

Self-Efficacy of PE Teachers to Work with Children with Disabilities

SUMMARY KEYWORDS

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SPEAKERS

Scott McNamara

Scott McNamara 00:07

Hello, this is Scott McNamara with What's New in adaptive physical education. And I am a young and aspiring PhD candidate from Old Dominion University and Lindsay Nolan, who is going to be here talking about her research expertise and experience around self efficacy and teaching students with disabilities or disabled students in PE settings. Welcome, Lindsay.

00:35

Hi, Scott, thank you for having me today. I'm excited to be here.

Scott McNamara 00:39

I'm excited to have you here. I got to know Lindsay. Really well, we got to know each other really well, in New Zealand, I had a really nice time hanging out with you and your family and such. And so super happy to have you here. How was what was your favorite experience New Zealand for the Asaka conference, before we get into who you are and your research?

00:59

Oh, that's a tough one to narrow it down to just one experience. Because I think just being able to travel across the world and meet people that I never would have thought that I would have the chance to have a conversation with and learn from and see how things are going in New Zealand and the type of research that's going on there. But I will say just, I think the whole conference was so well organized, and I learned so much. And I just enjoyed the time that we had. And in getting to know you as well as Wes and Michael and

Scott McNamara 01:41

nonconference, though, what was your favorite part of New Zealand? I went saw penguins in the wild. That was in prime conference. Yeah,

01:48

I actually had the amazing experience of traveling, like to two or three different cities after the conference with my grandmother and my boyfriend. And so I think just that experience of traveling a whole nother country for multiple days, and I'm spending that time with my family was just amazing.

Scott McNamara 02:11

All right, so let's talk a little bit about Lindsey. And so, Lindsey, you are at Old Dominion University, you are in your final, hopefully final year of your PhD. And you have been a newer teacher prior to that. Can you talk a little bit about yourself and how you became interested in the field of adaptive physical education?

02:33

Yeah, so when I was in my undergrad I was working on I was working in physical education, teacher education. And during my student teaching experience, Dr. Block from the University of Virginia actually came to Bradford where I was attending at the time, and spoke with us about Adapted Physical Education, which was actually a concept that I really didn't even know existed. In Virginia, we don't require the certification. So in a lot of undergrad programs, it's not talked about. So when Dr. Block came and spoke to my class and gave us information, I went into my student teaching experience with a whole new outlook on what PE meant for disabled students and what it could look like for them. And I didn't like what I was seeing from the student teachers that I was working with, and the school systems that I was in. So I decided to get my master's and go to UVA to work with Dr. Block. And get that experience in adaptive physical education. During that time, I spent time as an adaptive physical educator, which was very, it was a unique experience within Charlottesville, where I got to travel from school systems to school systems and work with a variety of students within the county. And I learned so much from Dr. Block and my experiences there. COVID hit, unfortunately, while I was in the heat of my master's program, so it kind of got moved online. I ended up getting a PE job and I just taught I went back to general physical education. And I taught PE and during that time, I just was not. I wasn't satisfied with what I was experiencing at my first school and the support from administration. It just, I just was not happy with where I was. And luckily Dr. Block sent me an email with Dr. Hagel, Dr. Hagel, cc to the email, talking about the amazing OSEP scholar opportunity to Work on getting my PhD and adapted physical education. And so I immediately applied and one year later, I ended up at Old Dominion working on my PhD. And I've enjoyed it ever since. So

Scott McNamara 05:14

you have like a nice little cohort there a lot of, you know, nice other doctoral students that you're in there to.

05:22

Definitely, it was two other two other students and I, we all started at the same time. And we are all on track together to be graduating this year, too. And it's just been nice working together and taking those steps to finish this, this journey that we're on.

Scott McNamara 05:45

So your research, which is part of your journey, is focused largely on self efficacy theory. And I believe that's been dura Albert pander, I believe you just passed away, right? And you're focused on the study

of competence of PE teachers to teach disabled children. So can you talk a little bit about this broad self efficacy theory? I, you know, I, I find personally and maybe like, some listeners are going to have different levels of understanding of it. I think it's a common, somewhat common known, at least on a very surface level that it's basically like, I think of it as self confidence often, but I looked at your stuff, it looks like you're getting a little bit more in depth on that. And such or so can you talk a little bit about the theory, and why it's important to understand PE teachers competence around teaching disabled children.

