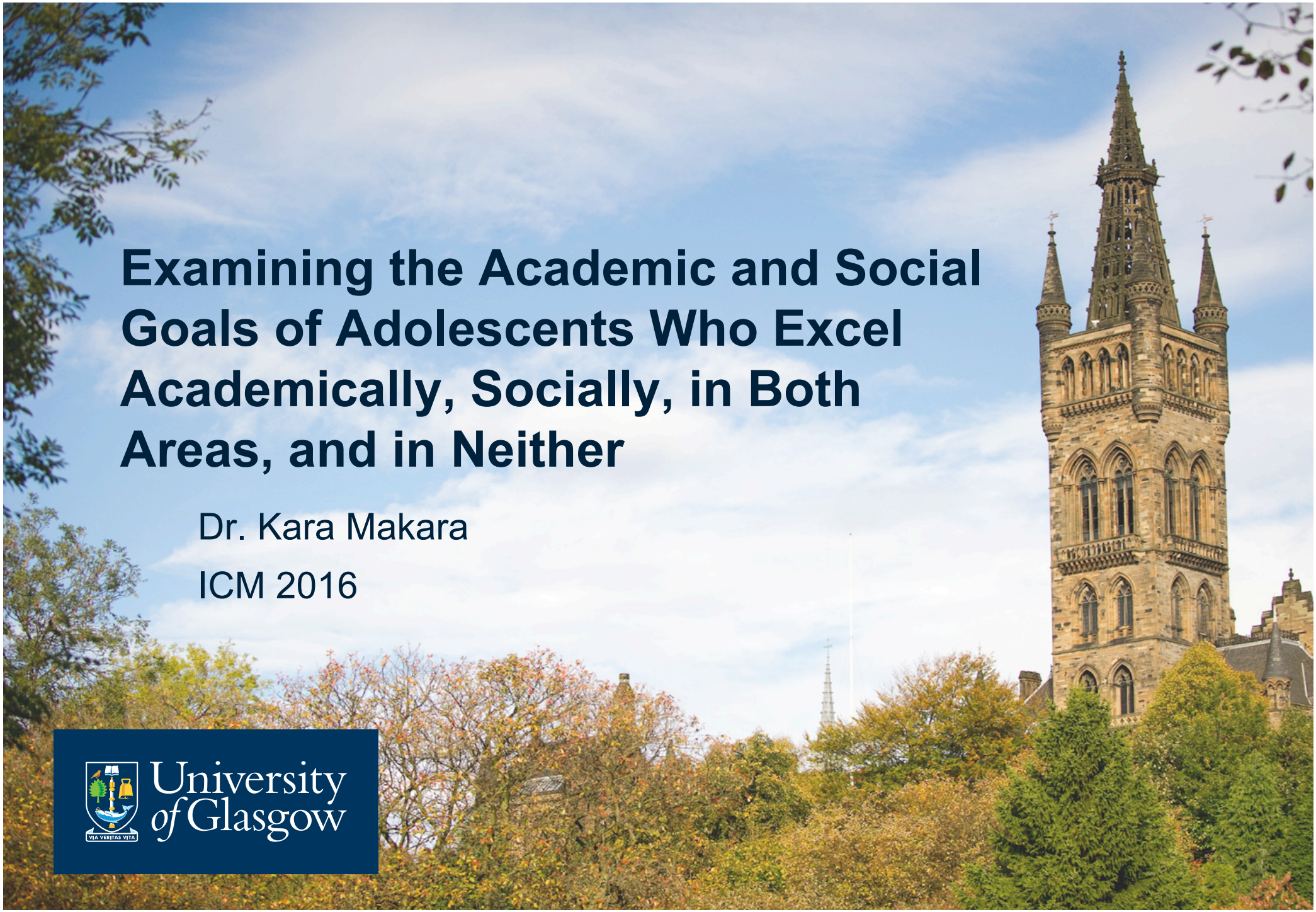

Examining the Academic and Social Goals of Adolescents Who Excel Academically, Socially, in Both Areas, and in Neither

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ICM 2016

University of Glasgow

Introduction

- Being popular (excelling socially) is often associated with academic performance (excelling academically)
- Adolescent students who are “popular”, indicated by reciprocated friendships, higher # of friends, and peer acceptance, also have higher academic achievement[1,2,3]
- Students who are rejected or victimized by peers have lower classroom participation & academic achievement[4, 5]

