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Perceived Self-Determination Growth During an International Expedition for Adolescents With and Without Disabilities

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Abstract

Two factors that positively influence success in school and in post-school settings are self-determination and social programs such as expeditions for students with and without disabilities. This mixed methods study examined the benefits of a two-week international expedition to Nepal for adolescents (ages 14-18) with and without disabilities from the United States. The researchers measured self-determination in student participants utilizing the Self-Determination Inventory: Student Report (Shogren et al., 2020) as a pre/post-program measure and the No Barriers USA Program Evaluation (Duerden et al., 2016) as post-program measure. Twelve adolescents and four adult leaders who participated in the international expedition were interviewed to determine their perceptions of the benefits for students. The self-determination scores of student participants significantly increased ($p = .007$) after participation in the two-week expedition. Four major themes emerged from the data: disability and identity, self-determination growth, accessing supports, and sense of purpose. Using a mixed methods approach, we compared and integrated findings that support previous studies indicating that social programs increase self-determination skills. Implications for practice and future research are discussed.

Key Words: expedition, self-determination, social programs, goal setting, goal attainment, international education, problem solving, self-awareness

PERCEIVED SELF-DETERMINATION GROWTH DURING AN INTERNATIONAL EXPEDITION FOR ADOLESCENTS WITH AND WITHOUT DISABILITIES

The correlation between self-determination and positive adult outcomes is well documented. A seminal study on evidence-based practices (EBPs) in secondary transition conducted by Test and colleagues (2009) identified teaching self-determination skills as an EBP. In a study of the relationships between self-determination and post-school outcomes for youth with disabilities, Shogren and colleagues (2015b) found that young adults with higher self-determination skills at the end of high school had higher rates of community involvement, employment with benefits, and independent living. Extending the research on in-school and post-school predictors of success for youth with disabilities, extensive analyses of the National Longitudinal Transition Study- 2 (NLTS2) data supported the findings that self-determination skills contribute to educational attainment and employment (Mazzotti et al., 2016). As awareness of self-determination has grown in the field of education, interventions have evolved from special education settings to inclusive settings in which all students may benefit (Shogren et al., 2016). Self-determination is defined as the "dispositional characteristic manifested as acting as the causal agent in one's life" (Shogren et al., 2015a, p. 258). *The Arc's Self-Determination Scale: Procedural Guidelines* (Wehmeyer, 1995) outlines the components of self-determination as: choice making, decision making, problem solving, goal setting, goal attainment, self-

monitoring, self-advocacy, internal locus of control, self-awareness and self-knowledge.

Self-determination theory (SDT; Deci & Ryan, 1985) was developed under the study of motivation to understand the *why* of behavior. SDT highlights the importance of resources for personality development and self-regulation and posits that innate psychological needs are the basis for self-motivation. Furthermore, Ryan and Deci (2000) examined SDT and its facilitation of intrinsic motivation, social development, and well-being. They postulated that the psychological needs of competence, autonomy, and relatedness are positively correlated with motivation and well-being. Causal agency theory (Shogren et al., 2015a) emphasizes agentic behavior as central to self-determination through the identification of three essential characteristics of self-determination (i.e., volitional action, agentic action, and action-control beliefs). The model developed by Shogren and colleagues (2015a) synthesizes the three essential characteristics of self-determination through human agency directed by psychological and biological needs. Practitioner-friendly score reports produced by the measure utilized in this study, the *Self-Determination Inventory: Student Report* (SDI:SR; Shogren et al., 2020) describe the three essential characteristics as *decide, act, and believe*. *Decide* (volitional action) is knowing one's own strengths and needs and setting self-chosen goals. *Act* (agentic action) refers to problem solving skills needed to take action toward goals. *Believe* (action-control beliefs) is one's own feelings of empowerment and belief in one's ability to reach goals. Although students with disabilities typically have lower self-determination skills compared with peers without disabilities (Shogren et al., 2014), all individuals can benefit from self-determination skills.

EXPEDITIONS FOR STUDENTS

Although international expeditions for students in general education are not typically seen within the context of self-determination, research has shown that expeditions positively impact areas related to self-determination including mental resilience, willingness to undertake challenges, understanding of oneself (Beames, 2005), reflective thought (Rea, 2006), emotional capital (Rothwell & Charleston, 2013), and confidence (Asfeldt & Hvenegaard, 2014). Wilderness educational expeditions result in long-lasting learning that impacts students personally and professionally (Asfeldt & Hvenegaard, 2014). Despite a myriad of studies on the benefits of expeditions with typically developing students, there have been no studies examining the perceptions of individuals who participated in expeditions for students with disabilities. Although some researchers examined the experiences of adults with disabilities on expeditions (e.g., adults with multiple sclerosis who completed an expedition to Machu Picchu; Calsius et al., 2015), there are no studies on the experiences of children and youth with disabilities during expeditions when programming is defined by the term, *expedition*.

