ORIGINAL RESEARCH ARTICLE

Mentoring the mentor: Developing clinical instructor cross-cultural psychological capital to support culturally/linguistically diverse DPT students

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Abstract

Rationale: Cultural and social isolation, microaggressions, and few culturally and linguistically diverse (CLD) mentors contribute to a lack of belonging on clinical education experiences (CEEs) for CLD Doctor of Physical Therapy students. The purpose was to investigate whether a multiple mentor model including a CLD learner, their clinical instructor (CI), and CLD mentor could develop CI cross-cultural psychological capital (CC PsyCap) and mentoring skills to support CLD learners on CEEs.
Methods: Three CLD learners and their CIs were each matched with a CLD mentor. CIs completed online cross-cultural mentor training and met with the CLD student and mentor four times during the 10-week CEE. CIs completed the CC PsyCap survey to measure changes in CI cross-cultural self-efficacy before and after the CEE. Interview data from participants were thematically analyzed.
Results: All CIs demonstrated an increase in CC PsyCap scores over the study period. CIs gained insight into the unique needs of CLD learners, often subjected to bias and discrimination, and developed strategies to proactively support learners. CLD learners faced challenges related to race in the CEE and pressure to assimilate. They valued CLD mentors who role-modeled persistence and success and CIs who celebrated diversity and created a welcoming environment.
Clinical relevance: CIs play an important role in mentoring CLD learners on CEEs. This study highlighted that CI CC PsyCap can be developed through mentoring and coaching from CLD mentors, ultimately increasing support for CLD learners on CEEs.

Keywords: *culturally and linguistically diverse learners*; *multiple mentor model*; *cross-cultural psychological capital*; *belonging*; *mixed methods*; *physical therapy*

Holistic admission procedures focus on diversifying the Doctor of Physical Therapy (DPT) student body and profession;[1,2] however, recruitment and retention must align. In 2018–2019, 22.5% of students enrolled in DPT programs identified as a racial/ethnic minority, but this declined to 20% of graduates (*N* = 11,331) in 2021. Meanwhile, 74.5% of enrolled students were White, and 74.5% graduated.[3] Developing strategies to ensure the retention of culturally and linguistically diverse (CLD) learners – defined as those who speak a language other than English at home, are born outside of the US,[4] or identify as from racially/ethnically minoritized groups[5] – is critical.

Barriers to CLD learner success extend beyond the classroom to include clinical education experiences (CEEs) where CLD learners report isolation, exclusion, and a shortage of CLD role models.[6–9] Maslow posits that basic needs for safety, belonging, and esteem must be met first to achieve success.[10] A lack of belonging may contribute to CLD learner challenges. Belonging, which promotes engagement, motivation to complete meaningful work, and feeling like an integral team member,[11–13] can

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be fostered by providing students with strategies to deal with social adversity,[14] welcoming and inclusive clinical environments,[11] and through mentorship.[15]

The growing racial and ethnic diversity of the DPT student body[3] presents a need to address race and culture in the clinical mentoring relationship. However, serving as a clinical instructor (CI) is a complex and multi-faceted task.[16] CIs must 'diagnose' both the patient and the learner and respond to needs from both in real time. Clinical educators may avoid conversations about race due to decreased time, training, and comfort, and not wanting to treat students from minoritized groups as different from the norm or dominant social group.[17] Guidance is needed on how to support CLD learners who have additional challenges to overcome, such as discrimination, decreased confidence, and social isolation.[6,18,19]

Facilitating productive relationships between CIs and CLD learners involves more than providing CLD role models. It should focus on CIs establishing supportive relationships with all students and understanding CLD learners' unique needs. There are many benefits to engaging with students in conversations about race and culture including increasing trust, communication, and rehearsing for similar conversations with colleagues and patients.[17] CIs may benefit from developing their cross-cultural psychological capital (CC PsyCap) (including self-efficacy, hope, optimism, and resilience) to build the resources to succeed in cross-cultural interactions.[15,20] Ultimately, increasing cross-cultural skills among healthcare providers could contribute to a strong foundation for caring for patients from minoritized and marginalized backgrounds.[21] DPT and nursing academic faculty who participated in a 6-month-long mentoring program supporting students from minoritized backgrounds demonstrated increases in their CC PsyCap and self-efficacy to engage in dialog about race.[22] It is not known whether these findings can be replicated in the CEE with CIs over a much shorter time period.

