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Understanding emerging adult identity development through work at a residential outdoor environmental education program: an application of social practice theory

Timothy J. Mateer[a] , B. Derrick Taff[a] , Carter A. Hunt[b] , Pete Allison[a] and Ellen Will[c]

[a]Department of Recreation, Park, and Tourism Management, Pennsylvania State University, State College PA, USA; [b]Department of Recreation, Park, and Tourism Management, and Department of Anthropology, The Pennsylvania State University, University Park, PA, USA; [c]Shaver's Creek Environmental Center, The Pennsylvania State University, Petersburg, PA, USA

ABSTRACT

Most previous research on residential outdoor environmental education (ROEE) programs has focused on the outcomes associated with student participation in these learning experiences. In contrast to these previous studies, this research takes an interpretivist approach to understand how work as a short-term instructor in a ROEE setting may also uniquely support learning and development for this population as well. A sample of former short-term instructors across the developmental period of emerging adulthood were interviewed to retrospectively explore the meaning that work in a single ROEE program holds in their current lives. Inductive analysis found social practice theory effectively aligned with the meaning former short-term instructors associated with program involvement. These findings suggest that short-term instructor work influenced individuals' identity development processes in both a social-emotional and pro-environmental manner. Moving past their ROEE experience, former short-term instructors attempted to live out meaningful practices associated with these program-related identities, such as sharing the outdoors with others. Implications for both professional development in a ROEE setting and future research are discussed.

Residential outdoor environmental education (ROEE) programs have been shown to promote pro-environmental learning and connection to nature for a wide variety of audiences. These educational programs allow 'students to discover nature through on-site, multi-day programming' (Mullenbach, Andrejewski, and Mowen 2019, 365) and may provide uniquely impactful environmental learning experiences for their participants (e.g. Liddicoat and Krasny 2014; Williams and Chawla 2016). While campers and students have been the primary subject of most previous research on ROEE, there is preliminary evidence that suggests educational outcomes from residential education settings are not limited to program participants. A small but growing body of research, conducted through a variety of multi-day educational experiences (most without a specific environmental focus), indicates that short-term educators may also be gaining a wide variety of outcomes through their work (DeGraaf and Glover 2003; Duerden et al. 2014; Johnson

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et al. 2011). Short-term instructors, that is, those working for periods of less than three months or one summer in residential education settings, comprise a population that commonly falls into the developmental period of emerging adulthood. This exploratory developmental period generally falls between the late-teen's to mid-20's (Arnett 2000; Bynner 2005; Reifman, Arnett, and Colwell 2007). These individuals have been shown to accrue a wide variety of outcomes from their work, such as leadership development (Kendellen et al. 2016) and increased emotional intelligence (Jacobs and McAvoy 2005). Little, if any, of this previous research has specifically examined if and how these benefits are being accrued by short-term employees in a ROEE setting. By better understanding how instructors are learning and growing from these experiences, ROEE programs can further increase their impact by intentionally promoting learning outcomes for short-term instructors in addition to program participants.

Identity development may specifically be an important psychological construct that can be influenced by work in ROEE settings. Identity exploration is an integral part of emerging adulthood (Arnett 2007; Schwartz et al. 2013) and previous research suggests that work in a residential educational setting may contribute to this process (Johnson et al. 2011). According to Waterman (2017), identity specifically 'refers to a person's self-definition, in terms of goals, values, and beliefs, whether developed through a process of conscious choice, identification with significant others, or ascription, that provide direction, purpose, and meaning in life' (p. 314). Experiences influencing individuals' self-concept in relation to the natural world have been found to play an integral role in promoting a variety of pro-environmental outcomes later in life (e.g. Carfora et al. 2017; Williams and Chawla 2016), representing an important concept to understand when designing impactful environmental education experiences.

Given individuals' self-concept may play an integral role in how emerging adults learn through their work in a ROEE setting, the purpose of this interpretivist study is to understand the retrospective meaning and identity development processes these short-term educators associate with their work. The central focus on 'meaning' aims to capture the emic perspectives that individuals associate with program experiences as they move forward in life. While previous research has demonstrated the efficacy of ROEE programming in populations of campers and students (e.g. Williams and Chawla 2016), this study provides much-needed evidence on how such approaches can be effectively implemented for short-term instructors as well. This study specifically focuses on a single ROEE program that intentionally focuses a portion of its programming around educating its short-term instructors on environmental education techniques. By purposively studying a ROEE program that aims to facilitate educational programming for this population, direction can be provided for other ROEE programs that aim to promote similar outcomes.