As inclusive expeditions for students have also not been previously studied, we conducted a mixed methods study to probe participant perceptions about a two-week expedition in Nepal for students with and without disabilities. The following research questions were examined:

1. How do teenagers and adult leaders with and without disabilities perceive the benefits of their participation in an international expedition?
2. Are the self-determination scores of teenagers with and without disabilities improved after participation in an international expedition as measured by the SDI:SR?

METHOD

Procedure

This study examined how adolescents and adults with and without disabilities perceived the benefits of a two-week international expedition to Nepal. Due to the small sample size, a mixed method design was utilized for data triangulation and to gain a deeper understanding of student growth as it related to the construct of self-determination. The expedition was organized by a non-profit organization called, *No Barriers USA*, and was open to adolescents in the United States ages 15-19 to apply. All individuals who applied to participate in the expedition and met the criteria were accepted. The expedition was led by four *No Barriers USA* ambassadors who have disabilities including blindness, deafblindness, and deafness and are leaders in their respective fields. Two *No Barriers USA* expedition leaders, one of whom is the first author of this study, also led the program and did not participate in the study. The organization utilizes a three-phase model, described below, which includes preparation over several months before the expedition, the expedition itself, and post-expedition follow-up. During the preparatory phase, consent for inclusion in this study was gained from all expedition participants. All participants and leaders provided consent, parental consent, and assent when applicable. The participants, non-profit organization, expedition, and data collection and analysis are described below.

Non-Profit Organization: *No Barriers USA*

No Barriers Youth is a branch of *No Barriers USA* that offers programs for students, the type of program that was utilized in this study. The mission of *No Barriers USA* is "to fully unleash the potential of the human spirit" (No Barriers USA, 2020). The *Three-Phase Structure* is used in all expedition programs to maximize student engagement. The phases include:

Phase 1: Thoughtful Preparation

During the several months prior to the expedition, students prepare by learning about the *No Barriers Life* curriculum, which can be accessed at https://www.nobarriersyouth.org/no-barriers-life/. The first phase aims to spark thought in participants about the impact they want to have on the world, connect participants through conference phone calls, and prepare students for the logistics of international travel.

Phase 2: Transformative Expeditions

Students apply the concepts they learned during phase one and participate in an expedition as a group. Students explore, discover, learn and grow, while honing their interests and passions to consider how they give their best back to the world. Participants step out of their comfort zone, persevere through challenges, and see the *No Barriers Life Elements* in action in themselves and the world around them.

Phase 3: Meaningful Return

Phase three asks participants to take what impacted them during the expedition and translate it into meaningful action at home. Examples of phase three projects include students giving presentations in their home communities about their experiences or starting a fund raiser to support a school they visited during their expedition. Engagement in phase three typically spans several months after the expedition.

Participants

The participants of the expedition and this study included twelve adolescents with and without disabilities and four adult leaders with disabilities. The participants were ages 14-18 (mean = 16.3). Although the program was not promoted for students who were under age 15, one participant who was age 14 year, 9 months participated. Using disability as defined by the *Individuals with Disabilities Education Act* (IDEA, 2004), five students did not have disabilities, but two of those five students described themselves as having anxiety (not an anxiety disorder). Seven of the students had various disabilities including traumatic brain injury, depressive disorder (under the disability category of emotional disturbance), profound bilateral hearing loss, orthopedic impairment including arthrogryposis, spastic diplegic cerebral palsy, and hydrocephalus, total blindness, and attention-deficit/hyperactivity disorder (ADHD). The students lived in various locations across the United States, representing nine different states and four major regions including the northeast, southeast, midwest, and west. The participants were from urban (45.5%), small urban/suburban (27.3%), rural fringe/10 miles from an urban area (18.2%), and rural (9.1%) regions. The group included seven male-identifying students and five female-identifying students. Eleven of the students were not Hispanic or Latinx and one student was Hispanic or Latinx. Two students were Asian. The adult participants only completed interviews, while the students completed interviews and surveys that were normed for adolescents.

Expedition

The *No Barriers Youth* expedition was a 15-day trip from the United States to Nepal that included visiting a school for children who are deaf or hard of hearing (DHH), cultural visits, trekking, horseback riding, and a visit at a youth hostel. On the first day of the expedition, the group flew from their home states across the country and met at the Los Angeles, California airport. Once the group was together, they flew to Kathmandu, Nepal. They travelled for two days to get to Nepal, had 12 days in Nepal including three in-country flights, and one day of travel to return home. The group visited four areas of Nepal including Pokhara, Jomson, Kagbeni, and Kathmandu, stayed in hotels and hostels, and shared meals as a team. Each day of the expedition had a structure schedule that included travel and/or activities such as hiking, team building, and personal reflection exercises. *No Barriers Life* curriculum activities were interspersed throughout the expedition to elicit meaningful experiences and reflection.