The theoretical model which frames this study is the racial/cultural identity development (RCID) model that conceptualizes persons from minoritized backgrounds on a development continuum as they seek to understand themselves and their culture in relation to the dominant culture.[23] During the first stage, conformity, students from minoritized backgrounds face the pressure of assimilation and acculturation and prefer the dominant culture's values to their own. In the resistance and immersion stage, students acknowledge the positive aspects of their culture and reject the dominant culture. During the last stage, integrative awareness, the student appreciates the unique characteristics of both their culture and the dominant culture.[23] The purpose of this study was to investigate whether a multiple mentor model including a CLD learner, their CI, and CLD mentor could develop CI CC PsyCap and mentoring skills to support CLD learners in CEEs.

Methods

This exploratory cohort study, approved by the Mass General Brigham Institutional Review Board (protocol number 2021P003239), included quantitative (survey) data and qualitative (interview) data. Admissions data for second-year DPT students at a graduate school of health sciences in the Northeast were reviewed to identify CLD learners, defined as individuals whose primary language was not English, self-identified as a racial or ethnic minority, or were born outside of the US.[4,5] Students who did not specify race in their application were excluded. CLD learners were recruited before their second full-time CEE, and once a student consented into the study, their

Table 1. Mentoring team demographics

Mentoring team	CLD student	Clinical instructor	CLD mentor
1	Identifies as Black, gender identifies as female.	Identifies as White, gender identifies as male. Practices in an outpatient orthopedic setting.	Identifies as Black, gender identifies as female. Practices in a private practice outpatient setting.
2	Identifies as Asian, born outside of the US, speaks English as a second language, gender identifies as male.	Identifies as White, gender identifies as female. Practices in a home care setting.	Identifies as Asian, gender identifies as male. Practices in a hospital-based outpatient setting.
3	Identifies as White, born outside of the US, gender identifies as female.	Identifies as White, gender identifies as female. Practices in a hospital-based outpatient orthopedic setting.	Identifies as Asian, gender identifies as female, born outside of the US. Practices in a private practice outpatient setting.
4	Identifies as Hispanic, gender identifies as female.	Unknown. CI did not respond to recruitment emails.	Identifies as Latina, gender identifies as female, born outside of the US. Practices in an inpatient rehabilitation setting

Note: Team 4 data were not included in the data analysis. CLD, culturally and linguistically diverse; CI, clinical instructor.

Table 2. Study timeline including professional development program and mentoring intervention

Timeline	Activity
4 weeks before CEE	CLD student recruited, CI and CLD mentor purposefully recruited. First author virtually introduces mentoring team.
2 weeks before the CEE	CIs complete CC PsyCap*
	CIs complete professional development on mentoring CLD learners
	1. Introduction to the five-tiered mentoring model
	2. Engaging students from minoritized backgrounds about race
	3. Frameworks for dealing with biased patients
	4. Leveraging social connection to support CLD learners in CEE
	5. Recognizing microaggressions (Optional)
	CLD mentors receive a recorded video and a written guide to facilitate mentoring sessions.
CEE wks 1–5	Mentoring team meets virtually twice with recommended activities
	E.g. Week 1 Priority: Establishing a social connection
	Discussion topics may include:
	• Background including family and community (emphasizing shared experiences and motivations)
	• Motivation for pursuing a career in the health professions
	• Interests outside of the field of physical therapy
Throughout the CEE	CIs and mentors received support from study staff via email, reflection prompts, and virtual meetings in addition to a usual virtual or in-person check-in visit from the Director of Clinical Education/Academic Coordinator of Clinical Education
Weeks 6–10	Mentoring team meet virtually twice with recommended activities
	Example of discussion prompt Weeks 8–9:
	• Continue discussions on insight into the profession and explore mentee's thoughts about professional growth and development
	• Discuss any strategies and resources needed to promote future success
	• Discuss future of the mentoring relationship once study concludes
Week 11	CIs complete PsyCap Survey
	1:1 interviews with CLD learners, CLD mentors, and CIs scheduled

*CC PsyCap, cross cultural psychological capital; CLD, culturally and linguistically diverse; CEE, clinical education experience; CI, clinical instructor.

