RESEARCH ARTICLE

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Sense of Belonging in Undergraduate Physical Education and Recreation Students: An Examination of Academic Programs, Classification, and Transfer Status

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Abstract: Sense of belonging in the campus community has been identified as a critical factor in persistence and retention in college students. This study aimed to examine sense of belonging in physical education (PE) and recreation, park & nonprofit administration (RPNA) undergraduate students. A 34-item survey consisting of six categories was used to collect data. Findings revealed that (a) PE majors had greater peer support, felt more comfortable in the classroom and less isolated in the learning environment, thought the extracurricular activities and bulletin board information were more helpful, and experienced a greater overall sense of belonging than RPNA majors, (b) freshmen and seniors experienced a greater sense of belonging than sophomores, (c) seniors reported greater peer support than sophomores, (d) sophomores felt less comfortable in the classroom than everyone else, (e) sophomores felt more isolated than freshmen and seniors, and (f) nontransfer students felt the information on the bulletin board made them feel more connected to their peers of the same major than transfer students. Results suggested that college students regardless of major, classification and transfer status could benefit from additional in- and out-of-class activities, caring and compassionate demeanor from faculty members, and better use of the bulletin board to direct attention to their classmates, events, and news.

Keywords: Kinesiology, Peer Support, Faculty Support, Extracurricular Activity, Bulletin Board

1. Introduction

Sense of belonging is a subjective feeling of acceptance, inclusion, connection, and support within a group. It is the perception of being respected, valued, and cared for by others that makes an individual feel like they belong. According to Haim-Litevsky *et al.* (2023), "the phenomenon of belonging and connectedness is universal and appears to be a basic human need in the context of well-being and participation, regardless of the type of community one belongs to" (p.13). This sense of belonging is especially important in educational settings because it is associated with students' personal growth, behavioral engagement, social life, emotional health, and academic performance (Ahn & Davis, 2020; Cohen & Viola, 2022; Fong *et al.,* 2024; Freeman *et al.,* 2010; Gillen-O'Neel, 2021; Kelly *et al.,* 2026; O'Keeffe, 2013; Pedler *et al.,* 2022; Ulmanen *et al.,* 2016; Wilson *et al.,* 2015). When students receive support, comfort and understanding from their peers and faculty, they feel less isolated and more like a community member, which ultimately helps with persistence and retention (Davis *et al.,* 2019; Gopalan & Brady, 2020; Hausmann *et al.,* 2007; Kelly *et al.,* 2026; Pedler *et al.,* 2022).

Previous research examining factors associated with college students' attachment to the campus community have found two common human connections: student-to-peer and student-to-faculty relationships (Ahn & Davis, 2020; Cohen & Viola, 2022; Freeman *et al.,* 2010; Hausmann *et al.,* 2007; Hoffman *et al.,* 2002; Knekta *et al.,* 2020). Using the 10 Words Question, Ahn and Davis (2020) categorized "lecturer" and "friends" under the academic and social domains of belonging (p. 626), while Cohen and Viola (2022) highlighted "staff-student relationships" and "peer relations and cohort identity" as two of the seven factors of how students experienced belonging during their college career (p. 8). To further investigate students'

sense of belonging through quantitative methods, Hoffman and her colleagues (2002) developed and validated a 26-item questionnaire under four factors (i.e., perceived peer support, perceived classroom comfort, perceived isolation, perceived faculty support). Almost two decades later, Knekta and her colleagues (2020) developed and validated a 20-item questionnaire under three factors (i.e., sense of belonging: valued competence, sense of belonging: social acceptance, involvement).

To date, most sense of belonging studies collected data from college students across a university. Only a few collected data from a specific department such as biology, psychology, computing, and the collective field of science, technology, engineering and mathematics (STEM) (Knekta *et al.,* 2020; Krafona 2014; Rainey *et al.,* 2018; Runa *et al.,* 2025; Wilson *et al.,* 2015). Students majoring in different fields may have different needs to experience a sense of belonging. For instance, the psychology undergraduate students in Krafona's (2014) study reported a low sense of belonging because the learning environment did not fulfill their spiritual and social needs. In other words, the university community was mainly fulfilling their academic needs. For a major that studies the mind and behavior, student-to-peer and student-to-faculty relationships seem to be a major factor to boost their sense of belonging. Students majoring in STEM, on the other hand, may not necessarily need human interactions to feel belonging because they could find their competence and identity in the field of study (Rainey *et al.,* 2018; Wilson *et al.,* 2015). Specifically, Rainey and her colleagues (2018) found that STEM majors ranked exceptionally high in perceived competence, personal interest, and science identity.