Survey Instruments

Self-Determination Inventory: Student Report (SDI:SR)

We utilized the SDI:SR (Shogren et al., 2020) to measure the self-determination of the participants in our study. A study conducted with a sample of 2,338 youth with disabilities and 2,352 youth without disabilities determined that the SDI:SR is a valid and reliable measure (Shogren et al., 2020). The SDI:SR measures students' perceptions of their self-determination skills (e.g., ability to make choices, decisions, and goals). The measure was utilized because it is aligned with the theoretical framework on which the study was based (Shogren et al., 2015a), may be completed on phones or computers, and only takes approximately ten minutes to complete. The SDI:SR was administered online and was comprised of 21 items. Students are prompted to move a sliding bar to respond on a scale from *disagree* to *agree* for items including, "*I have what it takes to reach my goals*" and "*I plan weekend activities I like to do.*" While adolescents use a visual sliding bar, the response produces a score ranging from 0 to 99 for each item. The numerical scores are not visible to the respondents. Although the survey produces a score for each essential characteristic of self-determination, only the overall score was utilized.

No Barriers USA Survey

The *No Barriers Survey* includes 24 statements for which students are asked to rate themselves on a five-point Likert scale ranging from "very untrue" to "very true" for the current moment (at the conclusion of the expedition)

and "before starting the No Barriers program." Examples of items include, "I have a vision that I am passionate about," "It is important to continually reach for my goals," and "It is important to get outside my comfort zone." *No Barriers USA* collaborated with researchers at Brigham Young University to design a psychometric test that accurately measured perceptions of growth in the *No Barriers Life Elements*. The measure was developed over multiple years, eliminating items that did not have high reliability. The survey is only completed at the end of each expedition. Students rate themselves on three to four statements for each of the seven *No Barriers Life Elements*, which include *vision, reach, pioneer, rope team, alchemy, summits,* and *elevate*. As the measure is used with thousands of *No Barriers USA* participants annually, it has been tested as valid and reliable (Duerden et al., 2016). A book recently published by two of the leaders of the non-profit details the No Barriers framework including the life elements (Lillig & Shurna, 2020). The elements correspond with the components of self-determination:

- A vision of what one wants in their future is needed in goal setting;
- One must have self-awareness and self-knowledge to understand their *vision*;
- *Reaching* outside of one's comfort zone is typically necessary in goal attainment;
- Problem solving and self-monitoring are needed to *pioneer* or innovate solutions;
- Choice making, decision making, and problem solving are employed when determining and utilizing one's *rope team* or their support network;
- An internal locus of control is needed for *alchemy* when one transforms life challenges into gifts or lessons; and
- *Summits* is goal attainment and a point at which individuals re-evaluate and become more self-aware.

Self-advocacy could be utilized in any of the *No Barriers Life Elements*. Self-awareness, self-knowledge, and choice making are needed in all of the elements. Although the *No Barriers Life Elements* were designed specifically as part of the *No Barriers USA* curriculum, self-determination skills are employed in each of the elements. Reciprocally, the elements aim to develop self-determination skills. Although the significance of the *No Barriers Life Elements* have not been researched, self-determination improves student outcomes (Test et al., 2010).

Data Collection

Students completed the *Self-Determination Inventory: Student Report* (SDI:SR, Shogren et al., 2020) during the week before departing for the expedition, or when they arrived at the Los Angeles airport on a computer at home or their phone. One student who was blind could not complete the survey himself as it was not accessible to students who are blind at that time. A parent read the questions aloud to him and described the response options. Given the visual nature of the sliding bar responses, accuracy of the student's response may have been impacted. Due to the challenging nature of airport logistics and pre-trip email responses, only eight students completed the SDI:SR prior to the expedition. Seven students completed the SDI:SR within two weeks of returning home from the expedition for a total of seven students who completed the SDI:SR before and after the expedition as a pre/post-program measure.

During the expedition, all students and adult leaders (n = 16) completed in-depth interviews (Creswell & Creswell, 2017) by an adult who joined the expedition for the purpose of recording photos, videos, and audio. Interviews were completed between the third and fourth quarters of the expedition, lasted 20 to 30 minutes each, and were video and audio-recorded. Due to the complex nature of the *No Barriers Life* elements, diverse student population, and variety of experiences during the expedition, the purpose of the in-depth interviews was to provide an extensive understanding of student growth and triangulate the data with the SDI:SR and *No Barriers USA Survey*. Only audio recordings were used for the purpose of this study. Interview questions related to the *No Barriers Life* curriculum, self-determination and their perceptions of the benefits of participating in the expedition program. All students (n = 12) completed the *No Barriers Survey*, which is a primarily quantitative measure, at the end of the expedition.