CIs were contacted and asked to participate. Mentors (practicing PTs and alumni of the institution who also met the criteria for CLD) were purposefully recruited and matched with a CLD learner and CI (see Table 1). Table 2 outlines the study timeline and intervention.

CIs completed the CC PsyCap Survey electronically before week 1 and following week 10 of the CEE. The CC PsyCap is a 20-item scale that measures psychological resources of four domains, namely efficacy ('*I feel confident in analyzing cross-cultural problems to find a solution*'), hope ('*There are lots of ways around any problem that I face when interacting with individuals from different cultures*'), optimism ('*When facing difficulties in cross-cultural interactions, I usually expect the best*'), and resilience ('*When I interact with individuals from a different culture, I am able to successfully overcome many challenges*'), validated with a calculated Cronbach's alpha of 0.95 for all 20 items. The Cronbach's alpha for each of the four sub-scales is 0.80 (hope), 0.91 (self-efficacy), 0.82 (optimism), and 0.92 (resilience).[24] Descriptive statistics were used to analyze CC PsyCap scores.

Two of the authors (KN and JW) conducted semi-structured one-on-one interviews with all participants (CLD students, CIs, and CLD mentors) following the CEE. An adapted protocol guided the interviews[15,25] and interview data were thematically analyzed[26] (see Table 3). To increase credibility, researchers leveraged data triangulation and an audit trail using multiple data sources: quantitative data, interview data, and researcher field notes. Research materials were kept in a central location to produce an audit trail and allow for study replication.

Results

Four CLD learners consented to the study, and four CLD mentors were recruited. Only three CIs agreed to participate. The fourth CI did not respond to recruitment emails. The fourth CLD learner was assigned a CLD mentor, but CLD learner and mentor data were excluded from the analysis. All participants received a stipend.

CI outcomes

All three CIs demonstrated increased CC PsyCap scores after the CEE (see Table 4). Two themes emerged from interviews with the three CIs (see Fig. 1).

Table 3. Steps for thematic analysis of qualitative data[20]

Step	Activity
1	Interviews conducted with CLD mentees, CIs and CLD mentors. Examples of CLD mentee prompt 'Can you share any challenges that you experienced in the clinical education environment?' and 'How has the intervention shaped feelings of isolation or connectedness to the physical therapy profession?' Example of CI prompts included 'What types of issues are harder to deal with than others in mentoring? Can you describe a time when it was particularly difficult to mentor a student in the clinical environment?' And 'What is the role of race and ethnicity in your mentoring?' Examples of CLD mentor prompts included 'How do you feel connected within the physical therapy profession/community? Alienated?' and 'How would you describe your role as a mentor in this program?'
	Interviews were audio-recorded and data transcribed, deidentified, and checked for accuracy.
2	The first author familiarized themself with the data by reading field notes and interview transcripts multiple times for initial ideas.
3	Initial codes generated in NVivo Qualitative Software (QSR International Pty Ltd). The first author completed first cycle coding, relying on a descriptive coding process, summarizing data chunks into words or short phrases stored in a codebook. An example of a mentee code included 'being defined by your race' while examples of CLD mentor codes included 'connected in the PT community' and 'empowering the student'. The researcher used an inductive coding approach due to the lack of research into the area of multiple mentoring during CEEs.
4	Searching for themes. During the second cycle coding, the codes were grouped into smaller categories (themes) and assigned names. For example, mentee codes 'being defined by your race' and 'cultural disconnect' were grouped in the theme 'CLD learners face added challenges in the classroom and on CEEs' and CLD mentor codes 'microaggressions imply not belonging' and 'exerting mental energy' formed the theme 'PTs from minoritized and marginalized backgrounds have a unique socialization in the profession'
5	Reviewing themes. The data was reviewed with themes in mind to identify any data not captured by the themes.
6	Authors identified compelling quotes from participants to include in the manuscript.