While it is important to evaluate students' sense of belonging, it is more practical to brainstorm ways to cultivate human connections. Taking Ruedas-Garcia and her research team's (2022) recommendations and applying them in a departmental setting, regular extracurricular activities can be used to "proactively engage with your 'peers'" (p. 3) and "foster connection outside of 'class'" (p. 5-6). Through student organizations such as a major's club, students are encouraged to participate in intramural sports and community service events. According to Strayhorn (2018), most college students "did not begin to feel like 'part of the campus' until they were involved in a few clubs, organizations, or campus activities such as student government, intramural sports, fraternities/sororities, or connected to others through class activities" (p. 140). Involvement in sport-related activities is particularly beneficial because of the time committed to practice and gameplay as well as the emotions that a team goes through over a season. It is the nervousness, frustration, anger, joy and disappointment that bring a team together. Moreover, participation in community service was positively associated with students' sense of belonging (Soria *et al.,* 2012). Evidently, engaging in such events encourages the development of friendships and institutional affiliation that would not have been fostered had students served at the same event on their own.

Another option to build connections within the department is to "provide opportunities to learn about each other" (p. 5, Ruedas-Garcia *et al.,* 2022). Recognizing the value of storytelling (Suzuki *et al.,* 2018), Ruedas-Garcia and colleagues (2022) recommended creating a safe platform that allows students to share who they are and find commonality with one another. In this technology-driven era, bulletin boards in the hallways on college campuses may not always capture the attention of young adults, but when they do, the text-and-image features could serve as a compelling visual experience to connect with others in a community. Using a big font size and eye-catching colors to post basic information and a portal (i.e., a QR code) to further information, Becton and Long's (2024) photovoice project "facilitated social interaction by encouraging [students] to share the information with friends in a real-world interaction that is analogous to 'sharing on social media' and 'brings together a community'" (p. 101). Turning a traditional bulletin board that is pinned up with flyers, handwritten notes and tear-off contact sheets into a contemporary one that displays members' portraits and personal information like a hall of fame along with up-to-date news and interactive messages could have the potential to strengthen the bonds within an academic program.

Given the importance of belonging associated with students' personal, social and academic experiences during college (Ahn & Davis, 2020; Cohen & Viola, 2022; Davis *et al.,* 2019; Fong *et al.,* 2024; Freeman *et al.,* 2010; Gillen-O'Neel, 2021; Gopalan & Brady, 2020; Hausmann *et al.,* 2007; Kelly *et al.,* 2026; O'Keeffe, 2013; Pedler *et al.,* 2022; Ulmanen *et al.,* 2016; Wilson *et al.*, 2015) and the lack of departmental data (Knekta *et al.,* 2020; Krafona 2014; Rainey *et al.,* 2018; Runa *et al.,* 2025; Wilson *et al.,* 2015), the purpose of this study was to examine the sense of belonging in a group of physical education (PE) and

recreation, park & nonprofit administration (RPNA) students. In addition to the four existing factors in Hoffman *et al.*'s (2002) questionnaire, the present study also aimed to examine how extracurricular activities and bulletin board information affected the student-to-peer and student-to-faculty relationships.

2. Materials and Methods

2.1 Instrument

Although Knekta *et al.'s* (2020) sense of belonging questionnaire was recently validated, it was tested specifically by biology faculty members and students. The authors believed that Hoffman et al.'s (2002) survey was more general to a student population that has not yet been studied. The original survey included 26 items: eight representing *perceived peer support* (sample question: "I could contact another student from class if I had a question about an assignment or test"), four representing *perceived classroom comfort* (sample question: "I feel comfortable volunteering ideas or opinions in class"), four representing *perceived isolation* (sample question: "No one in my classes knows anything personal about me"), and 10 representing *perceived faculty support* (sample question: "I feel that a faculty member would take the time to talk to me if I needed help"). Adding eight more questions, four regarding *extracurricular activities* (sample question: "Extracurricular activities help me build meaningful relationships with others in my major") and four regarding *bulletin board* (sample question: "The information on the bulletin board makes me feel connected to the students and faculty in my major"), the revised sense of belonging survey consisted of 34 items.