Data Analysis

The audio recordings of the interviews were transcribed using a reputable service, Rev.com. Interview responses were then coded using Nvivo for Mac version 12 to determine themes. Two researchers used open and axial coding to independently examine each meaning unit (phrase, sentence or paragraph) then group meaning units into themes (Merriam & Tisdell, 2015). This method was utilized to examine the data within the framework of self-determination. Each researcher compared transcripts to determine consistency across participants and examine transcripts for discrepant data. Each code, category, theme, and quotation was discussed between the two raters with any disagreements discussed until mutual agreement occurred. Themes were generated using constant comparison (Glaser & Strauss, 1967) to determine if the data aligned with the construct of self-determination and to identify emergent themes. Themes that lacked sufficient support were discarded.

The SDI:SR data were analyzed using a non-parametric pre/post-test, specifically a one-tailed t-Test for paired two sample means. This design was selected to determine if there was statistically significant growth in the self-determination scores of participants. The *No Barriers Survey* data were analyzed by describing perceived growth

Table 1
SDI:SR Scores

Participant Number	Total Pre-trip	Total Post-trip	Score Difference (Percent Change)
1	79	92	13
2	90	97	7
3	71	78	7
4	71	100	29
5	64	84	20
6	90	100	10
7	78	78	0
Mean Scores	78	90	12

through the percentage increase in rating in each category for the group as a whole. A convergent parallel mixed methods design was utilized due to the quantitative and qualitative data collection that occurred simultaneously (Creswell & Creswell, 2017). Quantitative and qualitative results are presented separately then compared side by side in the discussion.

Trustworthiness

Participants were purposefully identified to represent only the specific group of participants in the *No Barriers Youth* expedition to Nepal. Once interviews were transcribed, transcripts were then reviewed for validity by the researchers and through member checking. Trustworthiness was addressed through a variety of methods (Creswell & Creswell, 2017) including interrater reliability in coding to increase the reliability of the themes. Validity was addressed through member checking, peer debriefing, and reflexivity. A peer check was used at each phase of the study from proposal to manuscript.

RESULTS

Quantitative

A one-tail non-parametric pre/posttest design was utilized to measure growth in the self-determination scores of student participants from before the two-week expedition to Nepal to after the expedition. Seven participants completed the SDI:SR before and after the expedition (see descriptive statistics in Table 1). The self-determination scores of participants significantly increased ($p = .007$). A G* Power analysis determined that 45 participants would be needed to determine significance utilizing the data analysis procedures. A limitation is that only seven participants completed the pre/post program survey, but scores support qualitative findings. The SDI:SR overall score ranges from zero to 99. The mean SDI:SR score for the seven participants was 77.5 before the expedition and 89.9 after the expedition.

The *No Barriers Survey* measured perceived growth for the group of 12 student participants in all seven areas of the *No Barriers Life Elements*. Descriptive statistics for the survey data for the group of participants in each of the elements are displayed in Table 2. The mean ratings demonstrated perceived growth for all of the *No Barriers Life Elements*.

Qualitative

Disability and Identity

One theme that emerged from the interviews was a deeper description of the demographic details of the group. A participant described, "One thing that's unique about this group is that everybody has pretty significant challenges. Whether visible or invisible." The participants consisted of adult leaders and adolescents with and without disabilities, a seemingly diverse group from across the United States. However, they became unified by

Table 2
No Barriers Survey Data Showing Percentage of Participants Responses

Construct	Very Untrue Before	Very Untrue After	Untrue Before	Untrue After	Somewhat True Before	Somewhat True After	True Before	True After	Very True Before	Very True After
Vision	0	0	22	0	2.8	2.8	33.3	38.9	11.1	58.3
Reach	0	0	10.4	0	20.8	4.2	22.9	20.9	45.8	75
Pioneer	5.6	0	11.1	0	33.3	11.1	30.6	33.3	19.4	55.6
Rope Team	2.8	0	13.9	0	22.2	11.1	25	25	36.1	63.9
Alchemy	0	0	11.1	0	30.6	11.1	36.1	22.2	22.2	68.3
Summits	0	0	10.4	0	33.3	10.4	31.3	27.1	25	62.5
Elevate	0	0	4.2	0	22.9	0	16.7	16.7	56.3	83.4

sharing their unique challenges as explained by one of the adult leaders:

> What organizations often do is segment their populations, right?...I don't think that's the way forward...It doesn't matter what your background is, what your challenge is. We've got to figure out how to all come together and connect and relate to each other at a macro level and say, "Hey, wow, I empathize. I cross over to this other person's life and story. Even though their specific barrier is different from mine.