CLD, culturally and linguistically diverse; CEE, clinical education experience.

Table 4. Clinical instructor performance on cross-cultural psychological capital subscales

PsyCap composite score and subscales	T1	T2
Team 1 CI		
CC PsyCap composite score	71.00	77.00
Cross-cultural hope	15.00	15.00
Cross-cultural self-efficacy	31.00	34.00
Cross-cultural optimism	15.00	16.00
Cross-cultural resilience	10.00	12.00
Team 2 CI		
CC PsyCap composite score	91.00	98.00
Cross-cultural hope	16.00	20.00
Cross-cultural self-efficacy	43.00	43.00
Cross-cultural optimism	20.00	20.00
Cross-cultural resilience	12.00	15.00
Team 3 CI		
CC PsyCap composite score	85.00	98.00
Cross-cultural hope	17.00	20.00
Cross-cultural self-efficacy	40.00	43.00
Cross-cultural optimism	16.00	20.00
Cross-cultural resilience	12.00	15.00

Note: T1 denotes 'Time 1' pre-intervention, and T2 denotes 'Time 2' post-intervention. CC PsyCap, cross-cultural psychological capital.

CI Theme 1: Being a CI is challenging and requires specific skills and strategies

CIs were teaching students while meeting increasing productivity demands describing that the cost of being a CI often centers around time. One participant described the unique challenge of working in home care and having students with them while traveling to and from patient homes, '*there was no downtime; we're always talking about what happened, what was going to happen*'. Limited dedicated teaching time was not specific to being a CI to a CLD learner. CIs expressed concerns about the lack of prioritization overall around educating the next generation:

> We have to take time and think about who will replace those who leave the profession. If we're not spending time on those students, and this clinical experience, who is going to?

Prior to the study, CIs individualized their approach based on student year of study but made little changes for CLD learners. Only one CI described encountering blatant racism in the clinical environment during the CEE. However, there was awareness of biased patient behavior, and one CI described the mental exhaustion of being on alert towards patient bias and discrimination towards the student:

It was another layer in terms of the fatigue component, things I was thinking about. Were there things that were said that might have been upsetting or inappropriate in some way? I'm on alert for that at all times.

CIs prioritized creating a safe learning space and room for students to make mistakes. CIs valued active experimentation in clinical teaching that required letting things unfold naturally while student skills developed:

I try to give the students the tools or the guidance to find the information versus flat out giving it to them. I also try to make it clear to students that there are many ways to get to the same destination from a treatment standpoint. If it's a safety issue, yes, I'll get involved but … a lot of times students need to try stuff out and see what works and also fail.

CI Theme 2: A community of practice (CoP) creates a safe space for learning

CIs described the value of time away from patient care to engage in big-picture discussions with the student and CLD mentor where they gained awareness of the barriers CLD learners encounter. The CoP (which included the CLD student, mentor, other CIs, and study team) provided a safe learning space. CIs gained awareness of their privilege as White providers and insight into the daily microaggressions facing CLD mentors and students, '*It wouldn't have occurred to me to ask [the Chinese-American CLD mentor] where he was from. The fact that [he] gets asked that question opened my eyes to what else might be behind that question*'.

CIs also noticed the pressure that CLD learners felt to assimilate into American culture:

[The student] mentioned wanting to be as American as possible. And I almost have a twinge of sadness for him. Well, why? Why do you want to be American?... There's such a push for celebrating diversity, and the fact that he wanted to fit right in, it was a really different perspective ... If you asked me if he can be successful just as he is, I would say yes. Don't change a thing.

Student outcomes

Three students participated in 1:1 interviews and thematic analysis revealed two themes (see Fig. 1).