The 34 statements were listed in the order of appearance as they were described in the previous paragraph without dividers to signify the categories. Respondents were prompted to write down a number based on their experiences so far (1 = completely untrue, 2 = mostly untrue, 3 = equally true and untrue, 4 = mostly true, 5 = completely true) on the blank space at the end of each statement. Along with the three general questions regarding their major (check one of the two boxes: "physical education" or "recreation, park & nonprofit administration"), classification (check one of the four boxes: "freshman", "sophomore", "junior" or "senior"), and transfer status (check one of the two boxes: "yes" or "no"), the survey was printed on a piece of paper on both sides.

2.2 Data Collection

Undergraduate students majoring in PE and RPNA at a public university in the mid-eastern region of United States were invited to complete the survey at three time points: the beginning of fall semester, the beginning of spring semester, and the end of spring semester. Each data collection period lasted one week. Both authors and two trained research assistants took turns to visit every PE and RPNA class based on their availability. They used the first five minutes of the class to introduce the study and ask for participation. After a brief pause to answer any questions from the class, the survey and the informed consent form were distributed to all students in class. They were ensured that nonparticipation in the study would not affect their grade or relationship with the faculty member. If they decided to complete the survey, they were instructed not to write their names or leave any identifiable information on the survey. This anonymous practice was done to reduce the possibility of "studentship" (Graber, 1998) or "impression management" (Lawson, 1983a, 1983b) where students provided information that was aligned with the PE and RPNA faculty's perspectives so as to gain their approval rather than reporting what they really felt. As students began to complete the survey, the author or research assistant stood in front of the classroom and prompted students to return the consent forms and surveys to the podium, both the completed and blank ones. After each class, the papers were returned to the first author who separated the consent forms from the surveys and recycled the blank ones for another class or the next data collection point.

2.3 Effort in Extracurricular Activities and Bulletin Board

During the school year, the faculty sponsor of the major's club called for monthly meetings, discussing with the club members upcoming events and things they could do as a group. For instance, the PE Major's Club volunteered at a fall festival at a local elementary school. The PE students were stationed at different Halloween-themed booths, interacted with young children in gameplay, and gave out prizes. In the spring, the club also staffed three concession booths during the Education Day at a local ballpark, where over 1,000 K-12 students were bussed in for a mid-day minor league baseball game. During the school year, students in the PE Major's Club also registered for flag football, coed volleyball, and coed softball intramurals. RPNA Major's Club, on the other hand, hosted social, networking, and

recreational events on campus as well as attended and volunteered at a professional conference.

Two traditional cork bulletin boards were replaced with magnetic tempered glass dry erase boards, one for each discipline. The two boards were hung in the hallway with the most foot traffic when school was in session. Three sections were created and updated weekly by each discipline's graduate assistant (GA). First, a profile featuring the name of each student, faculty, and staff member, a photo, birthday, and a self-selected quote was printed on a piece of paper and taped on a 4" by 4" hexagon magnet. Profiles were arranged in the shape of a honeycomb grouping students by grade level with a separate section for faculty & staff. The intention was to move the magnets as the students progressed through the program, and the magnet would be given to them as a souvenir when they graduate. The "news" section comprised of print-out flyers or handwritten notes and QR codes to join the club, upcoming events, and student spotlights. Lastly, the GAs wrote an intriguing question or riddle every week and allotted space for everyone to comment on it.

2.4 Data Analysis

All survey data were entered and analyzed using SPSS 31. Descriptive statistics were conducted to summarize the characteristics of the sample. Four items on the perceived isolation were reverse-scaled questions, meaning the higher the number, the more isolated a student felt, hence the lower sense of belonging identified. Therefore, these items were reverse coded. The *overall mean score* for sense of belonging as well as the mean scores for the *perceived peer support*, *perceived classroom comfort*, *perceived isolation*, *perceived faculty support*, *extracurricular activities*, and *bulletin board* categories were calculated for further analysis.

Although there was a possibility that the same students completed the survey more than once across the three time points, the independence assumption was made because the survey responses were anonymous and identifying information could not be linked. Therefore, rather than Repeated Measures ANOVAs, Factorial ANOVAs were computed to detect any significant main effects or interactions between time and the three independent variables (i.e., major, classification, transfer status) on each of the seven dependent variables (i.e., overall mean score, perceived peer support, perceived classroom comfort, perceived isolation, perceived faculty support, extracurricular activities, and bulletin board).

3. Results

3.1 Major

A total of 161 surveys were collected over the three time points. Sixty (37.3%) were collected in the beginning of the fall semester, 59 (36.6%) in the beginning of the spring semester, and 42 (26.1%) at the end of the spring semester. The number and percentage of the subjects' major, classification and transfer status are illustrated in Table 1.