06:43

Yeah, so when looking at self efficacy, it is commonly known as one's confidence in their abilities to carry out a given task. However, the just looking at it from one's confidence level has left out a lot of information and understanding of what informs PE teachers self efficacy to teach students with disabilities within a variety of different settings. So when looking at the theory of self efficacy Bandura proposed that different these four different sources of self efficacy in form one's beliefs. And I know this is a very common thing. So I won't go too in depth on the four sources, but you know, you have your mastery experiences, which are the interpreted results of one's previous experience. And you have your vicarious experience, which refers to the information that one gains from observing others. And social persuasions is the feedback that you get from other people in the environment or related to your capabilities about carrying out the task at hand. And then your physiological responses refers to any emotions, feelings, and your affective states during performance. So together, these four sources of self efficacy, are said to construct one's beliefs in their capabilities to carry out a given task. And what's important for PE teachers is the experiences that they've had leading up to working in the school systems leading up to having disabled students in their classes all inform how they approach the task. Bandura proposed or part of this self efficacy theory is having a higher self efficacy, reversed or informed one's ability, so they are more likely to carry out a task. In this case, a PE teacher is more likely to provide accommodations or modifications for disabled students in integrated PE classes. So looking at self efficacy of PE teachers in service pre service has been a very heavy, heavily researched topic, I'd say within the past decade or so. And it is moving. I think there's a lot of room for growth still within this field.

Scott McNamara 09:34

A lot of I want to jump in, because I like those dimensions that you just said. And I know that's like, whatever, but we often don't talk about it in that depth. And we kind of talk about it as broad thing, which I think is somewhat what we're getting to here and that there's a lot of these dimensions that we haven't maybe looked at too closely in this world. Before we get maybe into because we're also going to touch on a systematic review that you did Did that might kind of bring some of that what's missing in the literature here? I want to touch on those dimensions. So you think they're important to highlight. So you know, I heard by curious, social persuasion, and I just wouldn't have to go through each one of them. But I just would like, like, if you could like, is there an example that you could provide in in, like, what is like what would be an example of a vicarious experience specific to PE and teaching disabled students?

10:31

Right. So when PE teachers don't are unable to evaluate their own capabilities, or when prior experience is limited, so when they don't have any mastery experiences of their own, in teaching disabled students in integrated classes, then the information that they've gained from observing other PE teachers, teach disabled students in this context, provides information related to their capabilities. And oftentimes, they're learning problem solving strategies from these experiences that they can later utilize when they are then teaching disabled students themselves.

Scott McNamara 11:20

And then those same ones, what kind of lead to that level of mastery and competence like social persuasion, is that as long as the mastery experiences,

11:31

know when that's a great question, and within the literature, a lot of the times everyone just says mastery experiences the most influential source. And that makes sense because that it allows authentic experiences for one to evaluate their capabilities as well as the task at hand. But if you look at research that has dug into the sources of self efficacy, social persuasion has been referred to as a less influential source. But a lot of the times when you look at self efficacy from outside of PE teaching, just teacher self efficacy in general, most mastery experiences have been kind of judged by the social persuasions they've received in that environment. So PE teachers are judging the success of their teaching based off of the social persuasions that they're receiving from their students or other colleagues within the classroom. So it's, you can say one is stronger than the other, but in all reality, it's only through cognitively processing all four sources of information, do they shape their teacher or teacher self efficacy beliefs? They're all

Scott McNamara 12:51

intersecting all the time? Yeah, right. One other thing, before we get into these challenges, are things that you found in your systematic review. One thing that I'm aware of, and again, I think this is like, somewhat common, like information is like the idea that sometimes one self efficacy can be really high and abilities can be really low at novice lit areas, and then we can see the opposite trend at like highly experienced levels. Is that something that we've also seen are and again, it's we don't know. But like, can you talk briefly about that effect. And then if we've seen that are all in the PE related literature?

