
A Little Help from Their Friends? How Social Factors Impact College Students' Sense of Belonging at a Large Public University

A Quantitative Survey Study

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The problem

Attrition/Retention

Nearly **70% of high-school graduates** attend college

Completion rate of Bachelor's degrees in 6 years < **60%**

Successful **transitions** to adulthood **depend on college completion** more than at any point in history

Sense of Belonging (SB)

Basic, **universal** human **need**

Plays key **role in persistence and degree completion**

Understudied in college

Social construct, **but** increasingly **multifactorial** in college?

“Underlying” Factors

Though social in nature, **need for** a more comprehensive/**nuanced exploration**

What are the respective **roles of specific developmental factors** when controlling for individual-level factors?

Foundations

Individual Factors

Some individuals may be **predisposed to belonging**

Others may experience **challenges based on race, gender**

Gap: **research** on belonging often **not nuanced enough** at individual level

Adjustment to College

Social and academic **adjustment significantly associated with completion**

Likely to influence students' SB, as well

Past focus primarily on academic outcomes

Friendships

Studies often include general measures of social adjustment

Overlook more **specific features** of social relationships

Current study **focuses on friendship closeness** at the dyadic and network level

Research Questions

Adjustment and Friends

Controlling for individual factors, **what are the contributions of social adjustment, academic adjustment, and friendship closeness (dyadic and network)?**

Moderators

Will minority group membership moderate social adjustment's relation to SB?

Will best friendship closeness moderate network closeness's relation to SB?

Hypotheses

Main Effects

H1: Controlling for other individual-level factors and antecedents to SB, **minority group membership will be negatively associated with SB.**

H2: **Social and academic adjustment** to college will be **positively associated with SB** when controlling for individual-level factors and antecedents to SB.

H3: Friendship **network closeness and best friendship closeness** will be **associated** with SB when controlling for other factors.

Moderators

H4: **Majority/minority group membership will moderate** the relationship between **social adjustment and SB**, such that this relationship will be **stronger for** members of the **majority** group.

H5: **Best friendship closeness will moderate** the association between **friendship network closeness and SB**. The **association** between friendship network closeness and SB is expected to be **stronger for students with relatively low best-friendship** closeness.