A 3 (time) × 2 (major) between-subjects factorial ANOVA was conducted to detect any significant main effects or interactions on each of the seven mean scores. A significant main effect for major was found in all categories except for perceived faculty support (Table 2). PE majors reported higher scores in all categories than RPNA majors (Table 3).

3.2 Classification

A 3 (time) × 4 (classification) between-subjects factorial ANOVA was calculated to locate any significant main effects or interactions on each of the seven mean scores. A significant main effect for classification was found in the overall score, perceived peer support, perceived classroom comfort, and perceived isolation (Table 4). Post hoc comparisons indicated that (a) freshmen and seniors experienced a greater sense of belonging than sophomores, (b) seniors reported a greater peer support than sophomores, (c) sophomores felt less comfortable in the classroom than everyone else, and (d) sophomores felt more isolated than freshmen and seniors (Table 5). It became evident that the sophomores could use more resources to increase the support and comfort level they needed to feel belonging in the classroom. Faculty support continued to be ranked the highest or second highest component, while bulletin board information was ranked among the lowest.

3.3 Transfer Status

Lastly, a 3 (time) × 2 (transfer status) between-subjects factorial ANOVA was computed to examine any significant main effects or interactions on each of the seven mean scores.

Table 1. Number and Percentage of the Subjects by Major, Classification, and Transfer Status

	Beginning of Fall	Beginning of Spring	End of Spring
Major			
PE	37 (61.7%)	27 (45.8%)	27 (64.3%)
RPNA	23 (38.3%)	32 (54.2%)	15 (35.7%)
Classification			
Freshman	5 (8.3%)	4 (6.8%)	4 (9.5%)
Sophomore	13 (21.7%)	14 (23.7%)	16 (38.1%)
Junior	21 (35.0%)	28 (47.5%)	16 (38.1%)
Senior	21 (35.0%)	13 (22.0%)	6 (14.3%)
Transfer Status			
No	35 (58.3%)	34 (57.6%)	28 (66.7%)
Yes	25 (41.7%)	25 (42.4%)	14 (33.3%)
Total	60	59	42

Note. PE = physical education; RPNA = recreation, park & nonprofit administration.

Table 2. Two-Way ANOVA Results for Time and Major

	Time					**Major**					**Interaction**				
	F	df	*p*	η²	1-β	*F*	df	*p*	η²	1-β	*F*	df	*p*	η²	1-β
Overall	1.579	2, 155	.209	.020	.331	9.088	1, 155	.003*	.055	.850	2.500	2, 155	.085	.031	.495
Peer Support	1.890	2, 155	.155	.024	.388	6.074	1, 155	.015*	.038	.688	1.881	2, 155	.156	.024	.387
Classroom Comfort	2.197	2, 155	.115	.028	.444	12.206	1, 155	<.001*	.073	.935	2.174	2, 155	.117	.027	.439
Isolation	1.891	2, 155	.154	.024	.389	13.358	1, 155	<.001*	.079	.953	.285	2, 155	.753	.004	.094
Faculty Support	1.116	2, 155	.330	.014	.244	.384	1, 155	.536	.002	.094	2.678	2, 155	.072	.033	.525
Extracurricular	.743	2, 155	.477	.009	.174	4.240	1, 155	.041*	.027	.534	1.384	2, 155	.254	.018	.294
Bulletin Board	.005	2, 155	.995	.000	.051	6.854	1, 155	.010*	.042	.739	.691	2, 155	.503	.009	.165

Note. *Significant difference.

Table 3. Means and Standard Deviations by Major

	PE		**RPNA**	
	Mean	*SD*	*Mean*	*SD*
Overall*	3.90	.604	3.56	.680
Peer Support*	3.65	.879	3.25	.979
Classroom Comfort*	4.28	.747	3.74	1.057
Isolation*	3.96	.804	3.43	.851
Faculty Support	4.17	.624	4.07	.658
Extracurricular*	3.80	.976	3.49	.948
Bulletin Board*	3.36	.982	2.93	.979

Note. PE = physical education; RPNA = recreation, park & nonprofit administration; *Significant difference.