[1] Kingery, Erdley, & Marshall, 2011; [2] Mihaly, 2009; [3] Wentzel, Barry, & Caldwell, 2004; [4] Buhs, Ladd, & Herald, 2006; [5] Nakamoto & Schwartz, 2010

Introduction

- Students who excel socially & academically also have adaptive goals while at school
  - Want to develop friendships, build meaningful relationships with peers, or to be prosocial[1,2]
  - Want to develop deeper understanding of school material and improve[3]

[1] Wentzel, 1993; [2] Ryan & Shim, 2006; [3] Pintrich, 2000

Introduction

- However, a subset of adolescents only excel academically, or only socially

Introduction

	Low Academic Performance	High Academic Performance
Low Popularity	Excelling in neither	Excelling only academically
High Popularity	Excelling only socially	Excelling in both areas

Aim of the current study

- Examine differences in academic and social achievement goals across the four groups
  - excelling in both (high GPA, high popularity)
  - excelling only academically (high GPA, low popularity)
  - excelling only socially (high popularity, low GPA)
  - excelling in neither (low GPA, low popularity)
- Examine how the four groups differ in their changes in achievement goals across the school year

Academic achievement goals

Mastery	Performance-Approach	Performance-Avoidance
Understanding & personal improvement	**Demonstrate academic competence**	**Avoid appearing academically incompetent**
"Really understanding my work is important to me."	"My goal is to look smarter than other students."	"It is important to me that I don't look stupid."

Ames, 1992; Elliot, 1999; Elliot & McGregor, 2001

Social achievement goals

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Development

Develop meaningful relationships

"It's important to me to have friends who really understand me."

Demonstration-Approach

Demonstrate social competence

"It's important to me that others think of me as popular."

Demonstration-Avoidance

Avoid appearing socially incompetent

"My goal is to avoid doing things that would cause others to make fun of me."

Ryan & Shim, 2006; 2008

Methods

- Hardcopy surveys administered at two time points (the beginning and end) of the school year
- 834 students at a US suburban public high school
  - 53% female
  - 9^{th}-11^{th} grades

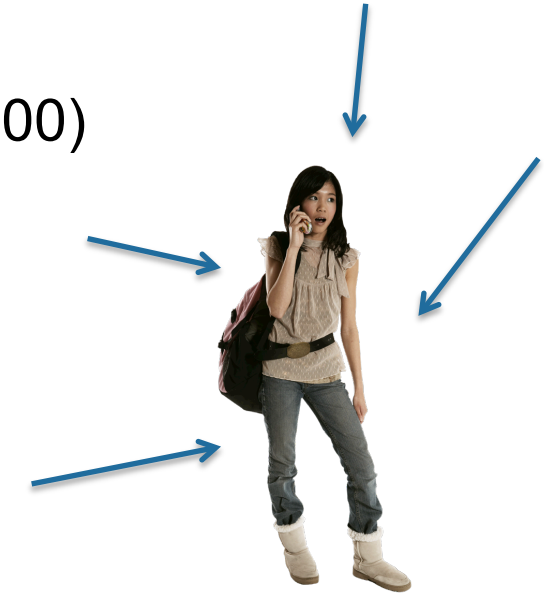
Measures

- Academic achievement goals
  - Mastery (5 items, α = .88)
  - Performance-approach (5 items, α = .87)
  - Performance-avoidance (5 items, α = .82)
- Social achievement goals
  - Development (5 items, α = .91)
  - Demonstration-approach (4 items, α = .85)
  - Demonstration-avoidance (4 items, α = .81)
- 5-point Likert scale

Academic goal measures from PALS, Midgley et al., 2000; Social goal measures adapted from Ryan & Shim (2006)

Measures

- Peer nominations
  - Students asked to list peers they hang out with the most at school
  - “Excelling socially” based on # of nominations each student received by others (indegree)
- Academic performance
  - “Excelling academically” based on GPA (0.00-4.00)
- Clear limitations of both proxy measures