Literature review

This literature review examines previous research that can help to provide context on the learning and identity development processes taking place through short-term work in a ROEE setting. The first section discusses social practice theory as an effective lens for examining identity development through work in ROEE programs. The second section reviews the importance of identity as a psychological concept and how it can inform environmental learning processes. Lastly, the third section highlights identity development in emerging adulthood as a unique period that can help inform program development for most short-term instructors. Research questions are then outlined based on gaps within this previous research and the opportunities presented by working at the interface of these concepts.

Social practice theory

Social psychology has often taken an individualistic lens in developing environmental education programs (e.g. Ajzen 1991; Stern 2000). While these approaches provide useful insight into some aspects of learning and behavior, others have argued that these approaches to understanding

learning do not fully account for humans as interactive beings nor the dynamic nature of social situations (Hargreaves 2011; Holland, Fox, and Daro 2008; Nash et al. 2017). Social practice theory is one approach that aims to overcome these limitations by de-centering individuals from the focus of investigation and instead focuses on broader cultural dynamics within which these individuals are embedded (Hargreaves 2011; Holland et al. 1998). Specifically, social practice theory aims to understand how individuals 'act in relation to collective cultural activities' and also 'emphasizes the historical production of persons in practice' while paying 'particular attention to differences among participants, and to the ongoing struggles that develop across activities around those differences' (Holland and Lave 2009, 5).

As conceptualized by Holland et al. (1998), social practice theory asserts individuals begin to identify with a relevant cultural world and act in accordance with its norms. Holland et al. (1998) posits this happens in four steps:

1. ***Prominence of a cultural world:*** A specific realm of action and issues begins to grow in salience for the individual, an individual 'wakes up' to or begins to identify with a cultural world
2. ***Identification with a cultural world:*** Individual begins to identify and act in accordance with a reference group, holding themselves accountable to the group and its values
3. ***Development of knowledge:*** Individual begins to develop and further their knowledge by existing and acting within the cultural world they identify with
4. ***Navigation of barriers:*** Individuals navigate barriers to living out their identities as they move forward in life

While original writing by Holland et al. (1998) explicitly outlines three steps to this process, Kempton and Holland (2003) discuss that individuals' identities must be continually reformulated due to evolving barriers in living them out, exemplifying the presence of this fourth and ongoing step. This approach to conceptualizing learning and growth through association with a 'cultural world' is coined as a 'social environmental identity' by Kempton and Holland (2003). They state it 'locate[s] a person as an environmentalist, or a particular type of environmentalist, in a context of persons, groups, and struggles' (Kempton and Holland 2003, 318). Previous research has suggested this stepwise framework effectively explained outcomes for individuals who attend ROEE camps early in life (Williams and Chawla 2016).

When examined collectively, these four steps assert that when someone sees themselves as member of a particular group, they begin to incorporate the salient aspects of this cultural world into their self-identification (Holland et al. 1998; Kempton and Holland 2003; Williams and Chawla 2016). In turn, this historical production of individuals' identities pushes them to be continually attempting to live out this identity as they move forward in life (Holland and Lave 2009). The act of living out this identity in different contexts is done through 'practices'. The term practice refers to relevant behaviors while also acknowledging the unique social and emotional meaning these behaviors hold to members of a specific cultural world (Hards 2011). Some early work on cultural worlds and identity development from Holland and colleagues did not specifically utilize the term 'social practice theory' to describe this dynamic (e.g. Holland et al. 1998, Kempton and Holland 2003; Kitchell et al. 2000). With this, Holland and Lave (2009) explicitly bridge their framework into social practice theory with identity as a primary driver of individuals' ongoing attempt to live out important practices.

While social practice theory, as outlined by Holland et al. (1998), utilizes the term 'cultural world' to describe broader societal dynamics that influence identity development, this study utilizes the term 'social world' from here onward. This is done to prevent any potentially erroneous attachments to heritage, ethnicity, or associated concepts when referring to environmental learning processes. The term 'social world' has been used extensively to describe the specialization process in outdoor recreation (Hughes, Hallo, and Norman 2016; Scott and Shafer 2001) and effectively parallels Holland et al. (1998) conceptualization in this alternative setting.