Table 4. Two-Way ANOVA Results for Time and Classification

	Time					Major					Interaction				
	F	df	*p*	η²	1-β	*F*	df	*p*	η²	1-β	*F*	df	*p*	η²	1-β
Overall	1.465	2, 149	.234	.019	.309	5.187	3, 149	.002*	.095	.920	.664	6, 149	.679	.026	.258
Peer Support	2.234	2, 149	.111	.029	.450	5.913	3,149	<.001*	.106	.951	1.037	6, 149	.404	.040	.401
Classroom Comfort	1.863	2,149	.159	.024	.383	5.711	3,149	<.001*	.193	.944	1.997	6, 149	.070	.074	.716
Isolation	1.702	2, 149	.186	.022	.354	3.951	3,149	.010*	.074	.824	.982	6, 149	.440	.038	.380
Faculty Support	1.382	2,149	.254	.018	.294	1.896	3,149	.133	.037	.483	.402	6, 149	.877	.016	.164
Extracurricular	.085	2, 149	.919	.001	.063	2.388	3,149	.071	.046	.588	.289	6, 149	.941	.012	.128
Bulletin Board	.182	2, 149	.834	.002	.078	2.081	3,149	.105	.040	.524	.354	6, 149	.907	.014	.148

Note. *Significant difference.

Table 5. Means and Standard Deviations by Classification

	Freshman		Sophomore		Junior		Senior	
	Mean	*SD*	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*
Overall	*4.00	.413	*‡3.48	.551	3.72	.710	‡4.02	.626
Peer Support	3.48	.579	*3.10	.661	3.41	1.078	*3.98	.865
Classroom Comfort	*4.46	.538	*‡§3.58	1.084	‡4.17	.838	§4.21	.841
Isolation	*4.07	.752	*‡3.40	.871	3.70	.828	‡4.01	.838
Faculty Support	4.31	.487	3.96	.613	4.12	.648	4.25	.671
Extracurricular	4.13	.887	3.43	.831	3.59	1.094	3.90	.860
Bulletin Board	3.57	.986	3.05	.975	3.00	1.043	3.46	.892

Note. *‡§Significantly different comparisons.

Table 6. Two-Way ANOVA Results for Time and Transfer Status

	Time					Major					Interaction				
	F	df	*p*	η²	1-β	*F*	df	*p*	η²	1-β	*F*	df	*p*	η²	1-β
Overall	1.962	2, 155	.144	.025	.402	.576	1, 155	.449	.004	.117	.223	2, 155	.801	.003	.084
Peer Support	2.466	2, 155	.088	.031	.490	.760	1, 155	.385	.005	.139	.373	2, 155	.689	.005	.109
Classroom Comfort	2.293	2, 155	.104	.029	.460	1.403	1, 155	.238	.009	.218	.291	2, 155	.748	.004	.096
Isolation	3.601	2, 155	.030*	.044	.660	.061	1, 155	.805	.000	.057	.536	2, 155	.586	.007	.137
Faculty Support	.840	2, 155	.434	.011	.192	.008	1, 155	.930	.000	.051	2.424	2, 155	.092	.030	.483
Extracurricular	.719	2, 155	.489	.009	.170	1.987	1, 155	.161	.013	.288	.049	2, 155	.953	.001	.057
Bulletin Board	.003	2, 155	.997	.000	.050	5.799	1, 155	.017*	.036	.668	.421	2, 155	.657	.005	.117

Note. *Significant difference

A significant main effect for time was found in perceived isolation (Table 6). According to the post hoc comparisons, subjects felt less isolated at the end of Spring (m = 3.92, SD = .781) than in the beginning of Spring (m = 3.51, SD = .929). The factorial ANOVA also detected a significant main effect for transfer status in the bulletin board score (Table 6). Nontransfer students (m = 3.33, SD = 1.015) felt the information on the bulletin board made them feel more connected to their peers of the same major than transfer students (m = 2.94, SD = .936).

4. Discussion

Prior research has demonstrated the importance of college students' sense of belonging to social and personal well-being, academic performance, and retention (Ahn & Davis, 2020; Cohen & Viola, 2022; Davis *et al.,* 2019; Fong *et al.*, 2024; Freeman *et al.,* 2010; Gillen-O'Neel, 2021; Gopalan & Brady, 2020; Hausmann *et al.,* 2007; Kelly *et al.,* 2026; O'Keeffe, 2013; Pedler *et al.,* 2022; Ulmanen *et al.,* 2016; Wilson *et al.,* 2015). A limited number of studies have been conducted within a single department (Knekta *et al.,* 2020; Krafona 2014; Rainey *et al.,* 2018; Runa *et al.,* 2025; Wilson *et al.,* 2015). Using a revised survey drawn from Hoffman and colleagues' (2002) earlier work, the present study examined PE and RPNA undergraduate students' sense of belonging at three time points during the academic year and the relationship between belonging and major, classification, and transfer status.