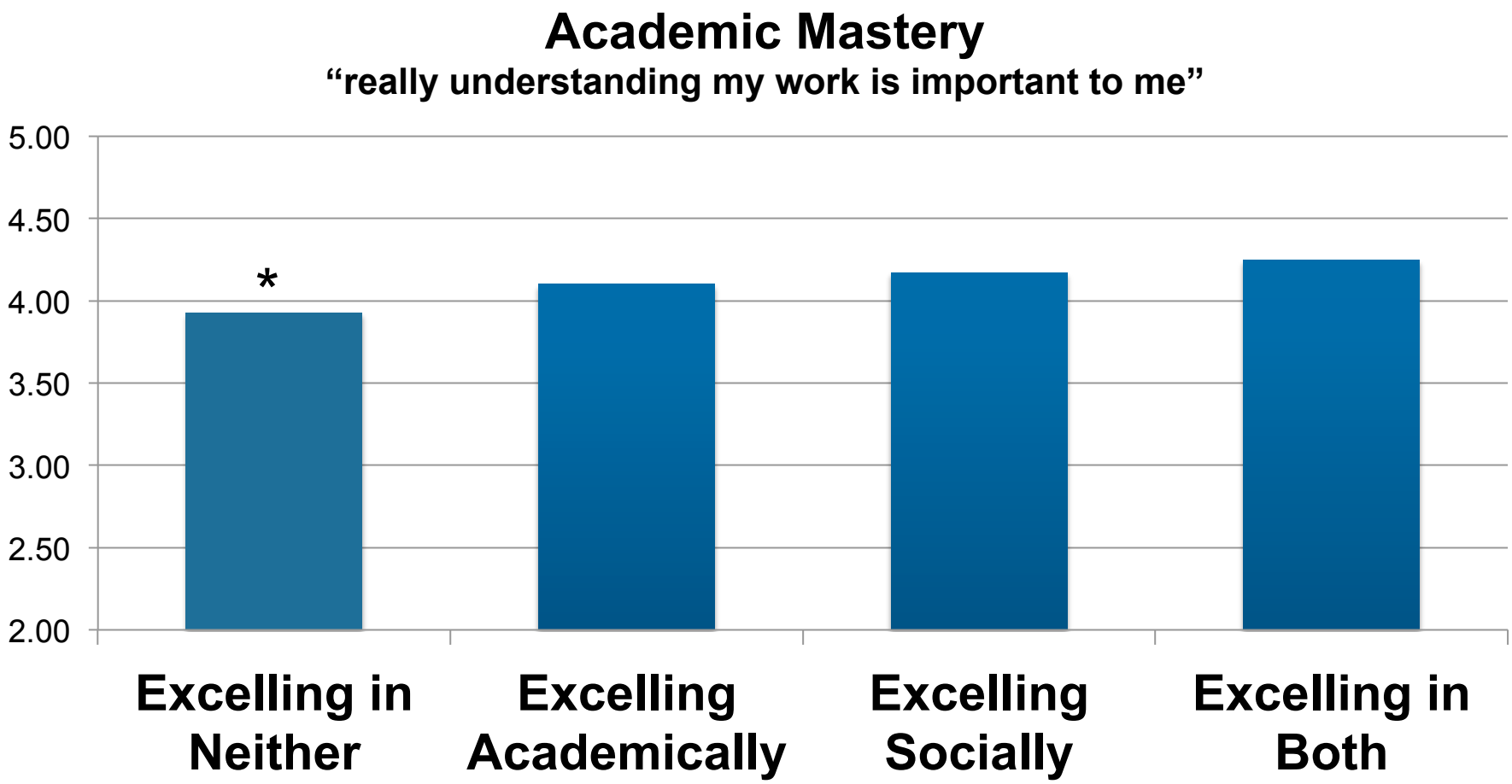
Analysis

- How do the four groups differ in their academic and social achievement goals?
  - Median split to determine high vs. low GPA and high vs. low peer nominations and assign students to one of four groups
  - ANOVAs to determine group differences
- How do the four groups differ in their change in goals across the school year?
  - General linear model with a between-subjects factor (student group) and a repeated measures within-subjects factor (W1 and W2 levels of motivation)