Four of the trip leaders were adults with disabilities. When they shared their identities and perceptions of disability, they provided opportunities for students to re-think their own identities and perceptions of disability,

> After [one of the leaders] spoke to us, I decided to share my story with the group, which was very challenging for me. Saying it out loud is a lot different. We can think about it all we want. I think about it every day. But it's different when you say it out loud or you hear somebody else talking about it. So that was really challenging for me...I felt very validated that others were looking at me and... Obviously, I was very emotional at the time, but the way that the group was looking at me was not a way that I've been looked at before. It was almost like a wow like I would have never known. And I wouldn't be the person that I am today without my accident. And I also feel like the decisions that I made after my accident have really just changed me as a person.

The opportunity for students to interact in an inclusive group also expanded self-awareness and perceptions of disability as can be seen in this example referencing the student who is blind,

> You would think that he always needs to be with someone but really when he's in a space that he recognizes, he's fine. He knows what he needs to do. He knows where he put everything. As long as people have what they need to succeed, anyone can do whatever they want to do and I kind of knew that before the trip, but it was really proven to me on this trip, that anyone can do what they want if they have the tools that they need.

Several of the students did not have disabilities, yet experienced significant challenges in their lives that they connected with all of the participants and leaders. Their perceptions of challenges related to identity, "To me it's not really like having a barrier and being like, 'Oh, I can overcome this.' I think it's using your barrier, being proud of it, and using it to fulfill your life." Although everyone experienced different barriers, identifying and discussing those challenges provided opportunities for everyone to connect, understand each other, and become more self-aware, "I connected with him through that and I was just like, "Yeah, I went kind of through the same thing."

Self-Determination Growth

Another theme that emerged was the opportunities for growth in self-determination through self-awareness and self-knowledge, choice making, decision making, goal setting and attainment, and problem solving.

Self-Awareness and Self-Knowledge. Development of self-awareness and self-knowledge was prominent in all participant interviews and overlapped with most themes that emerged. Through sharing their stories, the leaders helped to expand everyone's perceptions of what is possible, "No Barriers is living up to your potential and then understanding that your idea of your potential is so much smaller than it really is. That you are so much more capable of big things of your life." Development of self-awareness during the expedition began when the group met for the first time in the Los Angeles airport and was enhanced by the diversity of the group,

> This is the first group of people where I really feel I can just walk into a room with them or the LA airport when we were all meeting up and all of the things that I'm really self-conscious about with my disability, my appearance with being so tight all the time, my heightened startle reflex...I can just walk into a room with any of these people, and it's just, "Oh hey [Jeff], how are you doing?" With no other misconceptions or preconceived notions just hanging above my head.

Another example of becoming more self-aware through interactions with the group was,

> She showed us all that it's not a bad thing to share what happened to you, what's been the really difficult times in your life and what has been, like your summits. I think she taught me, at least, and I know a lot of other people on our team that it's okay to be vulnerable and then just go on to the next moment. We don't have to dwell on these things that have happened in our lives. It doesn't have to completely affect what other people think.

In becoming more self-aware, many participants developed an increased internal locus of control. When one student was asked, "What does no barriers mean to you?" she responded,

> It means that if I wake up in the morning and say, 'I'm going to climb Everest,' (which I'm not yet) that I can do it, and that nothing is strong enough to hold me back, and that whatever I set my mind to, I will do.

The increased self-knowledge developed during the expedition had broader implications as one student explained, "I was in a life-threatening accident. And after that...I really didn't have anything to label myself as. Or I kind of felt like I lost my purpose, when really I didn't, and I have found that on this trip." When considering their purpose in life, many students discussed growth in their desire to help others and have a positive impact on the world. Although this is a form of goal setting, *elevate* is one

of the *No Barriers Life Elements* in which students are encouraged to shift their focus outward and emerged as the theme, *sense of purpose*.

Choice Making and Decision Making. One student explained the freedom to make choices throughout the expedition, "I like how we get to explore, and hang out, and try different foods, and it's not all so structured...it was peaceful and adventurous, and I like that." Opportunities for choice also increased a sense of agency,

> There was one day where I said I wanted to ride the horse on my own, because I was getting led a lot. So, I said, "I want to take my horse on my own," and I did. And I got to ride my horse and feel free for once on the horse, and it made me feel very happy to ride an actual horse and do what I wanted to do on a horse, make it trot, make it run, make it do all these things."

Although choice making in one instance may seem insignificant, this same participant explained what choice making means to him and the decision making that follows,

> Even though support is amazing, I learned how to also depend on myself, depend on the choices I make to lead my life to somewhere. And I feel like the choices I made worked out. No barriers actually helped me learn that I can ... My choices aren't always the worst outcome. There's always a good outcome to my choices as well. Creating friends, I always got scared, because I was thinking, 'Yeah, I'm good at talking to people, but what if they don't like me as much?' And then every time I made a choice to go ahead and speak with someone it was always a very positive outcome. And it was just, it led me to think that my choices aren't ... They do matter to my life, and that I need to learn also to lead myself. And I've grown to do that. I can lead myself. I'm not saying that I'm probably a leader now and I'm going to go back home and lead everyone, but I am saying that I've learned how to become a leader to myself. I can tell myself what to do and I don't have to be afraid of the outcome anymore.