Identity and social practice

Social practice theory suggests that identity exists as one of the primary psychological constructs mediating the relationship between sociocultural influences and practice implementation. Individuals' self-conception is uniquely related to both how they see themselves in relation to other reference groups as well as their aspirations in relation to how they hope to be in the future (Waterman 2017). Both dimensions of identity, as conceptualized in this manner, are captured in how individuals struggle and adapt to live out meaningful practices in social practice theory (Holland and Lave 2009). As Erikson (1956) highlights in his classic writing on identity, the process of identity development is ongoing throughout an individuals' lifespan rather than being isolated to specific life periods, though the nature of this exploration may change over time. Additionally, identity does not exist as a unidimensional psychological construct. It is interactive with individuals' myriad self-perceptions, with individuals continually embodying multiple identities simultaneously in their sense of self (Crenshaw 1991; Ghavami, Katsiaficas, and Rogers 2016).

In examining the concept of identity in relation to environmental education, *environmental* identity development has specifically been recognized as an important aspect of learning experiences in relation to the natural world (Green, Kalvaitis, and Worster 2016; McGuire 2015). Clayton (2003) describes environmental identity as 'a sense of connection to some part of the nonhuman natural environment, based on history, emotional attachment, and/or similarity, that affects the ways in which we perceive and act toward the world' (pp. 45–46). Parallel to how Holland and Lave (2009) assert that identity is historically produced in social practice theory, both experimental (Van der Werff, Steg, and Keizer 2014) and retrospective narrative (Williams and Chawla 2016) data indicate that an environmental identity is also produced by individuals' memories of past experiences in relation to the natural world. The 'significant life experience' research (e.g. Chawla 1998; Corcoran 1999; Palmer et al. 1998) further supports this notion that salient early life memories, such as direct interaction with nature and social experiences in the outdoors, can influence individuals' relationship to the natural world later in life. Kempton and Holland's (2003) definition of a social environmental identity builds upon this concept by arguing one's relationship to the natural world is partially developed by an individuals' self-conception in relation to a specific reference group as well as their direct relationship to the natural world.

Given the potential impacts of identity development on environmental learning processes, short-term work in ROEE settings may provide an important opportunity to foster these outcomes in participants. The importance of incorporating identity-related outcomes into educational programming is emphasized by McGuire (2015) as he states: 'A growing body of empirical evidence supports the notion that the self acts as a sort of meta-attitude exerting a consistent directional influence on behavior' (McGuire 2015, 703). The concept of identity as a 'meta-attitude' pushing behaviors in a specific direction parallels the navigation process individuals go through to live out meaningful practices in a broad array of scenarios in social practice theory as well (Holland et al. 1998). In both circumstances, individuals adjust and alter their behaviors to align them with their self-concept. Structuring short-term work in a ROEE setting to foster identity-related outcomes can potentially encourage similar wide-ranging impacts for participants as well.

Reflecting on one's emerging adulthood

Identity development via social practice theory may serve as an especially effective approach to understanding instructor learning in a ROEE setting as most individuals occupying these positions primarily exist in the developmental period of emerging adulthood (Arnett 2000; Bynner 2005; Reifman, Arnett, and Colwell 2007). This period of growth is characterized by identity exploration, increased responsibility, and increased independence (Arnett 2007; Schwartz et al. 2013). Emerging adulthood is the time when individuals explore who they would like to

become once they settle into more permanent adult roles. As Arnett (2000) states, 'Because marriage and parenthood are delayed until the mid-twenties or late twenties for most people, it is no longer normative for the late teens and early twenties to be a time of entering and settling into long-term adult roles. On the contrary, these years are more typically a period of frequent change and exploration' (p. 469). Emerging adults generally expand the exploratory period of their lives out of the teenage years into a large portion of their twenties as well.

Regarding the nature of identity development during emerging adulthood, Ghavami, Katsiaficas, and Rogers (2016) assert that individuals begin to explore various identities in conjunction with each other rather than in isolation. The intersectional nature of various self-concepts is explored at this time, with individuals seeking to develop an understanding of who they are in a holistic sense. Prior findings indicate that work in a residential education setting as a short-term instructor can have positive impacts on emerging adult development by promoting these identity exploration processes (Johnson et al. 2011) as well as workforce skill development (Duerden et al. 2014). Other research asking former instructors to reflect on their work in a residential education setting suggested that these self-reported benefits change and shift as individuals move further away from the experience through emerging adulthood (DeGraaf and Glover 2003; Digby and Ferrari 2007). While these two previously cited studies did not specifically incorporate emerging adulthood into their design, the dynamic nature of the study period likely contributed to these differing perspectives at subsequent times of retrospection (Arnett 2007; Schwartz et al. 2013). To better educate for identity-related outcomes in ROEE settings, we need to understand how perceptions and meaning associated with the experience change across and beyond it. Research that specifically assesses emerging adulthood can provide this understanding.

