

Implementation of a Technology-Enhanced Peer Mentor Referral System for First-Year University Students

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aps | ASSOCIATION FOR
PSYCHOLOGICAL SCIENCE

College students are in need

60%

**of college students meet
criteria for at least one
mental health challenge**



FINDING THE RIGHT RESOURCE IS CHALLENGING



DROPOUT IS HIGH, ESPECIALLY FOR VULNERABLE POPULATIONS



MARGINALIZED STUDENTS FACE MANY BARRIERS



OVERALL, ABOUT **30-40%** OF UNDERGRADUATE STUDENTS DROP OUT OF COLLEGE WITHOUT FINISHING THEIR DEGREE



60% HIGHER CHANCE FOR STUDENTS WITH DISABILITIES
23% HIGHER CHANCE FOR FIRST-GENERATION COLLEGE STUDENTS
35% HIGHER RISK FOR BLACK/AFRICAN AMERICAN STUDENTS

College students are in need



Research supports that mentoring is most effective when it...

...is delivered by
credible, trained
peers



...focuses on specific
goals and challenges
and encourages follow
through



...provides a sense of
belonging



...helps those needing
it most



Why Technology?



Technology interventions may have more accessibility than typical services



Online informational support interventions may help bridge service gaps



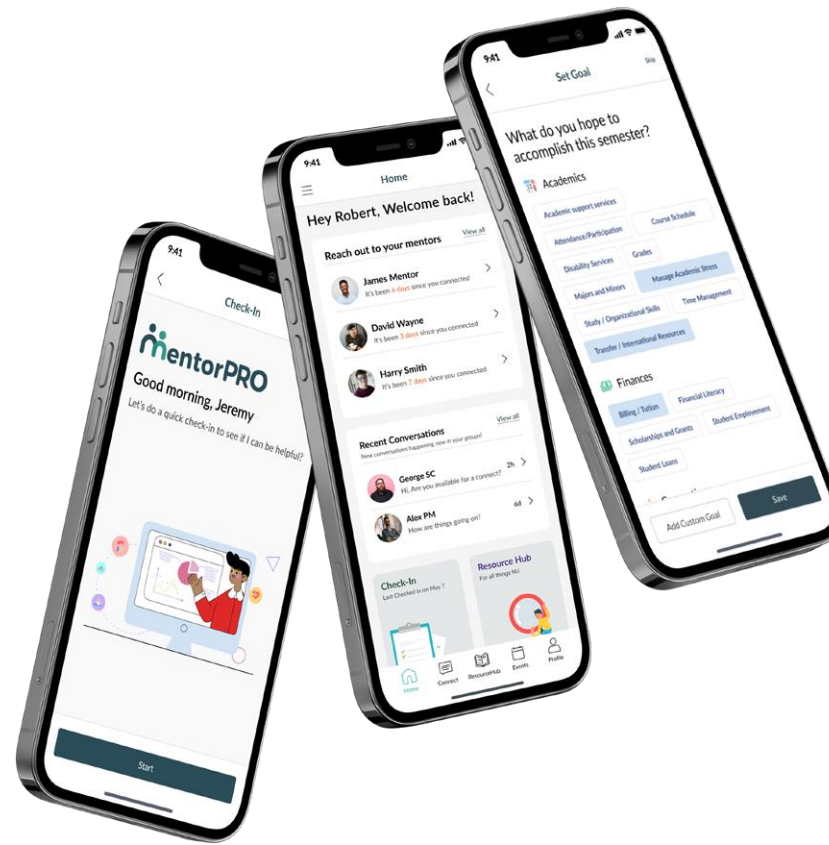
Secure messaging and data monitoring



Human support for intervention use can lead to positive outcomes



Current Study



Study Aims:

1. Examine the acceptability and feasibility of MentorPRO with a college student population.
2. Explore what insights college support staff can gain regarding student functioning.
3. Identify areas of improvement for the future of MentorPRO and peer mentoring in the technology space.