Goal Setting and Attainment. All of the participants expressed goals they established before they began expedition, along with goals they developed during the expedition. The goals of participating in the expedition were significant for most participants as demonstrated by one student, "I'm here for my anxiety and depression and I've been bullied...so I'm here to hopefully overcome the things that I've had and maybe have more confidence than what I've had in the past." Another student shared, "I'm here to get out of my comfort zone and appreciate myself for who I am." Opportunities for goal attainment during the expedition impacted self-awareness, "Once I climbed up that mountain...it made me feel so good because I knew that I could do it, and I didn't mess up, and I just had to be confident in myself." One student explained his new understanding of the goal attainment process,

> I'm gonna try not to force things...I'm gonna try to find the tools that I need to be able to do it, but if I can't do it with those, I'll try maybe something different, but I'm not gonna force myself to do something without the proper assistance to do it...I'm gonna go in slow. I'm gonna gain the resources that I need to be able to try new things.

Another student explained her new understanding of goal setting and attainment, "I'm always holding back. And if I don't go for it I just regret it a lot." Opportunities to practice goal setting and attainment also increased causal agency, "I have to take the steps, whatever they are, to get my goal, even if it does mean to motivate myself to do stuff that I regularly probably wouldn't like to do." Although students had previously experienced goal setting, inspirational teammates and leaders transformed their perception of goal setting, as one participant described,

> I feel like this trip has really taken my self-determination up like three notches. I have just completely just transformed. I'm still the same [Sarah], but I have transformed and grown as a person. My confidence has gone up. I've always said that anything I set my mind to I can do, without a doubt. But I don't know if I truly believed that. I hoped for the best as I went and did something, but I didn't truly believe it myself. But now I can confidently say that, if I'm going to do something, I'm going to do it, without a doubt.

In addition to increasing agency, students began to envision loftier goals for their lives as another student explained, "I feel like there's just another summit waiting for me in the future that I need to reach. I just can't wait to go on another journey like this just on my own personal journey just to reach that summit."

Problem Solving. Self-awareness and problem solving emerged as the themes with the most supporting evidence. One of the leaders discussed the *No Barriers* curriculum as it was infused into programming throughout the expedition,

> While we don't have the answer to how you lead your own rich, satisfying, and fulfilling life, the one thing that we do know is that there are some trail markers along the way. And we call those Life Elements. They're just simply ways to help you think about where you are in your (life) journey and where you want to go.

Group dynamics follow a typical progression of forming (coming together), norming (understanding typical behavior for the group), storming (feeling comfortable enough to voice disagreements), and performing (understanding differences and working cohesively as a team) (Tuckman & Jensen, 1977). It is typical for groups to experience challenges with working together once they are past the initial phases. One participant discussed how challenges with a teammate created an opportunity for problem solving, "I wanted to make friends. And I'm not gonna let anything stop that. So I tried being friends with

him instead of just making him a rival or a nemesis." Students also discussed discovering tools, like music, that they can utilize when they return home,

> It's really good relaxation for me, whether I'm physically cramping up and just totally done after a day's hike or mentally my anxiety or depression is just spiking and I can go to my guitar or my ukulele to just kind of calm and zen out.

Every participant discussed the visit at the school for students who are DHH in Kathmandu as a highlight. It particularly emerged in the context of problem solving, as one student explained,

> It was amazing at how you walk into a room and you literally have nothing in common. They can't hear you. We don't speak the same language. I don't really know how to sign. But we figured out a way to communicate because we both wanted to. We wanted to be able to talk to each other. And I feel like that it taught me a lot about people with disabilities along with life. If you really want something, it'll happen.

Another student discussed the gifts that emerged through the experience with figuring out how to communicate with the students at the school for children who are DHH,

> It was awesome, because I hate writing. But writing to these kids was the best thing I've done. I've loved every moment of it…I felt like these kids were like people I wanted to meet because they were so friendly. They were so accepting. They really knew where they were at, and they still didn't care. They were gonna find a way to communicate with all of us…And I was just like, "Wow. These guys are curious. I'd love to be this curious. That's why I came here…It was the best talk of my life, and that was really cool.

Other students discussed problem solving with physical challenges and their unique disabilities. A student provided an example of utilizing a teammate to work on strategies,

> I already struggle walking on stairs and walking in general. I struggle with it. I've been struggling with my walking, walking into stairs, I've been hobbling up them or like butt-scooting down a mountain with [Sarah]. The past few days, I've just like, I was determined, I was motivated/[Sarah] really pushed me. She inspired me and showed me like how much positivity I can get from any single scenario and I found that and I put it into like the smallest things. Me walking up a set of stairs or me hiking. I walked all by myself up the mountain.