Student Theme 1: CLD learners face added challenges in the classroom and on CEEs

In addition to the learning opportunities and expected challenges in a DPT program and during CEEs, CLD learners described facing a cultural disconnect with classmates, exacerbated by the COVID-19 pandemic. One participant remarked, '*I have several good friends, but it's difficult to step out of my comfort zone and socialize with others. That's sort of who I am; that's my personality, and partly because of culture*'. At times this cultural disconnect occurred during CEEs. Participants struggled to establish rapport with patients who referenced American culture. CLD learners felt out of place at times but credited the generosity of CIs who took time to get to know their culture, put them at ease, and learn about them as individuals. There was some awareness of the risk of losing aspects of their identity while attempting to assimilate. However, through conversations with the CLD mentor and CI, the student participants appreciated what they had to contribute to the profession and their patients' lives:

I thought, I'm going to blend into American culture and do my best to learn from all my patients. But after meeting [the CLD mentor], my thoughts shifted, because I feel like I can benefit from being part of the Asian population within this community ... If [the patient] can't speak English, I can communicate better than my CI. So instead of trying to fit into American culture, I could still fit into PT, and try to use my privilege to benefit those in the Asian community.

Student Theme 2: Mentoring takes time but develops relationships and builds confidence

CLD learners and mentors shared experiences as persons from minoritized backgrounds, building student confidence as they envisioned a future for themselves. The mentoring team conversations made space for discussions about healthcare, careers, and the profession. Regular meetings with the mentors kept CLD learners on track to meet professional goals. Setting aside time for these conversations allowed the CI to delve deeper into the cultural aspects of the student's life. Mentors helped to ease the power dynamic between the student and CI and fostered the student-CI relationship:

I think it definitely strengthened my sense of belonging, and comfort within the clinical space. I think it helped me to bond a bit earlier with my CI … so I didn't feel out of place during the clinical.

Learners described developing their communication skills through the mentorship program and felt better prepared to have conversations regarding their racial background. One learner described a chart review that revealed a patient history of racial bias. Meeting with the CI and CLD mentor before the patient encounter allowed the student and CI to be better prepared:

I had to wrestle a lot with, 'Will this person respond well to me being there? Am I able to treat this person feeling the way I do right now?' But my CI and I
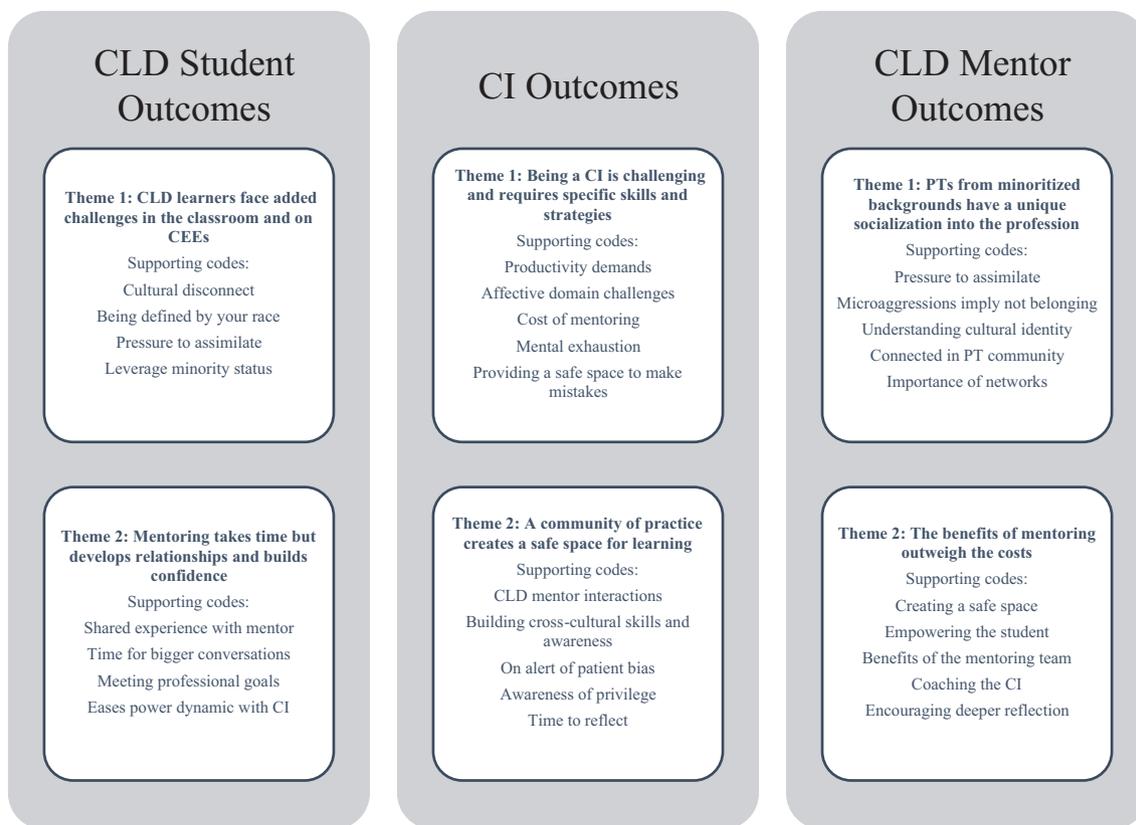
Fig. 1. Themes and Supporting Codes. CLD, culturally and linguistically diverse; CEE, clinical education experience; CI, clinical instructor; PTs, physical therapists.