Results

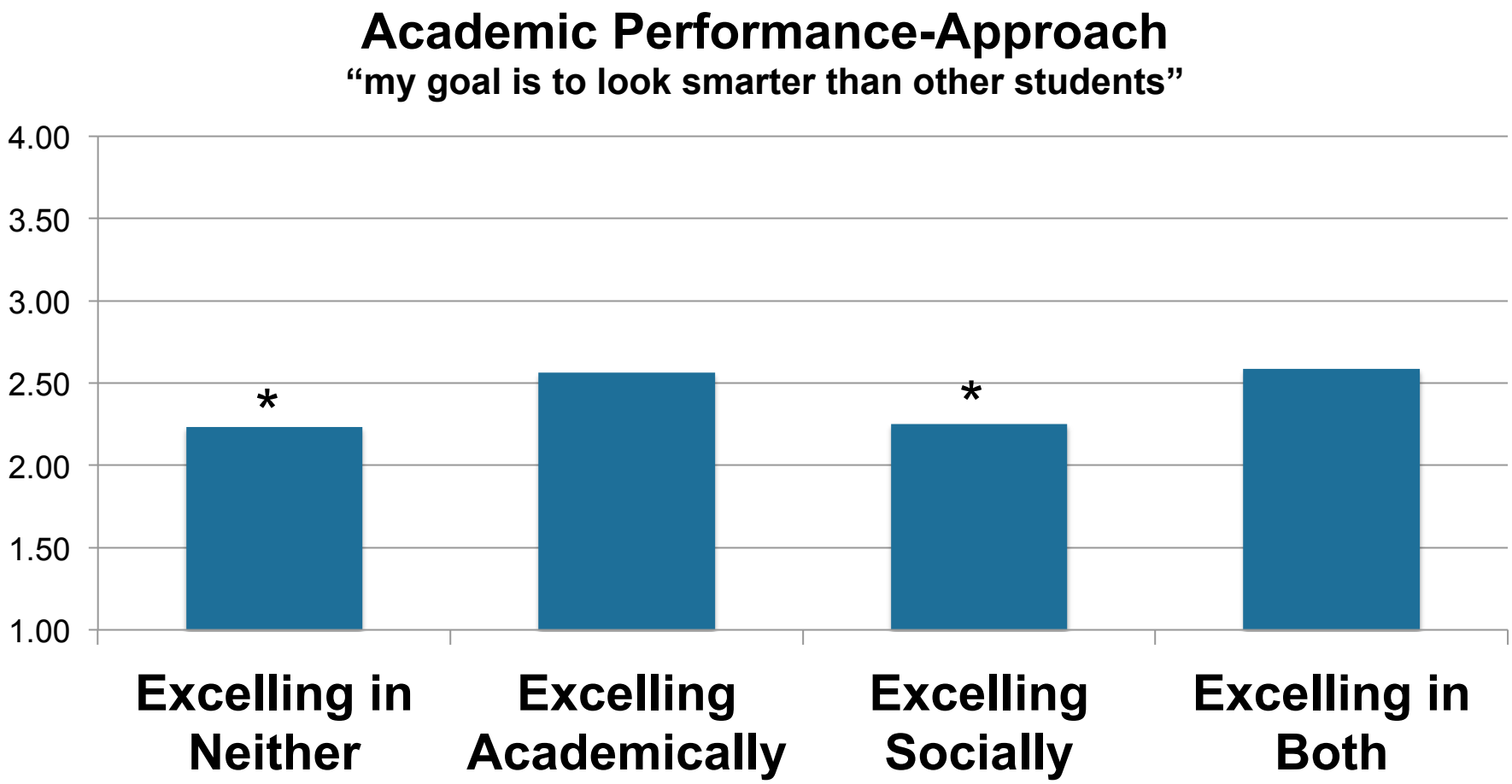
	Low Academic Performance	High Academic Performance
Low # of Peer Nominations	*N* = 262 *M* GPA = 2.62 *M* Peer Noms = 1.26	*N* = 197 *M* GPA = 3.87 *M* Peer Noms = 1.78
High # of Peer Nominations	*N* = 135 *M* GPA = 2.92 *M* Peer Noms = 6.16	*N* = 240 *M* GPA = 3.90 *M* Peer Noms = 6.78