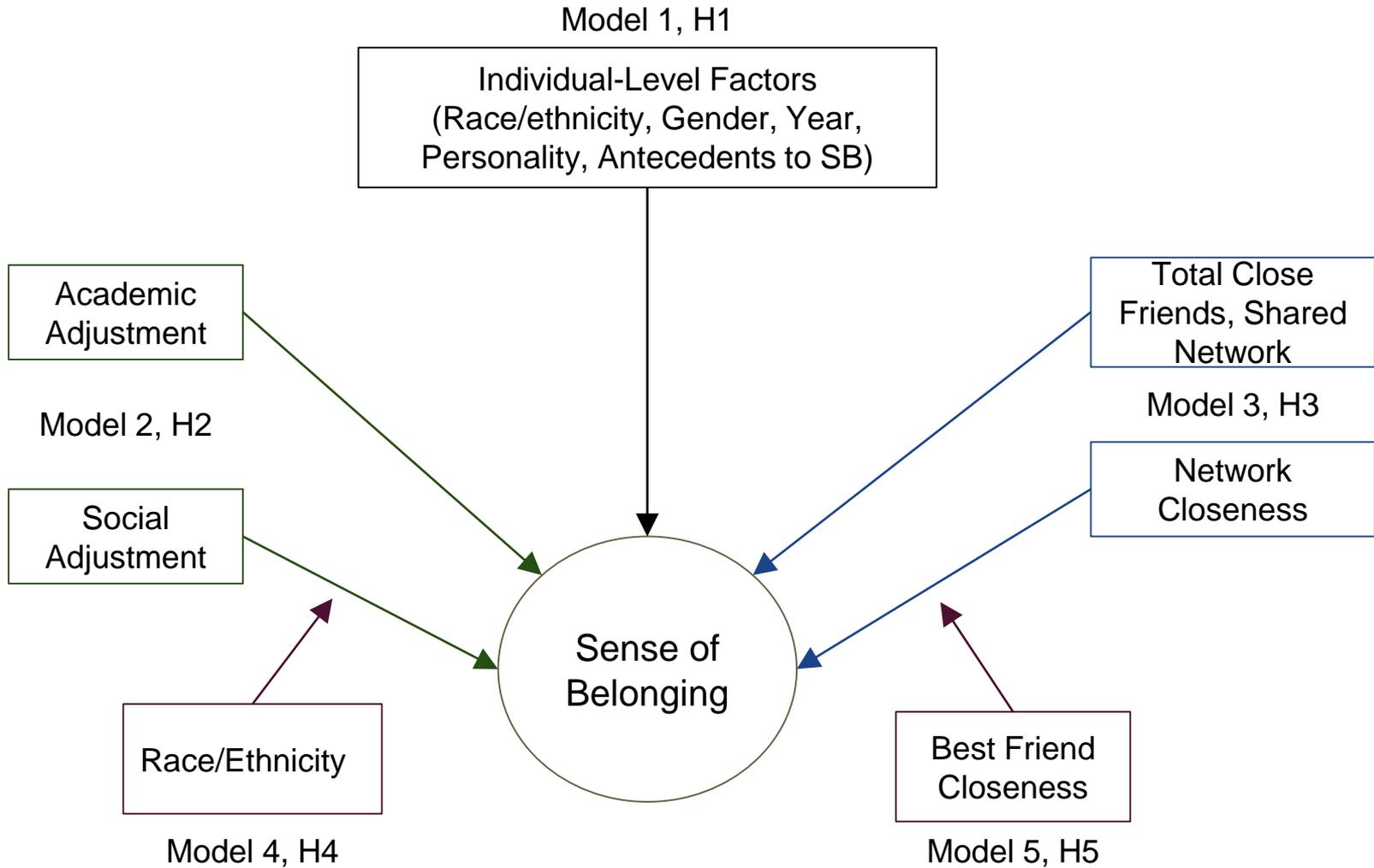
Methods

- **500** undergraduates ($M = 20.08$ years)
- **Self-report** questionnaire
- 82% **White**, 1% Black/African American, 2% Latino/a, 5% Asian American, 4% Asian/Pacific Islander, 6% multiracial; 73% **female**
- Measured psychological **SB**, **personality** traits, **adjustment** to college, friendship **closeness**, antecedents to SB, demographics

- Factor analysis of SOBI: **Unifactorial**
- **Variance inflation test** for social adjustment
- **Correlation** matrices
- **5-step hierarchical regression** starting at individual level
 - Added adjustment, friendship closeness, and moderators systematically to the initial model

Measurement

- **Sense of Belonging Instrument-Psychological** (Hagerty & Patusky, 1995; $\alpha=0.94$; “I generally feel that people accept me.”)
- **Sense of Belonging Instrument-Antecedents** (Hagerty & Patusky, 1995; $\alpha=0.86$; “I am working on fitting in better with those around me.”)
- **Big Five** Inventory-10 (Rammstedt & John, 2007; “I see myself as someone who is reserved.”)
- **SACQ Social** (Baker & Siryk, 1989; $\alpha=0.92$; “I am meeting as many people as I would like at college.”)
- **SACQ Academic** (Baker & Siryk, 1989; $\alpha=0.87$; “I am finding academic work at college difficult.”)
- **Friendship Qualities Scale** (Bukowski, Hoza, & Boivin, 1994; Network $\alpha=0.85$, Best $\alpha=0.92$; “I think about my friend even when my friend is not around.”)
- **Race/ethnicity** (select as many as apply from a list with a write-in option; grouped into majority/minority groups based on limitations of sample)

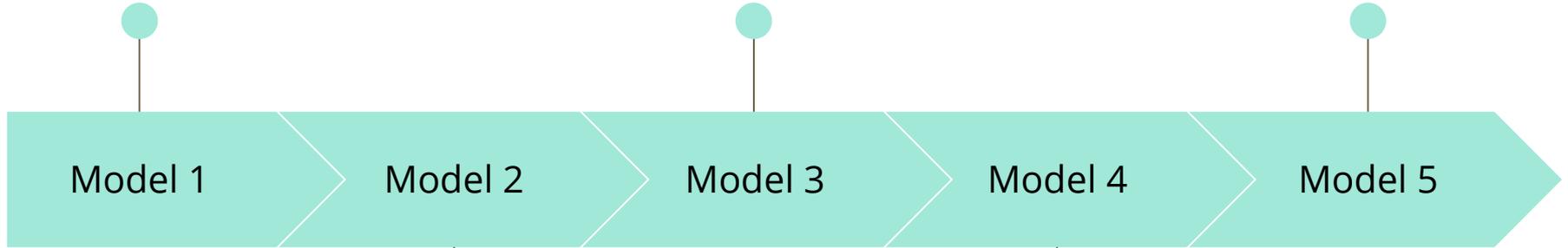


Overview of Regression Models

Individual-level
model: **37% of
variance in SB**

With **friendship
variables** added: **63%
of variance in SB**

65% of variance in SB
with **network X best
friendship** interaction



**62% of variance in
SB** when **social and
academic
adjustment** added

64% of variance in SB
with **minority X social
adjustment** interaction

Final Model Standardized Coefficients (β)

	Model 5
Racial/Ethnic Minority	-0.13***
Male	0.07*
Gender Other	0.01
Year 2	0.04
Year 3	0.03
Year 4	0.01
Year 5+	0.02
Openness	-0.08**
Conscientiousness	-0.02
Extraversion	0.06
Agreeableness	0.02
Neuroticism	-0.02
SOBI Antecedents	0.12***
Academic Adjustment	0.08*
Social Adjustment	0.56***
Network Closeness	0.11**
Best Friend Closeness	0.07
Total Close Friends	0.04
Close Friends from High School	-0.05
Shared Network	0.06*
Social Adjustment \times Minority on Campus	-0.09**
NetworkCloseness \times BestCloseness	0.10**