approached it together. And that helped me feel more confident to continue.

The learner also had the opportunity to consider their rights around working with biased patients. Mentoring facilitated proactive planning between the student and CI and bolstered the student's confidence that they would be able to handle the patient encounter with the CI's support. While the learners understood that it would not always be possible to prepare for challenging interpersonal encounters, rehearsed responses to difficult patient questions helped bolster confidence.

CLD mentor outcomes
Three CLD mentors participated in 1:1 interviews and analysis revealed two themes (see Fig. 1).

Theme 1: PTs from minoritized backgrounds have a unique socialization in the profession
The mentors recalled a lack of clinician and patient racial and ethnic diversity during CEEs. There was added pressure and exhaustion during a stressful period in their lives with the constant need to prove themselves, '*You feel that you have to work so hard to prove yourself and your identity*'. They described being subjected to microaggressions from patients and, at times, CIs, and felt ill-equipped to deal with difficult conversations:

> I had well-intentioned, but frankly, quite insensitive questions directed towards me. It was an older, 95% White population there. I got questions like, 'Oh, what are you? Where are you from?' and trying to guess my ethnicity just right off the bat. So, I found myself in an interesting place because we didn't receive any training on this. I wasn't prepared.

Mentors also faced pressure to assimilate, '*My first five years, I did struggle a lot. I was still trying to gel, settle in, trying to do what other people did. I was trying to nullify diversity, and I was trying to be somebody who I was not*'. They observed other students from minoritized backgrounds in their classrooms experience the same pressure '*there was pressure to assimilate and to just fit in, almost like the feeling of keeping your head above water, whatever it takes*'. The mentors described still being asked insensitive questions about their background by colleagues now but were better prepared to engage in dialog and protect their mental energy.

The mentors described currently holding leadership positions and having close ties in the PT community.

However, it took time and intention to establish networks and a commitment to serving minoritized communities:

> As I transition into entrepreneurship and have my own practice, my goal is to work with people of color and minoritized backgrounds, who don't typically get to use my services or see someone who looks like me when they go to the PT clinic. Now things are shifting, and I'm really excited about that change.

Mentor Theme 2: The benefits of mentoring outweigh the costs
Mentoring took time and emotional energy; however, mentors described it as rejuvenating. Some of the costs were mitigated by the structure of the study with guided interactions and set mentoring times. The mentors valued opportunities to share lessons learned with the mentees and talk about their early career challenges with the mentoring team:

> My lived experience, I can share that with students who are going through that themselves. And give them palpable affirmation that they're not alone, that what they're experiencing is valid. It's not new. They just need to find the right people who understand where they're coming from, and can help them guide, reflect, and process events.