13:32

Yeah, and that's an interesting topic, because we have seen pre service teachers coming out of their programs with the highly self efficacious towards teaching disabled students. And once they have had a year of teaching, so after their first year of teaching, their self efficacy has significantly decreased because maybe perhaps this isn't hasn't been explored. But actually, having that authentic experience of what it is like to teach in a real school setting in a real integrated class has changed their efficacy towards teaching them in the future. Whereas coming out of their pre service programs, where they've had some training experiences that might not have reflected the actual environment that they will be teaching them in in the future, has made them feel like they have the capabilities to do it. Prior to actually doing it.

Scott McNamara 14:46

Alright, let's jump into this systematic review. Yeah, systematic review with your advisor Dr. Justin Hagel. Even though he says he doesn't listen to podcasts, and you've been on this podcast about seven times. Um, And you all published in Adapted Physical Activity quarterly, called the self efficacy of physical education teachers to teach students with disabilities a systematic review of the literature. So you basically looked at a big number of studies and such over the last 20 years and the PE and disability areas. And I just want to I want to understand generally, like trends that you found in the literature, and then I think something that you're maybe also getting to is maybe potential gaps in the literature.

15:35

Okay. Yeah, I so I explored, I think there was 24 studies included in this review, and it encompasses pretty much all of the literature in this field because it wasn't until 2005, where self efficacy was really applied to PE teachers towards teaching disabled students. And since then, a couple of scales have been created. In 2010. Dr. Talia Farrow created her scale and in 2013, you have Dr blocks scale, measuring both of which are measuring PE teachers self efficacy to teach students with disabilities in a integrated class. Some trends within that are I would say, all of the literature for one is quantitative, there has not been a qualitative study that has utilized the theory of self efficacy to inform their study within PE teachers towards teaching students with disabilities. So, that is a significant gap with understanding what actually what sources inform their self efficacy. And within this literature, most of it has focused on pre service PE teachers towards teaching disabled students. And they have utilized interventions within practicum situations to explore their self efficacy, and utilized the scales that Dr. Block and Dr. Talley Pharaoh created. Now, one thing that is missing or just absent from the two scales within this context are an actual measurement of the four sources of self efficacy information. Now, I will say Dr. Talia Pharaoh's original creation, so the physical educators self efficacy to teach students with disabilities. Autism scale, is originally included sub skills on the four sources of self efficacy. However, they weren't included in the initial validation of the research. So no studies have used them prior. Well, I shouldn't say no studies, one study has used them, one single study has used them and they did find a significant relationship between the four sources of self efficacy and PE, teacher self efficacy beliefs. So this supports the assertion that we should be including measures of the four sources of self efficacy within literature when we're exploring

Scott McNamara 18:38

so jumping in on that saw, I it sounds like, maybe we're not looking at that intertwining we're kind of maybe focusing on that mastery experiences, what we've been saying. And again, not my area of expertise, or what the topic but I believe that's kind of what we're seeing is that most of its focused or on this really broad concept of self efficacy, versus getting into like, these intersecting things that are just as maybe, maybe not just as important, but quite important to that. I also want to like, generally, your systematic review, you know, review the literature, our what's our confidence level, and then our because that dictates our ability, what like what generally are the findings on that?

19:28

PE teachers generally have a high self efficacy to teach students with disabilities within the context of integrate the classes. Now, the majority of that is pre service. So it's not really reflecting what it looks like once they enter the actual in service teaching so um, I don't know, we there's still a need for

exploring their overall sense of self efficacy beliefs and how they change over time with entering the field.

Scott McNamara 20:11

Well, there's a decent chance that that, you know, obviously, first off, it sounds like you have to get into the sources, so to truly understand their self efficacy levels, and then secondly, it sounds like with a focus on pre service, we might have a false sense of their competence levels, which again, shouldn't be dictating their ability levels. Yeah. Okay. So, one last question on this aspect of the dimensions is, like, we needed to look at all these aspects within our instruments that maybe we're not doing right now. And I just want to understand like, like, in your own words, like, why is it essential that we look at all these dimensions versus kind of more of this broad view of self advocacy.