Methodology



Participants

- Pilot Program: August 2021-May 2022
- Private university in northeastern United States
- 6,709 eligible first year students
- Paid trained peer mentors (2nd year +)

	Full first-year class	Students in peer mentoring program
Number of students (<i>N</i>)	6709	3141
Age (<i>m</i> [<i>sd</i>])	18.60 (0.70)	19.36 (0.65)
Gender* (<i>n</i> [%])		
Female	3979 (59.33)	1961 (62.43)
Male	2724 (40.60)	1177 (37.47)
Not reported	6 (0.09)	3 (0.10)
International students (<i>n</i> [%])	605 (9.02)	334 (10.63)
Race and ethnicity ^a (<i>n</i> [%])		
Asian	1318 (19.65)	543 (17.29)
Black or African American	449 (6.69)	203 (6.46)
Hispanic or Latino	849 (12.65)	377 (12.00)
Other	6 (0.09)	6 (1.63)
White	2883 (42.97)	1391 (44.29)
Two or more races	468 (6.98)	240 (7.64)
Race and ethnicity unknown	131 (1.95)	47 (1.50)
Generational status (<i>n</i> [%])		
First generation	751 (11.19)	331 (10.54)
Continuing-generation	3631 (54.12)	1484 (47.25)
Not reported	2327 (34.68)	1326 (42.22)

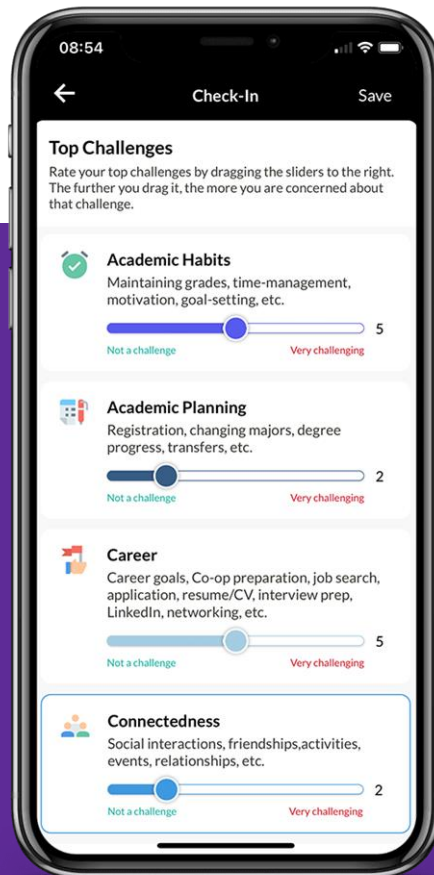
*The university only reports female and male gender at this time

