆ Current civic engagement (q 117)
 - ◆ Do you: Volunteer, Work for a Political Campaign, Advocacy, Community Based Research, Etc
 - ◆ Mean: 0.90; Range: 0 – 6; Std Dev: 1.11
 - ◆ Future civic engagement (q 124)
 - ◆ Do you plan to: Volunteer, Work for Non-Profit, Make Donations, Attend Graduate School in a Related Field, Run for Office, Etc
 - ◆ Mean: 4.31, Range: 0 – 12; Std Dev: 2.72

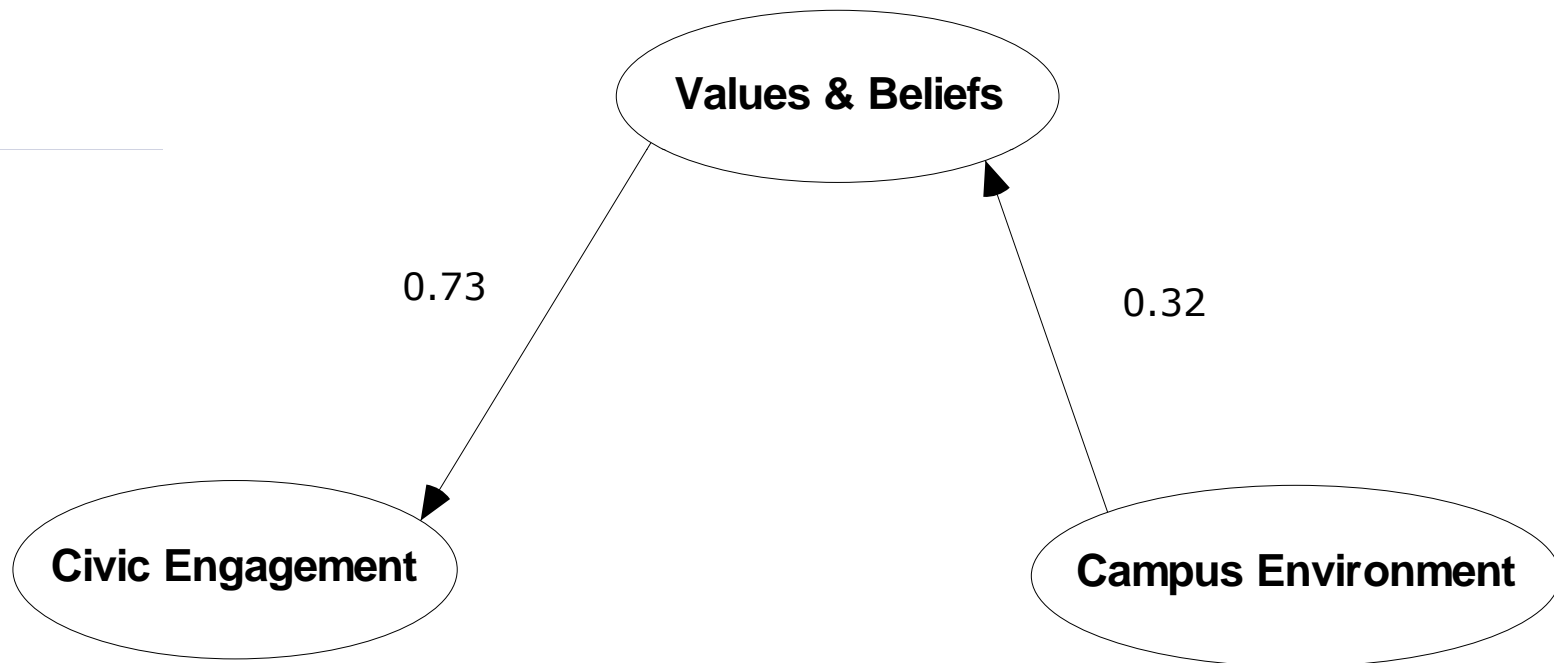
- ◆ Proposed conceptual model was tested
- ◆ Not supported by the data as the path coefficient between campus environment and civic engagement was not statistically significant ($p = 0.154$)
- ◆ Revised SEM had sufficient goodness-of-fit indices and significant path coefficients



- ◆ Goodness-of-fit indices
 - ◆ $\chi^2(10) = 52.496, p < 0.001$
 - ◆ CFI (Comparative Fit Index) = 0.989
 - ◆ RMSEA (Root Mean Square Error of Approx.) = 0.045
 - ◆ SRMR (Standardized Root Mean Sq Residual) = 0.021
- ◆ All path coefficients statistically significant ($p < 0.001$)
- ◆ Explains 10% of variance in students' values and beliefs and 54% of the variance in civic engagement

Revised Structural Equation Model





Findings

- ◆ Campus Environment had a significant positive impact on students' civic values & beliefs (0.32)
- ◆ Campus Environment had a significant positive indirect effect on civic engagement activities of undergraduates (0.24)
- ◆ Students' civic values and beliefs had a significant direct effect on their level of civic engagement (0.73)

Findings

- ◆ We tested whether model is invariant (equivalent) across race/ethnicity and sex.
- ◆ No significant differences between students of color and white students or between male and females students for strength and direction of relationship among the 3 latent variables
 - ◆ Difference in explanatory power between male and females when path coefficients are constrained to be equal
 - ◆ Civic values and beliefs in male students explained 13% more variance in civic engagement activity compared to female students

Limitations

- ◆ Relationships among three latent variables may not hold at institutions that do not have institutional support for civic engagement
- ◆ Research design did not have covariates to control for pre-college attitudes and beliefs
- ◆ Subsection of CPAAS instrument on Senior Survey may not fully capture the effect of the environment of civic engagement outcomes

Conclusions & Implications for Future Research

- ◆ Interesting finding is how the relationship between the campus environment and civic engagement activities is mediated through students' values and beliefs
 - ◆ Self-efficacy could influence students' motivation to participate in civic engagement
 - ◆ Students may need to develop their leadership abilities in order to feel empowered to participate in civic activities
- ◆ Students with strong belief systems that feel that they can make a difference will devote their time to civic-minded activities during college and beyond

Conclusions & Implications for Future Research

- ◆ Future Research
 - ◆ Is the model generalizable to other institutions?
 - ◆ Does an institutional mission of civic engagement influence the institution's staff and faculty?
 - ◆ Do graduate and professional students at Tufts display the same relationships among the variables as the institution's undergraduates?



Civic Engagement at Tufts

QUESTIONS???

Contact Information

- ◆ Dr. Dawn Geronimo Terkla, Associate Provost of Office of Institutional Research, Assessment & Evaluation, dawn.terkla@tufts.edu
- ◆ Meredith S. Billings, Senior Research Analyst, Office of Institutional Research & Evaluation, meredith.billings@tufts.edu