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Findings

Main Effects

- Models 1-3: **underrepresented group** membership had **negative association** with SB (H1 supported)
- Model 2: large change in explained variance when adding **adjustment variables** (H2 supported)
- Model 3: **network closeness related to SB**, but **best-friendship closeness not related to SB** (H3 partially supported)

Moderators

- Social adaptation more strongly related to SB for students in **majority group** (H4 supported)
- Friendship network closeness more strongly related to SB for students with high **best friendship closeness** (Partial support for H5, but **counterintuitive**)

Moderators

Figure 1. Social Adjustment and Belonging by Group Membership

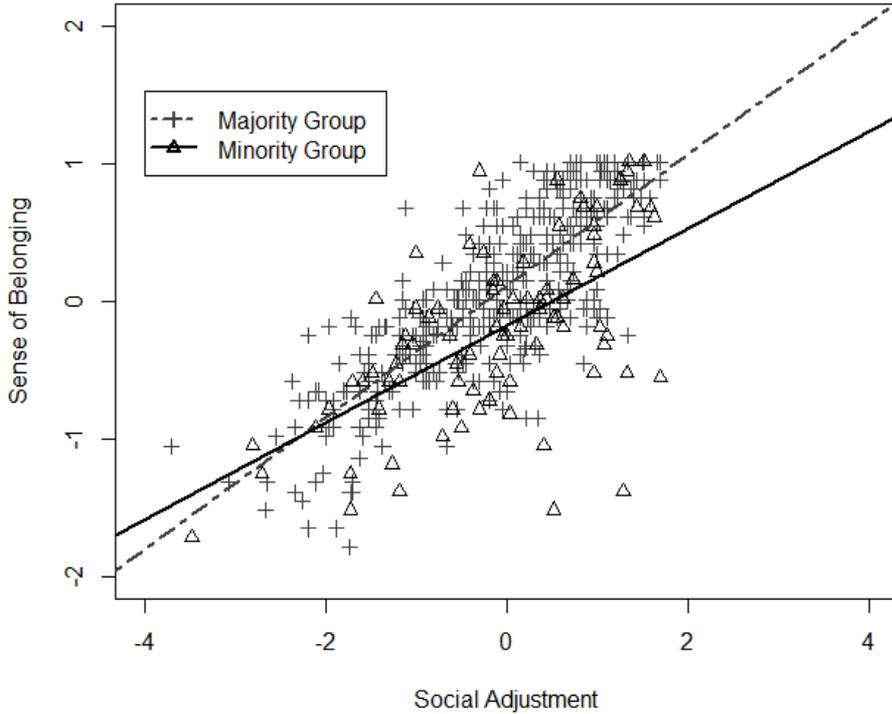
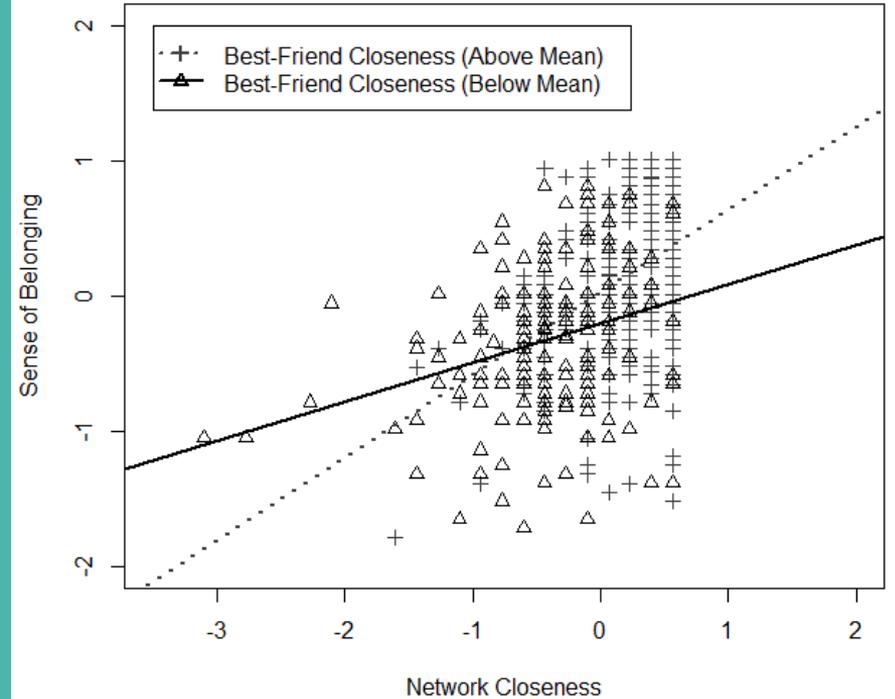


Figure 2. Network Closeness and Belonging by Dyadic Closeness



Implications

- What explains the **difference between majority group members and underrepresented students** when relating social adjustment to SB?
- Effect of friendship network **closeness more nuanced than initial main effect** suggested: What might happen at the dyadic level to explain interaction?

Future Directions

- Need to better understand underrepresented students at **PWIs**
- SB at **institution vs. more proximal** “pockets” of belonging
- Build nuanced **developmental models of college student belonging**