^aThe university only collects race and ethnicity from domestic students

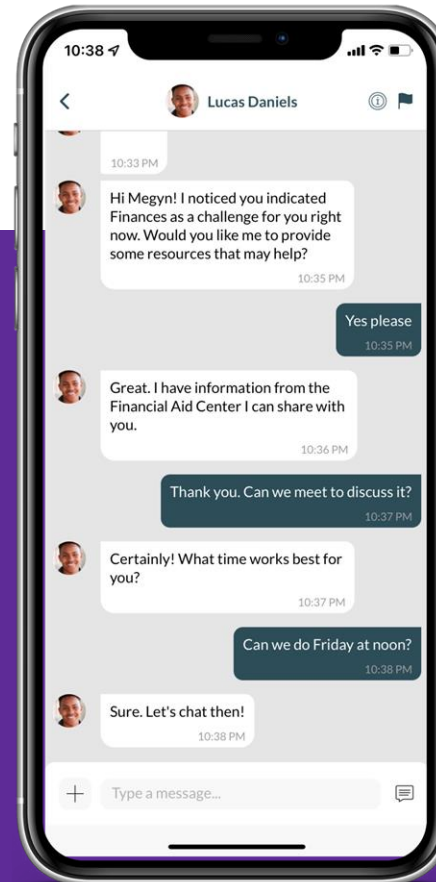


Acceptability & Feasibility: Engagement

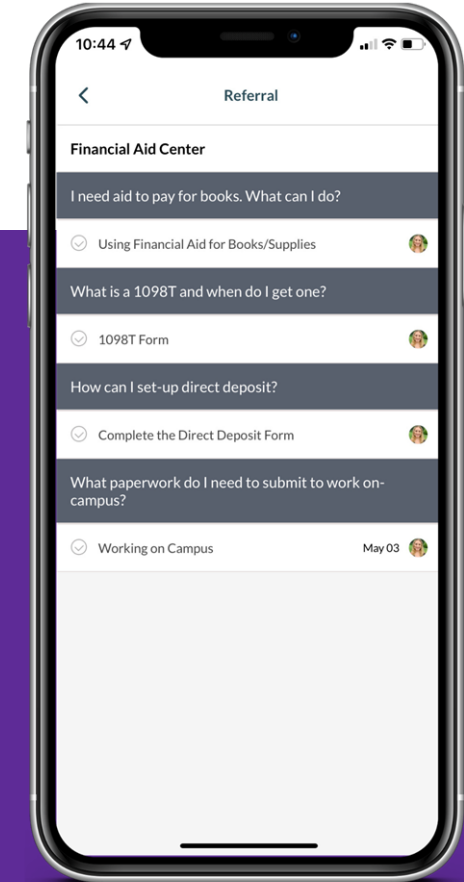
Check-In



Messages



Referrals



Check-In

- Students identify how severe their top challenges are
- Inspired by Top Problems (Weisz, 2011)
- Six life domains:
 - Academic Habits
 - Academic Planning
 - Career
 - Connectedness
 - Finances
 - Health & Wellbeing
- Measured engagement by number of completed Check-Ins

08:54

Check-In Save

Top Challenges

Rate your top challenges by dragging the sliders to the right. The further you drag it, the more you are concerned about that challenge.

Academic Habits
Maintaining grades, time-management, motivation, goal-setting, etc.

5

Not a challenge Very challenging

Academic Planning
Registration, changing majors, degree progress, transfers, etc.

2

Not a challenge Very challenging

Career
Career goals, Co-op preparation, job search, application, resume/CV, interview prep, LinkedIn, networking, etc.

5

Not a challenge Very challenging

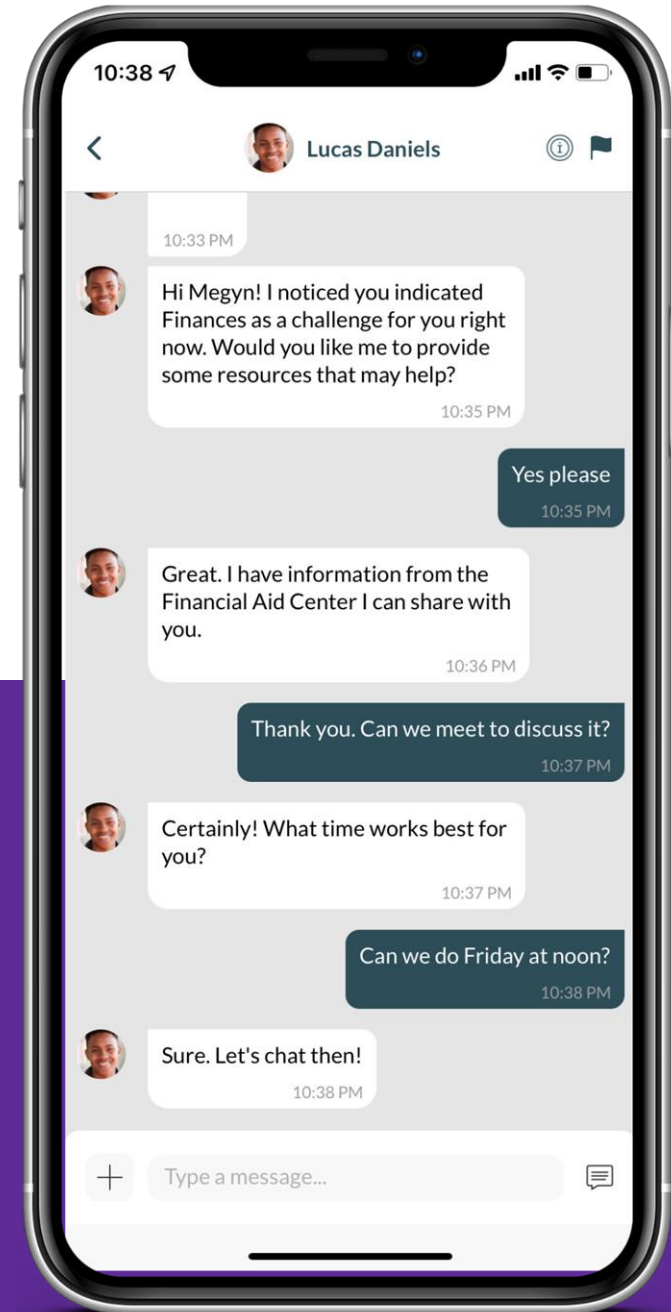
Connectedness
Social interactions, friendships, activities, events, relationships, etc.