4.1 Major

PE majors reported greater overall sense of belonging than RPNA majors, suggesting they had greater peer support, felt more comfortable in the classroom and less isolated in the learning environment, and thought the extracurricular activities and bulletin board information were more helpful than RPNA majors. Although the statistical analysis of faculty support found no significant result between the majors, it was ranked the highest among the RPNA majors and second highest among the PE majors (Table 3), indicating student-faculty relationships are an important factor to their feelings of being included, supported, valued, and cared for in both majors.

RPNA majors reported their lowest sense of belonging scores at the start of the spring semester shortly after students returned from spending the holidays with family and friends (blue dashes in Figure 1). It is possible replacing this carefree time with a full courseload of schoolwork for the next 15 weeks contributed to the lower scores not just in overall sense of belonging, but in all categories except extracurricular activities.

For RPNA majors, extracurricular activity scores decreased in the spring semester (orange dashes in Figure 1) indicating students felt less pride in their major, felt less supported by peers in their major, and built fewer meaningful relationships through extracurricular activities with the major club than in the fall semester. There are at least two possible explanations. First, there may have been a lack of extracurricular activities during the spring semester for RPNA majors so they simply did not have the opportunity or chose not to participate in community service events or campus activities as a group (Soria *et al.,* 2012; Strayhorn, 2018). Second, it could be that the extracurricular activities available were not meaningful for the RPNA majors to feel supported, connected, or proud of being part of the group.

The PE majors, on the other hand, reported their experiences generally above their RPNA peers at each time point (Figure 1), with two exceptions. First, perceived isolation scores were lowest at the start of the spring semester although still higher than RPNA (green line in Figure 1). Second, scores were highest in the bulletin board category (purple line in Figure 1) at the start of the spring semester, suggesting the design and updates to start the semester contributed to a sense of belonging.

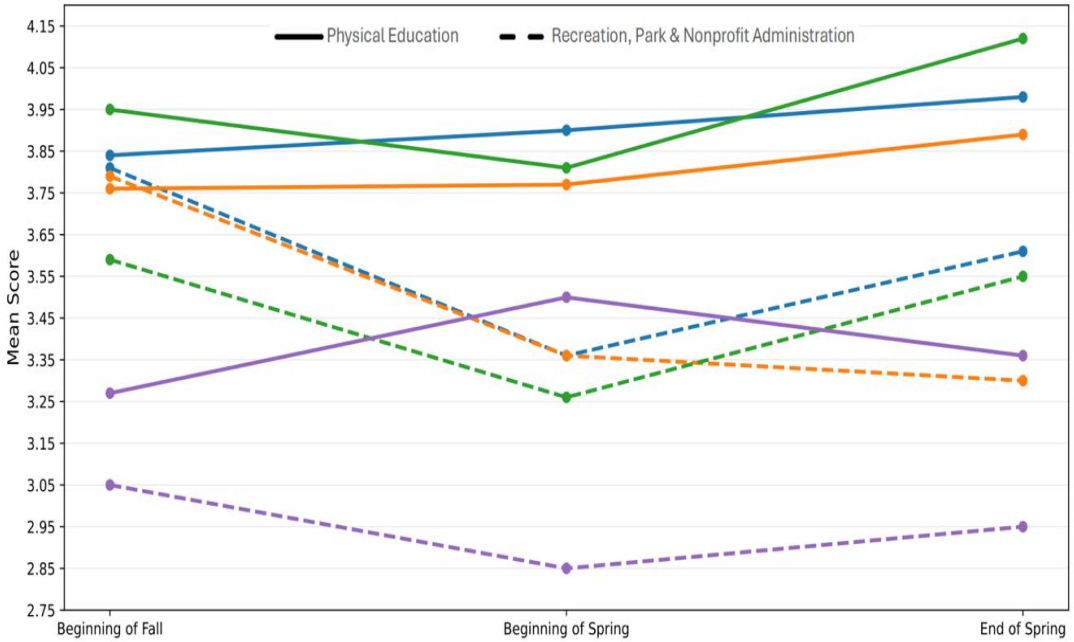
4.2 Classification

Looking at the trends over time by classification, most of them illustrated a similar V-shape where greater support, comfort level, and sense of belonging were indicated in the beginning and at the end of the school year by everyone except for the freshman group who reported higher scores at each time point (see examples in Figure 2). Two other frequent observations were (a) the sophomore groups experienced an all-time low in all but one category, and (b) the V-shape was more pronounced in the senior group. Illustrated in orange lines in Figure 2, connections made through bulletin board information were the only category that the sophomores were not ranked the lowest. This figure also showed lower scores at each time point for the senior group, perhaps because they were student-teaching or working in internships off campus and therefore did not see the bulletin board. Moreover, the extracurricular activities

category was the rare case where the freshmen reported the upside-down V-shape instead of their usual increase over time (green lines in Figure 2), suggesting the newcomers might be looking for more out-of-class activities to bond with their peers and be part of a group.