Results



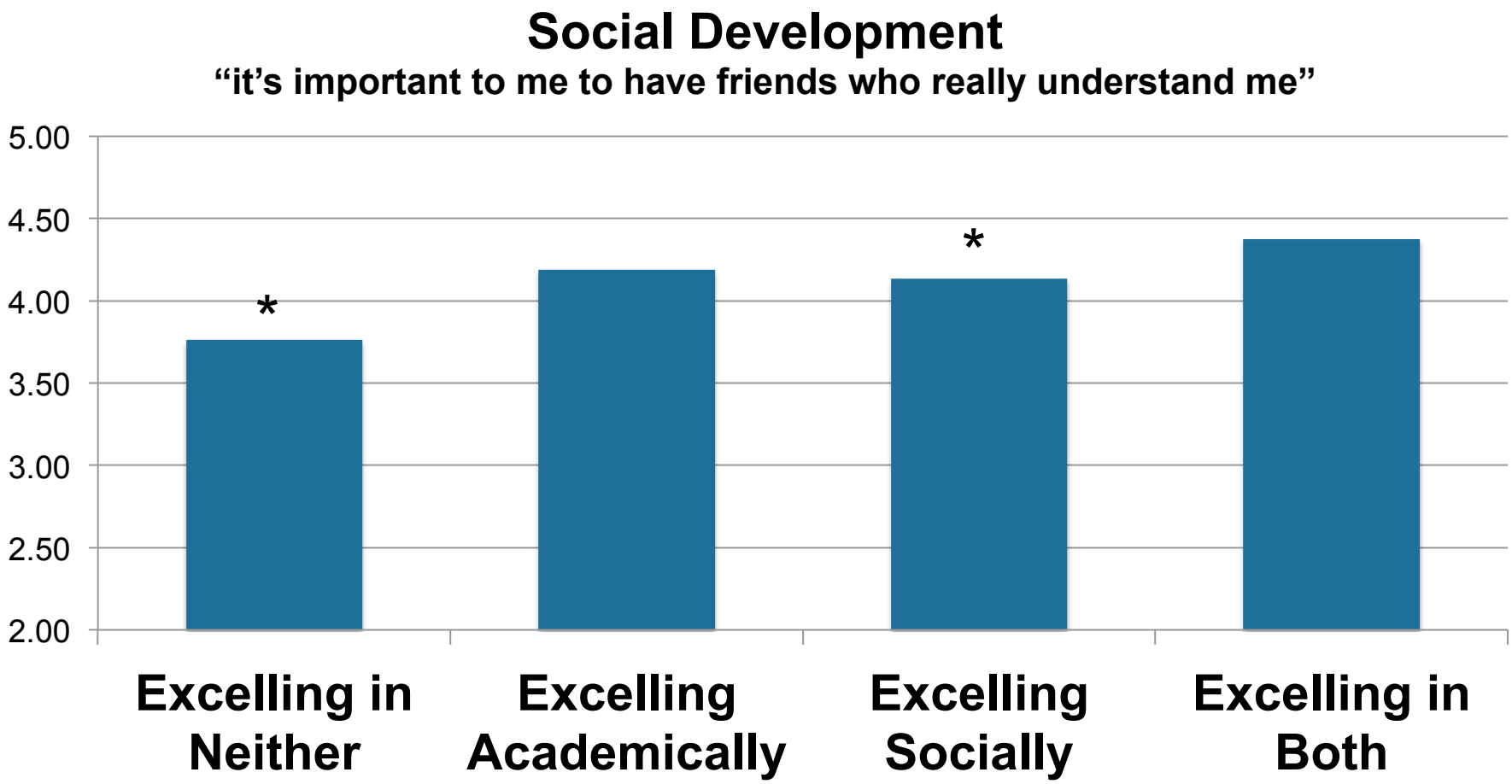
$F(3,744) = 6.99$, $p < .001$

Results



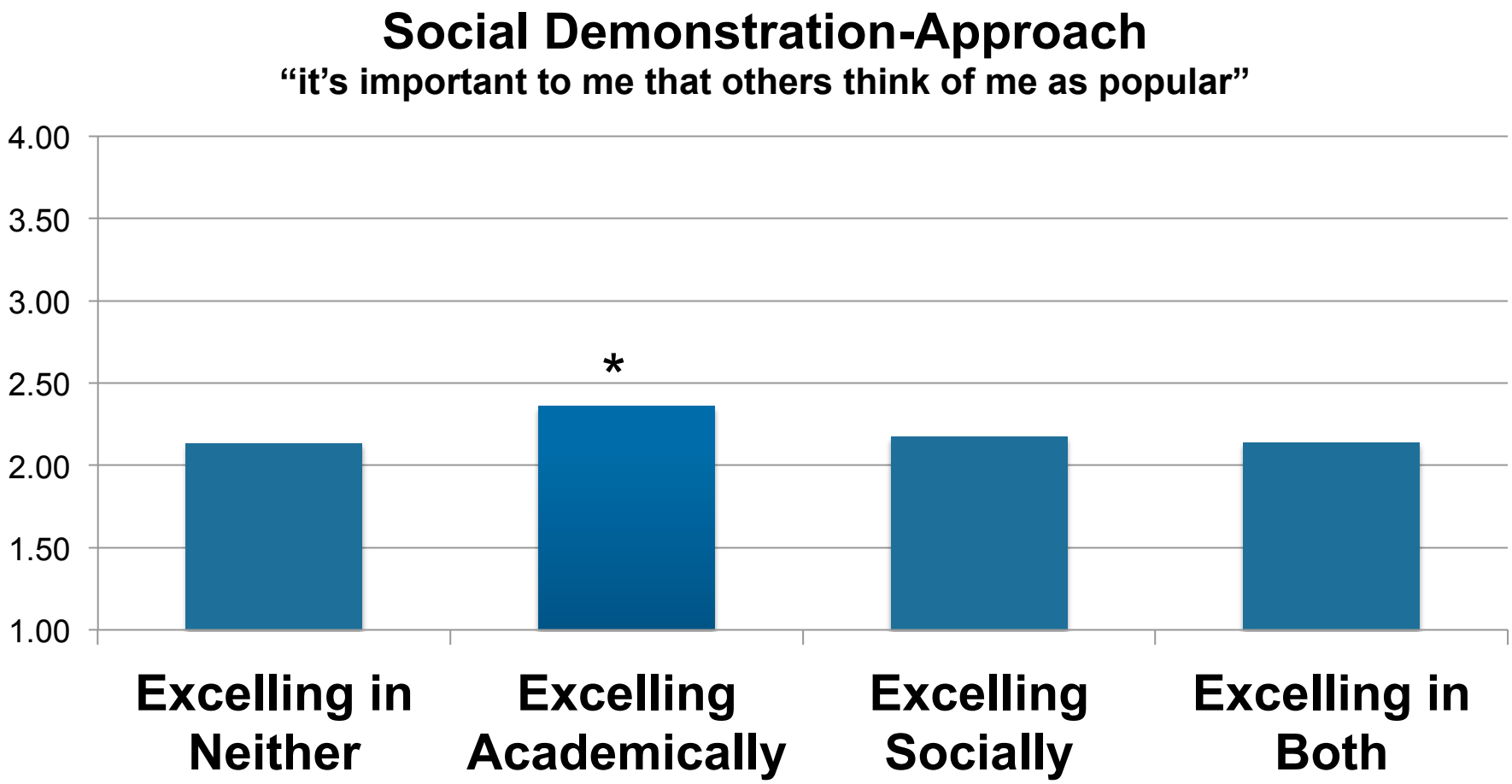
$F(3,744) = 7.78$, $p < .001$

Results



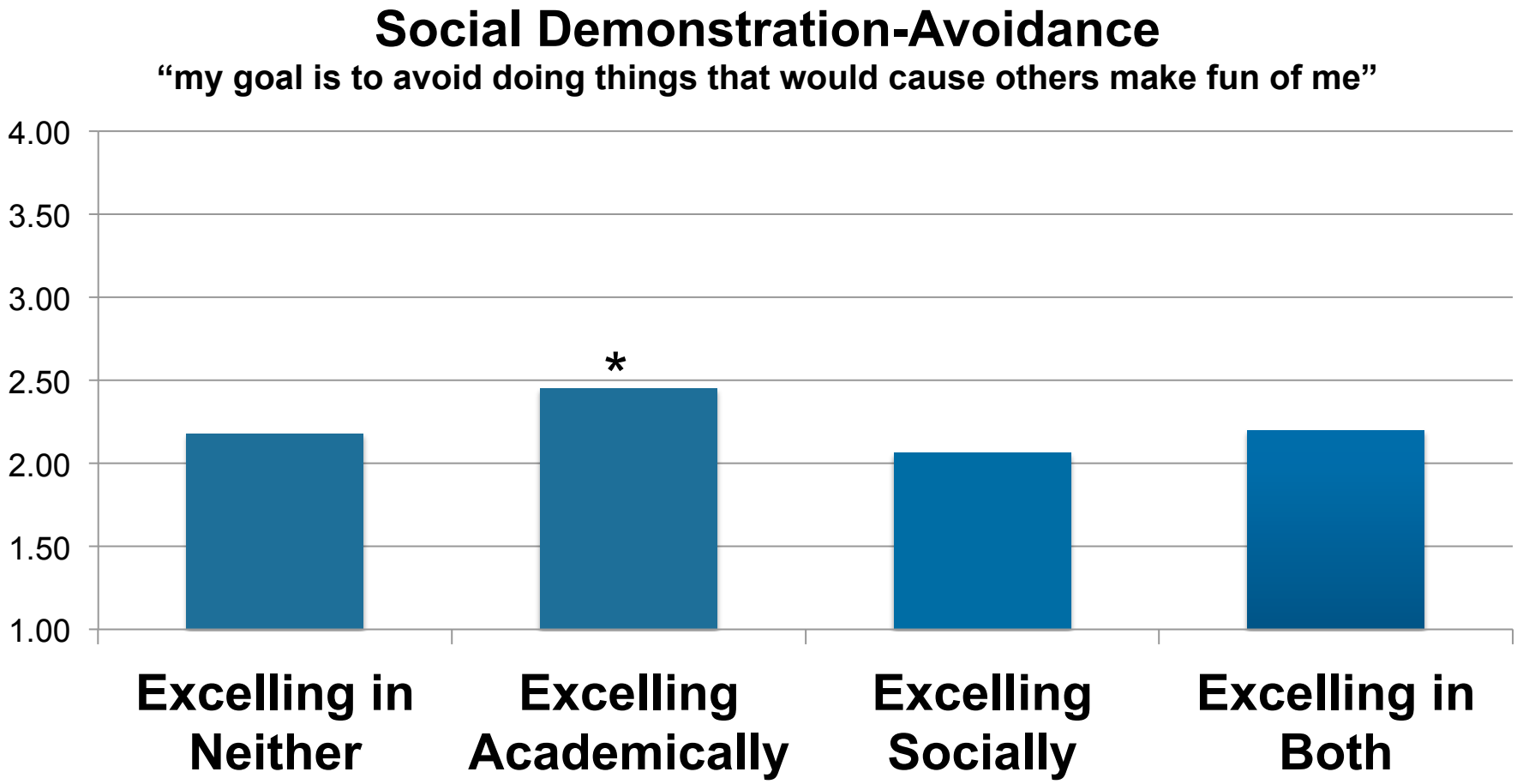
$F(3,743) = 22.17$, $p < .001$

Results



$F(3,744) = 2.74$, $p < .05$

Results

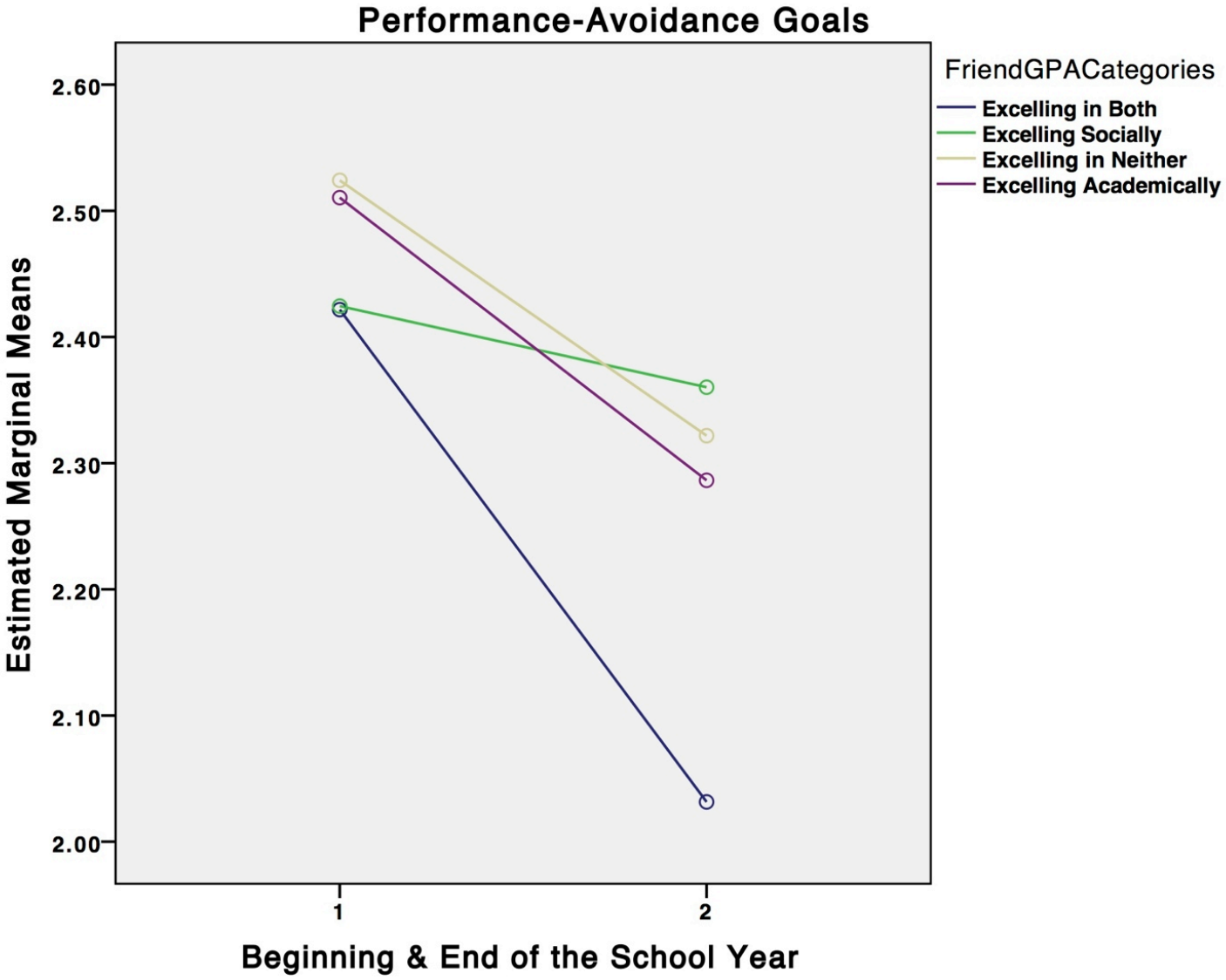


$F(3,744) = 5.75$, $p < .01$

Results

- While many sig. differences in goal levels between groups, only one significant difference in *change* in goal across the year (goal x group interaction)
  - Performance-avoidance goals decreased more for students who *excelled in both* areas compared to just excelling in one

Results


Performance-Avoidance Goals
Estimated Marginal Means
2.60
2.50
2.40
2.30
2.20
2.10
2.00
1
2
Beginning & End of the School Year
FriendGPACategories
Excelling in Both