2

Not a challenge Very challenging

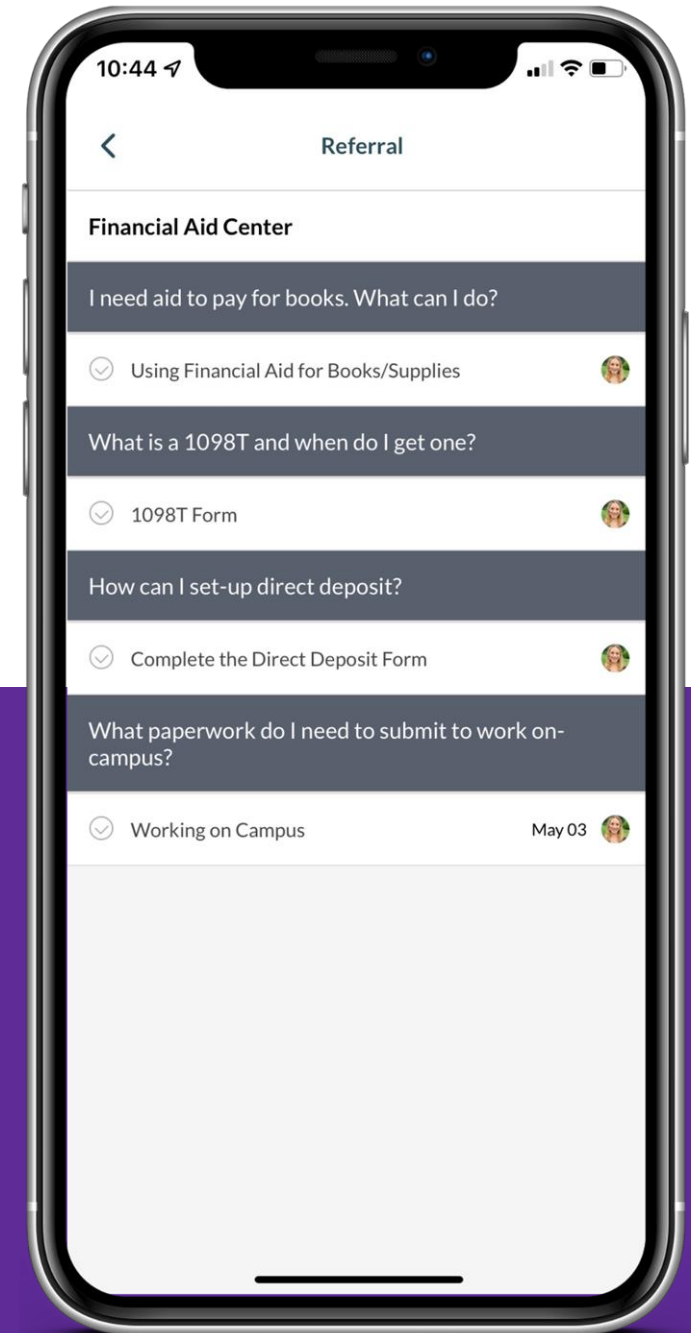
Chat

- Students are able to message the mentors that they have been assigned to
- Messages are also monitored by peer mentors' supervisors for students' safety
- Engagement defined by number of messages sent to peer mentors



Referrals

- Main intervention feature
- Mentors assign mentees with resource referrals related to their challenges and goals
- Supportive Accountability Model



Student Wellbeing: Student Adjustment Surveys

3 Items:

“I feel part of the [university] community”

(adapted from Goodenow, 1993)

“I am confident that I will be a successful student at [the university]”

(adapted from Bedewy and Gabriel, 2015).