Research questions

By understanding the lived experiences of short-term instructors participating in a ROEE program designed intentionally to provide growth and mentorship for emerging adults, better insight into designing impactful practices can be developed. Given the dynamic nature of development during emerging adulthood (Arnett 2007; Schwartz et al. 2013) and that some prior research indicates meaning from work in a residential education may change at different points of retrospection (DeGraaf and Glover 2003; Digby and Ferrari 2007), this study aims to understand general meaning attached to short-term work in a ROEE setting as well as how this meaning changes across and beyond emerging adulthood. The following two research questions were specifically developed to accomplish this study's goal of better understanding ROEE programmatic outcomes for short-term instructors and how to better mentor these individuals for environmental learning outcomes in the future:

RQ1: What meaning do emerging adults associate with their experience as a short-term instructor in a ROEE setting?

RQ2: How does the meaning associated with the ROEE short-term instructor experience change at different points of retrospection across and beyond the developmental period of emerging adulthood?

Methods

Study setting and population

Shaver's Creek Environmental Center's Outdoor School (SCEC ODS) is a four-day, three-night ROEE program serving fifth-graders in the central Pennsylvania region. The participants in this study are former short-term instructors at SCEC ODS who were attending the Pennsylvania State

University for their undergraduate education. At the time of their participation in the SCEC ODS program, these short-term instructors were receiving class credit for their work. They received two, three-hour trainings prior to their week at SCEC ODS. They then lived at SCEC ODS for one full camp session, becoming an integral part of program functioning. They acted as the primary caregivers to campers throughout the week: sleeping in cabins with the campers overnight, helping campers prepare for the day's activities, teaching lessons, eating communal meals with the campers, and fulfilling any other necessary roles throughout the week. Campers, those under the care of the undergraduate students, attend SCEC ODS through their public or private schools.

Given that the short-term instructors are receiving class credit for their time at SCEC ODS, education is an integral part of the experience. Concepts emphasized in trainings are pedagogical skills, knowledge of basic environmental science, group management skills, and the intersectionality of these concepts. Short-term instructors are required to write a reflection paper at the end of their experience, encouraging them to look back and derive meaning from their week at SCEC ODS. These parts of the SCEC ODS program exemplify its unique process of educating and developing its undergraduate participants in an intentional manner. This distinct educational program can potentially provide insight into how other ROEE organizations can approach staff training and development in an intentional manner as well.

Research design & data collection

This study took a qualitative interpretivist approach to data collection and analysis (Thanh and Thanh 2015), aiming to both understand the broad outcomes individuals associated with their SCEC ODS experience (addressing the first research question) and how individuals throughout and beyond emerging adulthood perceive the meaning of the experience differently (addressing the second research question). The interpretivist approach helps to build an understanding of how individuals perceive the program from their unique perspective (Schwandt 2003), a research approach that has been utilized regularly in previous environmental education studies (e.g. D'Amato and Krasny 2011).

A semi-structured interview guide was developed to ensure participants shared thorough information on the perception of their SCEC ODS experience, yet informants were allowed to expand freely on any prompt provided. There were three primary sections to the semi-structured interview: pre-SCEC ODS, the SCEC ODS experience, and moving forward in life post-SCEC ODS. The first section covered relevant previous life experiences, how individuals learned about SCEC ODS, and motivations for signing up to be a counselor. The second section discussed anecdotal memories, impactful programmatic elements, and the subjective feelings associated with different programmatic elements. Finally, the third section addressed adjustment back into everyday life, knowledge and skills gained from the experience, and the perceived meaning associated with the experience in current lives of informants.

Given that prior research has indicated that the meaning and perception of work in a residential education setting changes with retrospection (DeGraaf and Glover 2003; Digby and Ferrari 2007), a quota sampling approach (Bernard 2011) was utilized to segment the counselor alumni population into three main groups. The quota sampling approach outlined three primary categories to be sampled: a group within emerging adulthood (25 years old or younger) and still pursuing an undergraduate degree or having graduated within the past three months; a second group within emerging adulthood and out of their undergraduate education for three months or more; and a third group out of emerging adulthood (over 25 years old) and out of their undergraduate education. At least six interviews were conducted with each sub-population, as Bernard (2011) states this can be adequate to reach saturation in some forms of qualitative research.