21:04

So when you are when researchers are creating interventions, or when we're trying to create training for PE teachers, to enhance their self efficacy towards teaching disabled students. And this theory has these four constructs that have been shown to influence self efficacy beliefs. We are and we're creating interventions that are aimed to hit to aim to taps in on those four sources or aim to explore or provide mastery experiences or provide vicarious experiences. If we are saying at the end of their intervention, that PE teacher self efficacy improved from pre to post test, and their intervention targeted, however many sources, if we're not including an actual measurement of the four sources, then how what information is there, to, to base, the this this claim on this caught this causal claim on because we're not actually measuring? If they experienced any successful experiences, or if the experiences of watching others actually informed their self efficacy beliefs?

Scott McNamara 22:33

Yeah, so I can definitely see how that gets more in the weeds of like, I think there's, I've seen a lot of stuff with like contact theory, you're listening podcasts from two or three years ago. But like, there's like, and that's often towards, like, self efficacy and or attitudes, but like, without knowing exactly what's happening, because I think that's the problem with a contact area, which generally is more in depth, go back, listen to the podcast, but people often think of it as simply being around disabled persons. And that's not really it's a much more in depth about ownership and equal status and planning and such. But like, I think that getting in the weeds like this can potentially allow you to be much more refined in why are the self efficacy, you know, trends occurring, and then we can craft those interventions. I know, I'm just repeating what you said, but it helps me What recommendations do you got to see as far as moving this area of research further? And how do you see yourself fitting into that? Like, what research? Are you then looking to do moving forward to look at all these dimensionalities of self efficacy?

23:50

Well, so I'm actually excited to share that I have I did a qualitative inquiry on PE teacher self efficacy. And it has recently been accepted to a Adapted Physical Activity quarterly. So hopefully, that should be out soon. And so within this qualitative study, I explored the different constructs of self efficacy theory through interviewing 16 PE teachers around the United States, so I got a pretty good sample there and there, the responses formed or the data really helped to construct some unique themes that I think

present some new understandings toward what actually shapes PE teacher self efficacy beliefs. And so, within this within this qualitative study, I found a A I found that PT teachers do rely on mastery experiences, they do mention their social persuasions, they do mentioned vicarious and physiological state. And these are very influential in their beliefs towards teaching disabled students. However, there were two contextual factors that were mentioned consistently, that P teachers that their self efficacy beliefs are contingent on these contextual factors and how they're four sources of information, influence their self efficacy is highly informed, based off of these contextual factors. So, two things that I found were that class sizes consistently, PE teachers consistently mentioned, large class sizes, which has been a thing within literature, we know that PE has a very large ratio of student to teacher within the classroom. And so this has led to, oftentimes 5050 Kids in one gymnasium one teacher, no one else. So the PE teachers within these class sizes, are stressing the need for hands on support. So this was the other contextual factor that that came up their self efficacy beliefs were contingent on having another personnel working alongside the disabled student or working alongside any type of student that needed extra support during class time. So the while their mastery experiences while providing PE teachers with hands on experiences, is influential, or is provides them with great experience that informs their efficacy. In all reality, if we're not providing them with these experiences within the actual setting that they will be teaching them. And if we're not providing pre service teachers, with experiences in an integrated classroom while trying to teach students with disabilities, then then their self their mastery experiences are not as influential once they enter the real world.

Scott McNamara 27:33

It seems like getting to these big factors of like, What the What like, why are they developing their self efficacy in this way is going to be really big. Okay, know what I want to say, getting back to the large class sizes. So that seems to negative, like, does that negatively impact their self efficacy? And then in their previous experience, is that and so if they were in a really loud, large class size in previous years, and are no longer in that, will that like, those previous experiences and large class sizes? kind of dictate it? Or is it kind of the current group that they're working with? Does that makes sense?

28:20

So, um, if I understand correctly, you're asking their previous experiences with working with?

Scott McNamara 28:28

Like, is it is it kind of like, past experiences that were maybe disorganized and things or like that? What would that like dictating their current feelings of self efficacy?

28:44

I, you know, within this paper, PE teachers, I had a large range of years of teaching experience and teachers worked at multiple different school systems and experience different settings and different class sizes. And you can, you can hear or you can see within their responses, how they they've had experiences with large class sizes and no support. And when that happens, they do not feel confident that they can teach a student with a disability, but they've had experiences in which they've had the support that they need. And in those experiences, or in those situations, they feel like they're capable to teach that student within that setting.