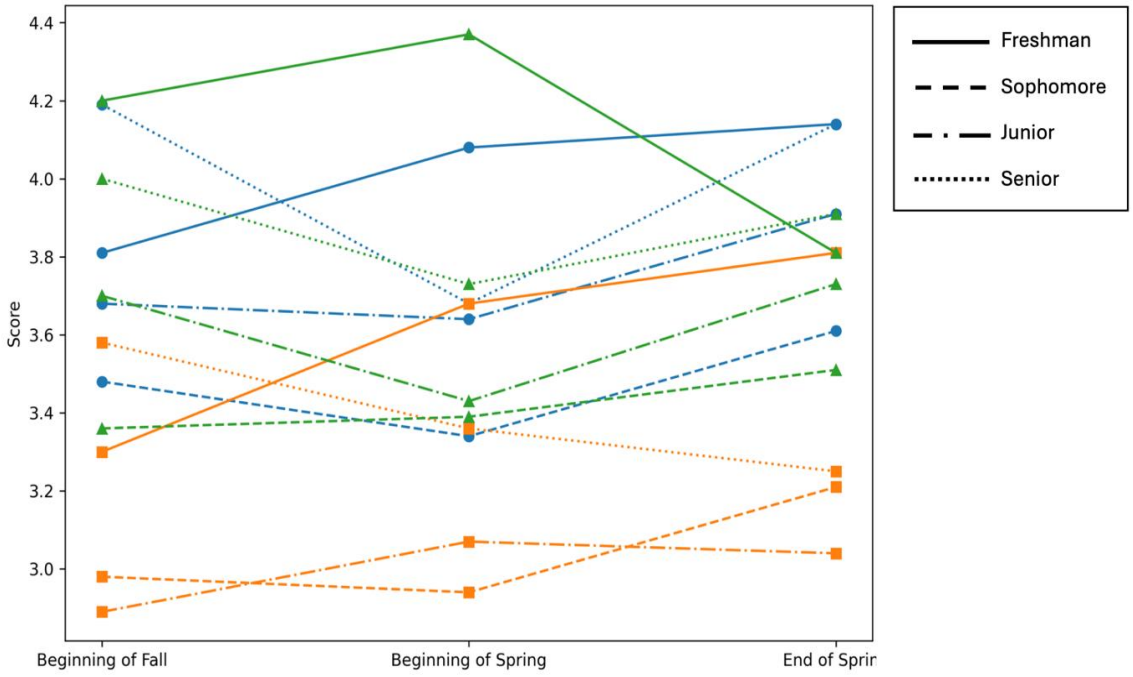
4.3 Transfer Status

Plot observation illustrates a V-shape trend with nontransfer students reporting a higher level of support, comfort level, connection, and sense of belonging over the course of the study (see examples in Figure 3).