Excelling Socially
Excelling in Neither
Excelling Academically

Summary

- Is it enough to excel in only one area? Excelling either academically or socially seemed to be a protective factor, as the *excelling in neither* group had lower mastery goals and development goals compared to other groups
- However, students who do well only academically, compared to other groups, reported higher social demonstration goals, i.e., concerned about demonstrating their social competence or avoiding showing their lack of popularity

Theoretical Implications

- Informs achievement goal theory through highlighting small differences in students' goals depending upon different combinations of academic and social success
- However, few group differences in *changes* in goals across time
- Given the correlational data, important to consider the two-way direction of influence

Practical Implications

- Support students who do well academically but struggle socially by discouraging a focus on comparisons to others
- In general, students who excel neither socially nor academically have lowest mastery & development goals
  - Help these students focus on personal improvement
- Need research on how teachers can manage peer relations at school

Next steps

- Understand why there are group differences
- Need different measures of “excelling socially”
  - Reciprocated friendships; strength of friendships
  - How happy are students with their friends? 1 good friend vs. 10 bad
- Move beyond median split
  - Look at students only at the extremes (e.g., > 90th % academically)
  - Interactions between GPA, number of peer nominations, and goals
- Consider other motivational frameworks

Image 1

Thank You

University of Glasgow

Questions or comments kara.makarafuller@glasgow.ac.uk
or tweet @kara_makara

Data collected when I was in the Combined Program in Education and Psychology at U of Michigan

UNIVERSITY OF MICHIGAN

Thank you to the ICM organisers!

EXTRA SLIDES

Means & Standard Deviations

Variable	W1 M	W1 SD	W2 M	W2 SD
Academic – Mastery	4.10	.77	4.00	.86
Academic – Performance-Approach	2.42	.95	2.39	1.03
Academic – Performance-Avoidance	2.47	.97	2.25	1.00
Social – Development	4.11	.84	4.08	.93
Social – Demonstration-Approach	2.20	.89	1.96	.83
Social – Demonstration-Avoidance	2.23	.88	2.13	.89
Grade point average (GPA)	3.33	.75	-	-
Peer nominations	3.76	3.10	-	-

Note. All on scale of 1 (not at all true of me) to 5 (very true of me) except GPA (0-4) and peer noms. (0-14)

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