This quote demonstrates how the theme of *accessing supports* overlapped with problem solving.

Accessing Supports

Rope team is one of the *No Barriers Life Elements* that encourages participants to consider their teammates on the expedition as well as their supports at home. Accessing supports, which includes people who can support you, is an important self-determination skill (Heller et al., 2011). How participants defined *rope team* developed over the course of the expedition,

> When I picture support, I always picture cheerleaders on a pyramid and it's like supporting each other. But for teenagers, I feel like we really...it's almost like we're leaning on shoulders and it's like a whole circle. We're all just leaning on our shoulders and I feel like we really do depend on each other in times of crisis or in times of, "Hey, man, I really need someone to talk to." Or, "Hey, could you help me with this? I'm really having trouble…"

Accessing supports in the context of developing friendships also aligns with the positive correlation between friendships and self-determination (Millen et al., 2019). While one student explained that she did not feel support from the other students, all other participants discussed the depth of support they felt from their teammates in detail.

The theme of *accessing supports* was primarily discussed in relation to how members of the expedition team opened up to others, "I think we're basically a family. She trusts us so much to share that with us." Another student said, "It was a little shocking how she could have total trust in me, because she trusted the entire team sharing what she shared." Another student discussed how she accessed the support of her team,

> I've definitely been supported by [Molly] and by [Sarah] and they've just been there for me when I was talking about my Tourette's or when I took a day off from the expedition. Because I was having really bad Tourette's that one day and [Molly] was like, "Is there anything I can get for you or anything?" And it felt really nice to have that support.

The support of teammates primarily assisted with motivation, which is significant as self-determination theory is a theory of motivation (Deci & Ryan, 1985),

> I feel like everybody on this trip is like really motivating, and they're always like you can do this. You can do this, and I feel like I can actually do this. I can be on the top of the world when I get to my summit. It's like whatever they [my goals] are, I can do whatever I want to do. I could be whatever I want to be, and I feel like I can take this confidence back to say theater and then master classes when I'm singing for people who are from Carnegie Melon or on Broadway. I feel like I can do that for them and not have to be as nervous as I was before this trip.

This particular student's motivation from her support system also impacted her goal setting and self-awareness. Another participant related to goal setting, "we want people on our rope team that are going to push us and make us strive and make us the best that we can be." The significance of support systems was summarized by one

participant, "I have a much bigger support system than I have people trying to tear me down."

Sense of Purpose

An important aspect of the *No Barriers Curriculum* is the bridge to students' lives beyond and after the expedition, which is encouraged through the third phase of the program in the form of a project that students complete when they return home and is labelled as the life element, *elevate*. They set a goal that shifts their perspective outward to other people. One student explained the change in her perspective on life more broadly, "I think a lot of other places I've been you're just focused on the suffering and how much ... I just keep on thinking how much I wanna help and how much I wanna do." Another student echoed those sentiments,

> I feel like my purpose is inspiring other people and showing other people that they are capable of anything that they set their mind to and that adversity only helps us grow as a person, and that not only when we face adversity do we really find ourselves, but a lot of the times our purpose comes from those types of adversity. So I feel like my purpose is serving others and exploring the world.

Another student shared similar feelings,

> I've always been a positive person, but I feel like I also grew while I was here. I want to do something big about it. I want to keep pushing. I want to use my media and just show the world that there are no barriers no matter who you are. No matter what you face, you can do anything you set your mind to.

Summary of Qualitative Results

The four themes that emerged in the data included disability and identity, self-determination growth, accessing supports, and sense of purpose. The first theme revealed that participants embraced their identity and did not have a deficit perspective of disability, but rather understood disability and barriers for their resulting strengths and ability to connect all humans. The data supported seven components under the theme of self-determination growth. Participants also learned strategies to help themselves through challenges and access supports in the process. At the end of the expedition, participants thought more intentionally about their life goals and belief in their abilities. Overall, the themes identified from the qualitative data supported the quantitative data.

DISCUSSION

The significance of the *No Barriers* three-phase model including, *thoughtful preparation* (Phase 1), *transformative expedition* (Phase 2), and *meaningful return* (Phase 3), was demonstrated in the results through perceived growth in self-determination and the increased desire of participants to have a positive impact on the world. Although the preparatory phase was not explicitly discussed by participants and data were collected immediately before, during and after the expedition, the trip preparation may have affected the results. Participants spent several months before the expedition participating in group conference phone calls in which they had the opportunity to get to know each other and the leaders, learn about the *No Barriers Life Elements*, learn about the local culture and environment in Nepal, and set goals. The purpose of phase one is to elicit more significant growth during the expedition, but future studies should be conducted to measure to what extent phase one impacts the results.