“When I have questions about [the university], I reach out to my peer mentor”

(created by MentorPRO team)

*5-point Likert scale: strongly disagree (1) to strongly agree (5)

*This questionnaire was presented the first time students used MentorPRO, then was presented again every 3 months.

Results



MentorPRO Pilot Program

	Full first-year class	Students in peer mentoring program	Difference statistic
Number of students (<i>N</i>)	6709	3141	
Age (<i>m</i> [<i>sd</i>])	18.60 (0.70)	19.36 (0.65)	$t(3140) = 65.53, p < 0.001$
Gender* (<i>n</i> [%])			$\chi^2(2) = 13.08, p = 0.001$
Female	3979 (59.33)	1961 (62.43)	
Male	2724 (40.60)	1177 (37.47)	
Not reported	6 (0.09)	3 (0.10)	
International students (<i>n</i> [%])	605 (9.02)	334 (10.63)	$\chi^2(1) = 10.10, p = 0.002$
Race and ethnicity ^a (<i>n</i> [%])			$\chi^2(6) = 21.71, p = 0.001$
Asian	1318 (19.65)	543 (17.29)	
Black or African American	449 (6.69)	203 (6.46)	
Hispanic or Latino	849 (12.65)	377 (12.00)	
Other	6 (0.09)	6 (1.63)	
White	2883 (42.97)	1391 (44.29)	
Two or more races	468 (6.98)	240 (7.64)	
Race and ethnicity unknown	131 (1.95)	47 (1.50)	
Generational status (<i>n</i> [%])			$\chi^2(2) = 79.68, p < 0.001$
First generation	751 (11.19)	331 (10.54)	
Continuing-generation	3631 (54.12)	1484 (47.25)	
Not reported	2327 (34.68)	1326 (42.22)	

*The university only reports female and male gender at this time

^aThe university only collects race and ethnicity from domestic students

46.83% of first years opted in

Who did this program appeal to?

- Females
- International students
- White students
- Multiracial students



Main Findings

Engagement

Check-Ins	Chat	Referrals
17,032 check-ins 2,947 students	13,456 messages to peer mentors 1,798 students	756 referrals 458 students



Main Findings

Engagement

Check-Ins	Chat	Referrals
17,032 check-ins 2,947 students	13,456 messages to peer mentors 1,798 students	756 referrals 458 students