The mentors had benefited from many mentors and appreciated the value of a multiple-mentor model. They also spoke about the importance for the CLD learner to witness both their White CI and CLD mentor experience career success:

> The CI and I were very different people, especially when it comes to physical appearance. I think it was cool for [the student] to see that we had similar things to say … you'll figure things out because of who you are, and you've been trained for this. Instilling that confidence is what I hope this person walks away with. The confidence of there's going to be many different routes that I go to do this, but I have not only seen someone who looks like me do this, someone else who doesn't look like me, and they had different routes, but they're both doing great.

The CLD mentors supported the students and contributed to CI development. CIs had relayed completing mandatory institutional training on race and racism but shared that their learning was solidified once skills were practiced with the CLD student and mentor. CIs reflected on prior experiences with learners from minoritized and marginalized groups and what they might do differently, including being proactive in discussing race and racism on CEEs. The mentors described pushing the CIs to think

about their assumptions and learned behaviors. One of the mentors remarked:

> The CI said, 'I think this is a great program because not only is it helping my relationship with a student, but I think it will strengthen my relationship with patients from culturally diverse backgrounds.'

Discussion

This is the first study to explore the development of CC PsyCap among CIs through the use of a CoP model. CIs expressed challenges with mentoring all students (not just CLD learners) due to the increased productivity demands in the clinical environment. However, the CoP provided a safe space for the CIs to make mistakes and learn. CIs gained insight into the challenges faced by CLD learners, reflected on past experiences, and developed skills to inform future cross-cultural interactions. Academic DPT faculty who completed training on cross-cultural mentoring and formed part of an in-person mentoring team with a first-year CLD DPT student and a second-year CLD DPT peer mentor, showed a significant increase in their CC PsyCap compared to faculty in a comparison group.[15] When this program was replicated in the virtual environment with DPT and nursing faculty, all members of the mentoring team once again made gains.[22] Reichard et al.[20] conducted cross-cultural training for participants in the US and South Africa and found a significant increase in CC PsyCap and cultural intelligence post-training. In this study, all three CIs gained CC PsyCap over the course of the study reinforcing that this resource can be developed by sharing knowledge and offering the opportunity for skill development.

Consistent with existing research,[5–9,22] CLD learners expressed challenges in the CEE, including encountering biased patients and feeling pressure to assimilate into American culture. CLD mentors experienced similar challenges early in their careers. The RCID model highlights that, over time, students from minoritized backgrounds have increasing respect for historically marginalized values, ultimately appreciating both their own and the majority culture.[23] We observed this development through interactions with the CLD mentors. The CLD learners appreciated how being from a minoritized background could be an asset to the profession. Presently, 42.2% of the US population identify as a racial/ethnic minority, and 8% of the population report speaking English with a proficiency of less than 'very well'.[27] Effective communication between patient and provider is critical for safe, patient-centered healthcare, and language and cultural barriers between patients and providers can lead to poorer health outcomes.[28,29] CLD learners with unique linguistic skills[30] could serve as an asset to the healthcare profession,

and we noted this among the CLD mentors who expressed commitment to serving minoritized students and patient communities. Consistent with prior studies on the multiple mentor model, we saw that all mentoring team members made gains.[15,22] Though mentoring takes time and emotional investment, CLD mentors described it as fulfilling and key to producing future CLD clinicians and mentors.

The small sample of students, CIs, and mentors limits the generalizability of findings, and this study's results should be interpreted as exploratory. To aid recruitment and minimize the cultural taxation on CLD participants, all participants received a stipend which has the potential to affect the mentoring relationship and influence study findings. We do not know whether the CI gains in CC PsyCap are sustained over time, warranting further investigation. One CI did not respond to recruitment emails after their student had self-selected in the program and this could have implications for the student-CI relationship. To minimize the negative effects, the CLD learner was matched with a mentor who provided additional support during the CEE.

Conclusion

CIs play an important role in mentoring CLD learners on CEEs. This small, exploratory study highlighted that CI CC PsyCap can be developed through the formation of a CoP, through mentoring and coaching from CLD mentors, ultimately increasing support for CLD learners on CEEs.

Conflict of interest and funding

Ethical approval

Ethical approval was granted from the MGB Human Research Committee Institutional Review Board (January 14, 2022, 2021P003239).

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