Scott McNamara 29:37

Yeah, and that's thank you for getting that from what I was trying to ask because that was not coming out super clear. So while I'm thinking about this, something that seems interesting to me is that oftentimes, college level practicums are much more organized, or, or just even more condensed, more in know that they're making lesson plans, they're working in small groups, they might be Yeah. And I'm wondering, in a way, if those are really, really organized, you know, things, which sometimes happens in the schools as well. But oftentimes, that's a lot a little bit more chaotic for a variety of reasons, especially when you're like a new person in your hand at something that might be you know, nobody's giving you the ropes on, I'm wondering if that's potentially eating also to this false sense of self efficacy levels at the pre service all because most of their experiences, if they're coming from the practical mind, much more prescribed and organized, and

30:47

they're granted, structured, it's structured in that practicum setting, so they know what to expect when going into it. And so when, when you are a PE teacher, you don't know what to expect, every day is different, every day is different. So I think that with these practicum experiences that are happening, you know, during class time, and students are getting credit, because they're participating in it, it's not giving them that authentic experience of what it's like when it's your responsibility when these students are your responsibility. And this is your job. And we want all students to be successful within the within the PE environment. So I think that that's a battle. And I mean, I know from my personal like, outside of research, my personal experiences stepping into being a PE teacher, for the first time, that's my administration, I was handed the self contained autistic class in my gen ed, sixth grade class. And there were sixth, seventh and eighth grade students in this autistic class. And they were I asked for support in how I can help or reach each age level within my sixth grade class. And my administrator says, you have your master's in this, you should know what to do. And so that was the extent of the support I got so

Scott McNamara 32:23

yes, quite interesting. That saying something about your social persuasion, would that be like kind of influenced

32:32

my social persuasion? Like I didn't have any, any feedback? I wasn't given any? Nothing. So I immediately felt like, what am I going to do? I didn't, I had no clue. My self efficacy definitely went down in that situation.

Scott McNamara 32:50

So it sounds to me to like self efficacy that a man is very dictated, like, the current context as well, like, who am I teaching, what setting what resources what support, so even potentially, a true master teacher and can go out but the experience is too chaotic or unorganized, their self efficacy is going to be really low, no matter, just like every, like any, you know, like a pre service teachers like that.

33:24

Right? Right. And speaking of the contextual factors, that was, that's another thing that within this line of literature has only been explored within integrated context. So PE teachers, self efficacy to teach disabled students has, we don't know what it looks like within other settings outside of integrated PE. So going for future directions continuing on that conversation that we were having, that is another area of exploration that I am leaning towards, is to sort of examine PE teachers self efficacy within integrated context is and within other instructional placements.

Scott McNamara 34:19

I'm looking forward to your future success. I really liked getting to know you this last, you know, I know you don't know anything about it. years now, but I really got to know you this last few months. And I am really excited to see your future success. I believe you're in your dissertation right now. I am, like, also want to touch on what you are planning to do with that. And then yeah, yeah.

34:44

So actually, it leads right into what I was just speaking of my dissertation is actually I'm working to construct a new scale to measure PE teacher self-efficacy to teach disabled students across different instructional placements. And within this scale, I'm looking to include a measurement of the four sources of self efficacy to expand literature within both of those areas. And through this project and the creation of this scale, the intent or the hope is that the findings from it will be used to problematize the usefulness of the assertions of integrated physical education. So

Scott McNamara 35:46

that is a very exciting dissertation. And, and that's why I wanted to also highlight your work because I think it's really cool that you're getting so in depth on this theory, because something that's also been highlighted again, probably years ago, now this podcast, I'm being called the OG and podcast well now so I know, in this in like, I'll refer to podcasts from six years ago all the time, but, um, like we've talked a few times about the pancake effects for that in our field that we often have, we cover a lot of things but maybe not making a tower effect of getting really in depth on on different items within there. And so to me what you're doing some really cool because it sounds like you're getting going to be getting really in depth on something so you can really understand the minutiae, and nuance that kind of can really propel our field forward in a meaningful way. Lindsay, thank you so much for coming on the podcast and sharing your your background and your research and your future endeavors.

36:49

Yes, thank you for having me, Scott. I've enjoyed our conversation this morning. And I have enjoyed getting to know you as well over the past couple of years. So again, thanks