Number of Check-Ins significantly correlated with GPA

$r(2945)=0.04, p = 0.043$



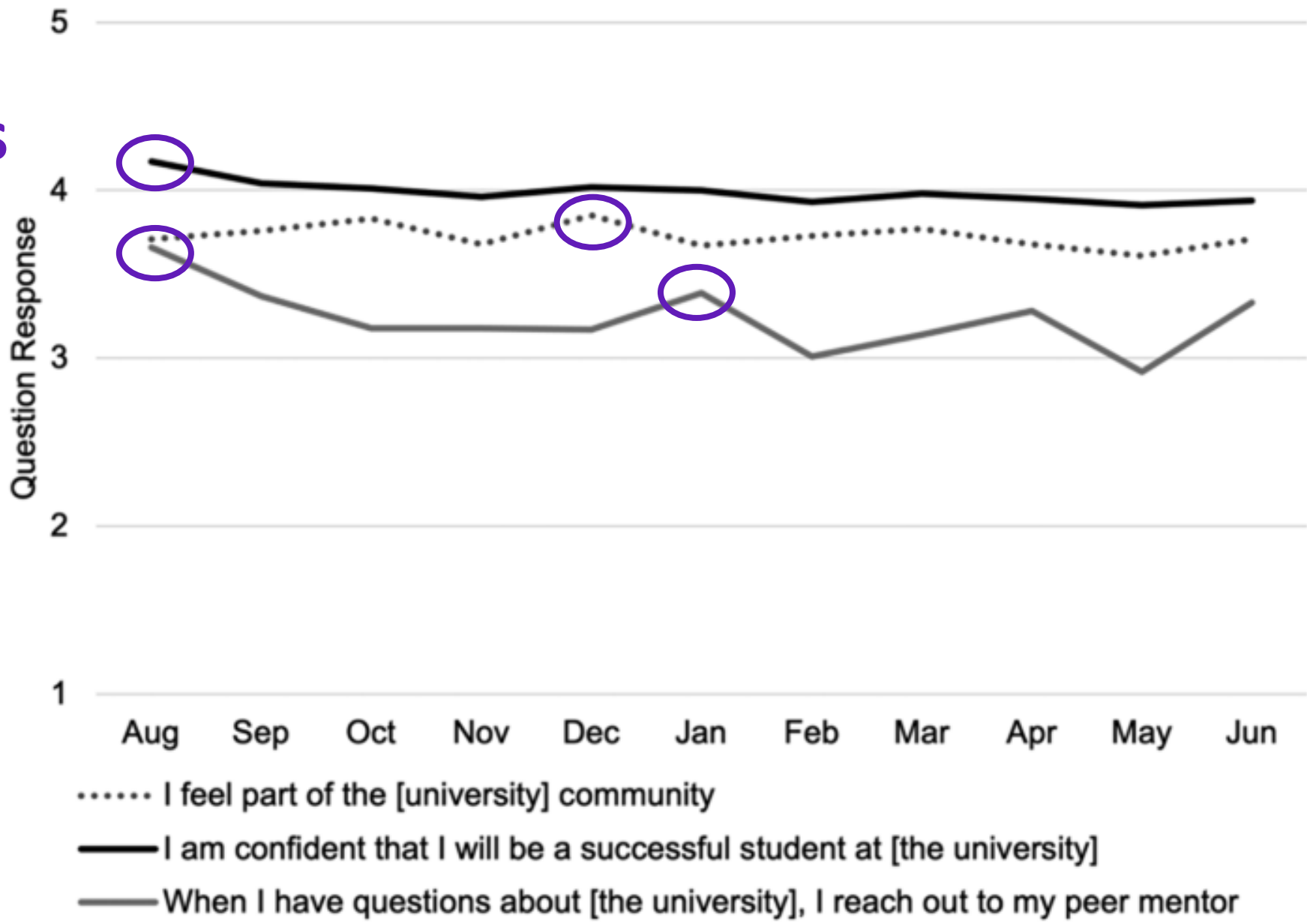
Survey Responses

What insights college support staff can gain regarding student functioning?