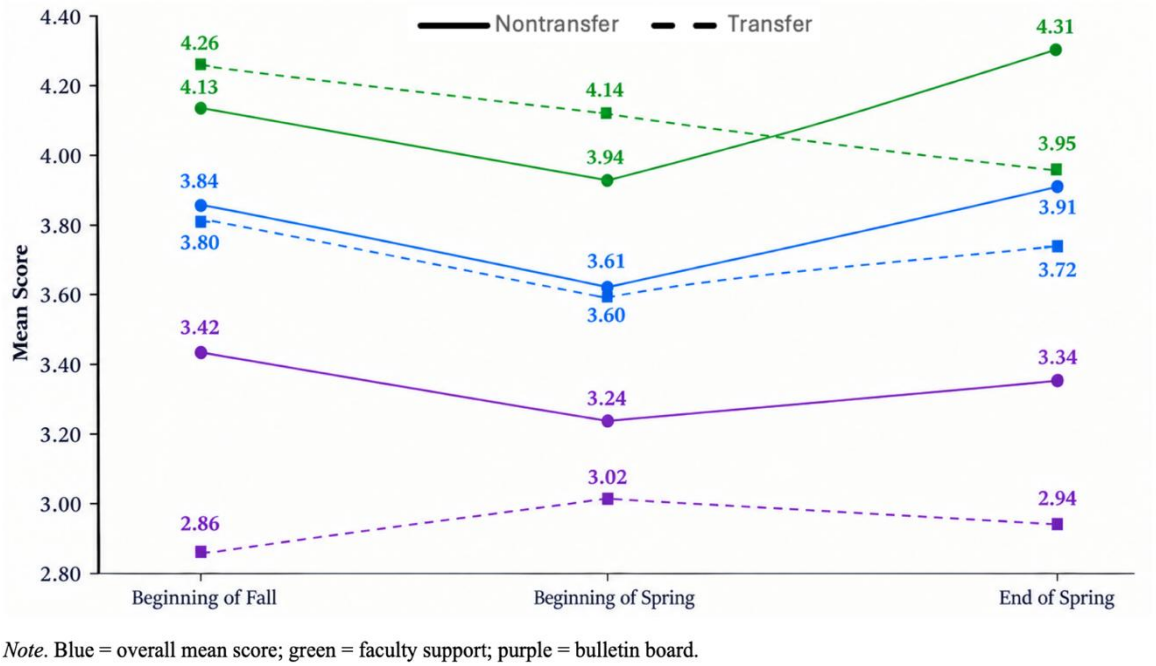
Note. Blue = overall mean score; orange = extracurricular activities; green = perceived isolation; purple = bulletin board.

Figure 1. Sense of Belonging across Four Measures by Major.



Note. Blue = overall mean score; orange = bulletin board; green = extracurricular activities.

Figure 2. Sense of Belonging across Three Measures by Classification.



Note. Blue = overall mean score; green = faculty support; purple = bulletin board.

Figure 3. Sense of Belonging across Three Measures by Transfer Status.

One of the exceptions was illustrated in Figure 3, where the transfer students reported lower scores for faculty support at each time point, suggesting faculty members could offer more assistance and resources to help those who recently came from another university or academic program on campus to navigate their way in the classroom, on campus, and in the community. Another exception was shown in Figure 3, where an upside-down V-shape revealed nontransfer students' experience regarding the bulletin board information. The low rankings in the beginning and at the end of the school year suggested that announcements and reminders about bulletin board information could be made more frequently to the transfer students and continuous effort could be made throughout the spring semester.

Freshmen were the only grade level to report higher sense of belonging scores at each time point. This further suggests the importance of sustaining sense of belonging over the course of the school year. Extracurricular activities might be a particularly important avenue for doing so. Lastly, transfer students reported lower faculty support scores at each time point. Although scores remained relatively high, this result again points to the importance of sustaining sense of belonging over the course of an entire academic year. In conclusion, faculty efforts to support new students (freshman, transfer) and facilitate involvement in the majors' club over the course of the entire school year could play an outsized role in creating a community where all students feels a sense of belonging and experience the resultant benefits.

5. Conclusion

While both majors reported high scores, results suggested that PE majors had a greater sense of belonging than RPNA majors and that extracurricular involvement via the majors' club could be particularly important. The PE Majors Club appeared to offer more opportunities during the school year and reported higher levels of student pride, support, and relationship building through those opportunities. Meanwhile, RPNA extracurricular scores were lower at each time point. This result highlights the importance of maintaining opportunities for involvement in majors' clubs throughout the school year.

5.1 Limitations and Implications for Future Research

This pilot study is limited by its small sample size. A longitudinal design that tracks freshman to their senior year could help draw a more solid conclusion regarding PE and RPNA majors' experiences in this university. This study is also limited to its quantitative research method using a revised sense of belonging survey. Analysis of internal consistency for the two new subscales was not performed as they were exploratory factors in this pilot study. A validation process could be done to ensure the additional eight questions on the

extracurricular activities and bulletin board information are phrased properly for the purpose of the study.

Qualitative research methods such as semi-structured interviews or focus group interviews could also be implemented to verify the subjects' responses drawn from the surveys. Lastly, an intentional intervention that plans out regular extracurricular activities based on the Major's Club could be utilized. For instance, regular gatherings to volunteer at campus or community events, go on a hike, play sports in the quad, or simply hang out at a coffee shop could be implemented to examine the effectiveness of such outside-of-class meetings on college students' sense of belonging. Better use of the magnetic, tempered glass, dry erase board is another factor to make an impact on the students' college experience. Fellow researchers are encouraged to include these factors and examine how they affect college students' sense of belonging in a specific field of study.

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Yes