Side-by-side comparison of the quantitative and qualitative data show perceived improvements in self-determination through interviews and survey scores after students participated in a two-week international expedition for adolescents with and without disabilities. The qualitative findings supported the quantitative data showing perceived growth in self-determination. The results support previous research showing increased self-awareness (Beames, 2005) and confidence (Asfeldt & Hvenegaard, 2014). The *No Barriers Survey* data allowed us to understand the particular *No Barriers Life Elements* in which there was greater or lesser perceived change. Although the *No Barriers Survey* data are not defined by self-determination, they closely align with the components of self-determination. The element in which the most significant perceived growth was recorded was *vision*. The percentage of participants who responded "very true" to statements about the construct increased by 47.2% from before the expedition to after the expedition. *Vision* is one's knowledge of their values, interests, passions, and potential. This translates to self-awareness, self-knowledge, and an internal locus of control and could inform goal setting and attainment. These data support the qualitative data, which showed self-awareness as the theme with the most supporting evidence.

The element in which the second highest increase in the group's scores occurred was *alchemy*, for which 46.1% more participants responded with "very true" to statements about the element after the expedition. At its core, *alchemy* is about harnessing one's challenges and using them for strength and as a positive influence in one's life. Multiple participants discussed this concept of taking one's own disability or challenge and being proud of it while using it to "fulfill your life." This element supports the themes of disability and identity and problem solving, which were the themes with the second most qualitative data. Perceived growth occurred for the group in all of the *No Barriers Life Elements* (see Table 2).

The interview data provided detail on the components of self-determination in which greater and lesser growth was perceived. One component of self-determination in which no data were collected was self-monitoring. With a

short two-week intervention, progress monitoring can be challenging logistically, and it was not explicitly part of the expedition with the exception of group debriefing of activities through discussion. Although some students independently journaled, devoting time to document reflections individually throughout the expedition could provide increased opportunities for self-monitoring. Another component of self-determination that did not directly emerge as a theme was self-advocacy. Although participants did not discuss opportunities in which they needed to advocate for their unique needs, they shared their challenges with the group and how they accessed their supports to face challenges. These are indirect forms of advocating for oneself.

The remaining components of self-determination which include choice making, decision making, problem solving, goal setting and attainment, an internal locus of control, self-awareness, and self-knowledge all emerged in the qualitative data. Self-awareness and problem solving had the most supporting evidence. The theme of disability and identity also had strong supporting evidence. The only discrepant data was in the form of one interview quote in which the participant stated that she did not feel supported by her teammates. All other data were triangulated as the *No Barriers Survey* data supported the interview findings discussing the components of self-determination and the SDI:SR data supported the findings of overall perceived growth in self-determination.

The results are statistically significant within this study, the value of the findings is amplified when the results of the current study are compared with other self-determination interventions. In a study of 340 students with intellectual disabilities ages 10-21 years, Shogren and colleagues (2018) used an evidence-based self-determination intervention, the *Self-Determined Learning Model of Instruction* (SDLMI). The overall scores on the SDI:SR increased an average of 8% over the course of an entire school year. In the current study, although only seven participants completed both the SDI:SR as a pre and post-program measure, scores increased an average of 12% after just a two-week intervention. The SDI:SR data are supported by the *No Barriers Survey,* which was completed by 12 adolescent participants, and the interviews, which were completed by 12 adolescents and four adult leaders.

LIMITATIONS

Although data were triangulated, the sample size was small. Further research is needed to determine if the findings are generalizable to the population of students with and without disabilities. The first author was one of the expedition leaders and thus might have been biased in her analysis of the data. Interviews were conducted by a staff member who joined the expedition in the role of videographer and photographer. As his purpose was to collect media assets for the organization *No Barriers USA*, interview questions were aimed at capturing the positive impacts of the expedition and did not include questions to probe possible discrepant data. Although questions were not leading, follow up questions were aimed to determine if students had perceived growth in areas related to the *No Barriers Life Elements*. Adult leaders who were interviewed also may have been positively biased in support of the hypothesis, however, the results were focused on perceived change in self-determination in the student participants utilizing qualitative and quantitative data primarily from the students.

IMPLICATIONS FOR FUTURE RESEARCH AND PRACTICE

Although these findings are preliminary, they provide promising insight into a topic that has not been previously researched: the perceived self-determination changes after participation in a short international expedition. Further research needs to be conducted on international expeditions for adolescents more broadly as they are rarely defined using the term, *expedition*, and the results of existing studies are mixed with no consistent focus on measuring a particular construct. Additionally, existing studies lack quality and rigor, particularly in defining the intervention in a replicable manner. This study should be replicated with a similar expedition program utilizing the same intervention with the *No Barriers Curriculum*, as programming led through *No Barriers USA* has not been previously researched as an intervention. The results also support the benefits and need for future research and practice with international expeditions and the use of short-term self-determination interventions outside of the academic setting.

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