- Check-in Scores
- Student Adjustment Survey Responses



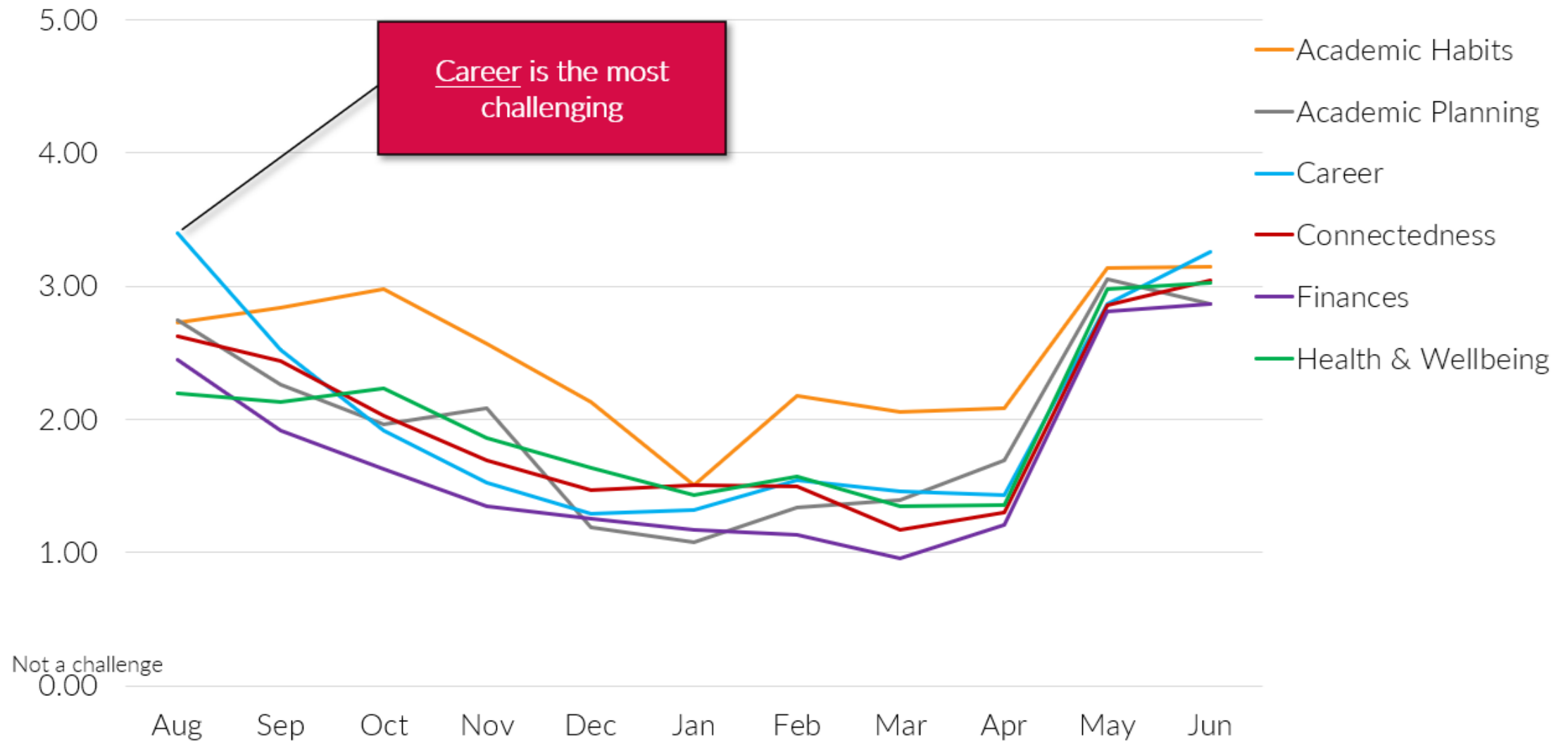
Survey Responses



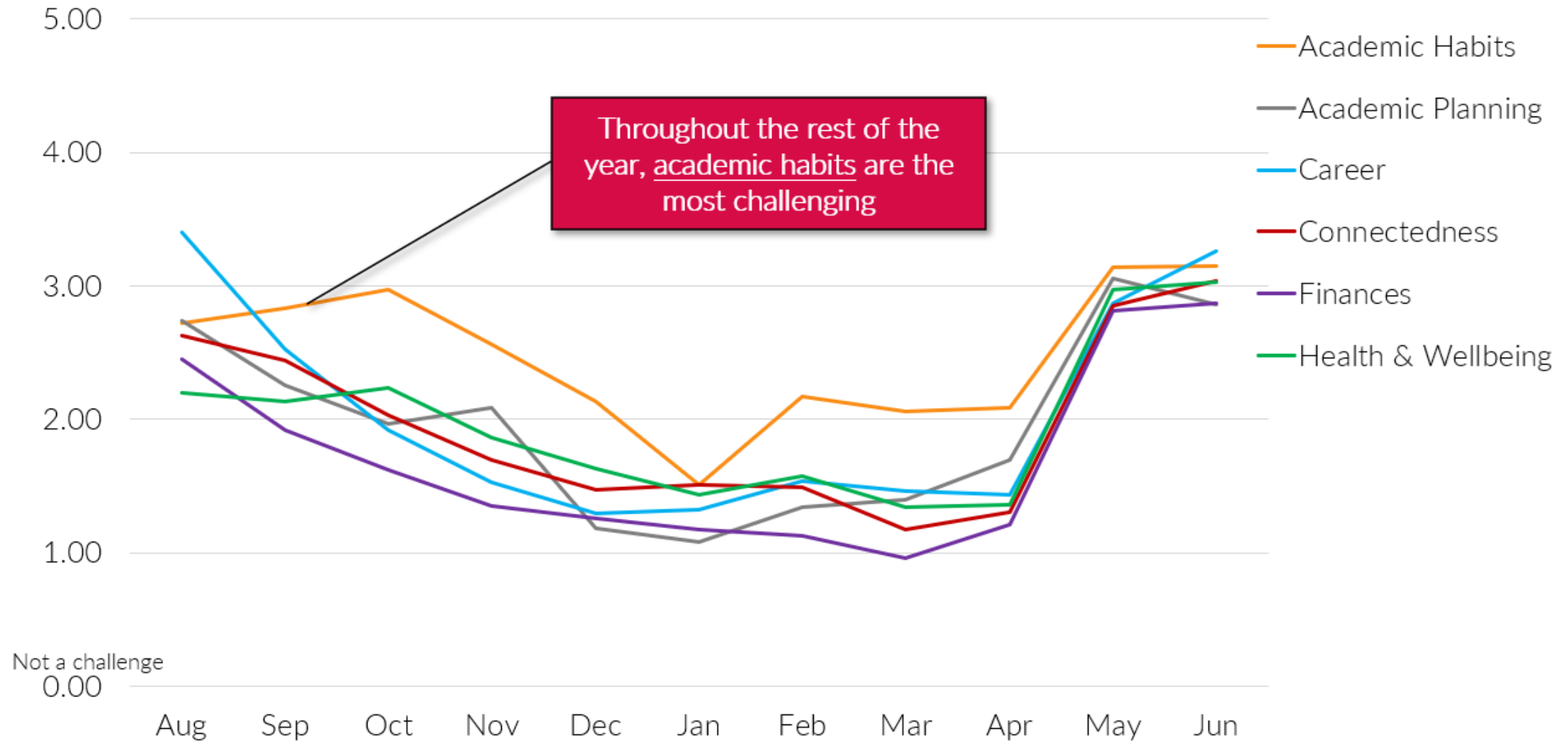
Note. Mean responses by month of the questionnaire items.



Check-Ins

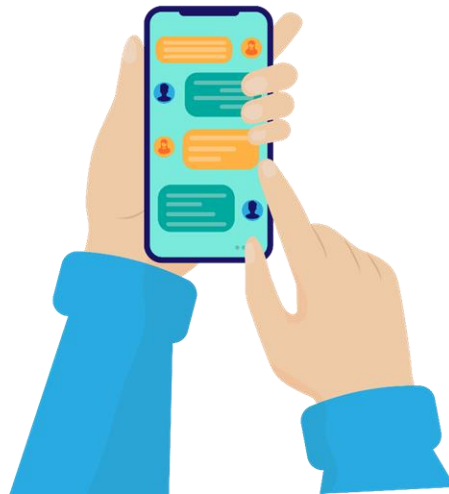


Check-Ins



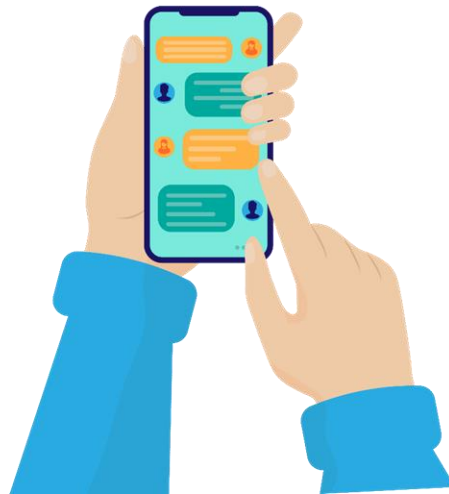
Limitations

- No true baseline data for all students
- No control or comparison group
- Change in Check-In procedure



Discussion Points

- Pilot year demonstrated acceptability and feasibility.
- Referral engagement lower than we anticipated.
- Check-Ins and Surveys can inform university staff on what challenges students are having, and when they might need the most support.
- Future work



Thank you!!

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Q+A