To recruit individuals within each of these categories, the lead author obtained rosters of all counselors who worked at SCEC ODS from Fall 2004 to Spring 2019. Using these lists, a recruitment email was then sent out to former SCEC ODS instructors. This led to twenty-six semi-structured interviews: eight were scheduled via chain referral from key informants within the SCEC ODS community, and 18 were scheduled via the email solicitation. While potentially introducing a level of bias into informant responses, chain referral was utilized as a complementary sampling strategy to bolster sample size for this difficult-to-access population while additional email addresses were gathered.

Twenty-six former short-term instructors were interviewed on their SCEC ODS experience and the corresponding meaning it holds in their current lives. Interview lengths ranged from 50 min to 120 min in length. A wide range of time involved with SCEC ODS was reported with individuals participating in SCEC ODS anywhere from one week to over 10 weeks. Former participant ages ranged from 20 to 34 years old. The quota sampling framework outlined was satisfied as at least six informants were interviewed within each sub-population determined by emerging adulthood. Basic demographic information for the 26 individuals and assigned identification numbers are outlined in Table 1.

Analysis plan

Interviews were all conducted by the first author during the summer of 2019. In complement to these interviews, the primary researcher also developed an intimate knowledge of the program while working as a teaching assistant for program trainings over three semesters. This

Table 1. Basic demographic information of informants and sampling category informed by emerging adulthood theory (A: emerging adulthood (25 years old or younger) and still pursuing an undergraduate degree or having graduated within the past three months; B: within emerging adulthood and out of their undergraduate education for three months or more; C: out of emerging adulthood (over 25 years old) and out of their undergraduate education).

Informant ID #	Sampling Category	Age	Gender	Number of Weeks Worked at SCEC ODS
1	B	23	Female	8
2	A	22	Male	1
3	C	29	Male	10
4	C	26	Male	5
5	C	33	Male	6
6	C	31	Female	9
7	C	29	Male	6
8	C	34	Male	Numerous (worked as counselor, also previously worked for SCEC ODS in year-round administrative role)
9	C	33	Male	1
10	B	24	Male	1
11	B	22	Female	1
12	A	22	Female	4
13	A	20	Female	3
14	C	28	Male	4
15	B	24	Female	3
16	A	20	Male	2
17	C	26	Female	2
18	B	24	Female	3
19	B	24	Female	4
20	B	23	Female	2
21	A	23	Female	5
22	C	26	Female	1
23	A	22	Male	4
24	C	30	Male	6
25	B	24	Female	1
26	A	21	Female	2

allowed for the lead author to directly observe SCEC ODS programming multiple times as well as study the various curriculum components. Informants were also able to speak at ease about the program as the interviewer had a general knowledge on programming function and traditions. Informants were informed of the primary researcher's involvement with SCEC ODS.

In addition to the primary researcher of this study, two research assistants were recruited to aid with coding. Interviews were transcribed by the lead author and one research assistant. The three individuals then conducted independent coding processes. The inductive nature of this process was emphasized to both research assistants, highlighting that their analysis should aim to capture the emic perspective of the informants being interviewed. Initial codes were developed within three primary categories that paralleled the interview guide: life position and relationship to the natural world pre-SCEC ODS, perceptions of learning and growth during the SCEC ODS experience, and perceived meaning and outcomes post-program. Codes were compared between researchers, and discrepancies in codes were discussed between them to develop a mutual understanding of emerging themes. Revisions were then made to codes to represent this mutual understanding. Once codes were refined and operationalized, the first author tied these themes back into existing theory that best accounted for the emic perspective of the informants (Bernard, Wutich, and Ryan 2016). While this represents a shift from the study's primary inductive approach, moving between inductive and deductive coding is a common strategy in qualitative research (Patton 2002).

Results

In taking an interpretivist approach to understanding program meaning for past participants, identity development and the evolving effort to live out meaningful practices associated with this identity emerged as prominent outcomes for former short-term instructors. As Holland et al. (1998) outline via social practice theory, SCEC ODS facilitated these outcomes by incorporating individuals into a social world. By becoming associated with SCEC ODS, holding oneself accountable to the associated norms, and gaining firsthand knowledge from program participation, individuals' self-conception begins to shift in a meaningful way. A summary of the four stages of social practice theory as they pertain to the outcomes of this study are outlined in Table 2. The first three steps primarily address the first research question, while the fourth step primarily informs the second research question. In conjunction with a social environmental identity, the term originally coined by Kempton and Holland (2003), the term 'social actor identity' was also developed to describe the unique interpersonal traits individuals identified with after their experience at SCEC ODS. These interpersonal skills were often described as a distinct yet interactive identity for past program participants. The following sections explore each theoretical step and its connection to the lived of experiences of former program instructors.

Prominence of a social world

In examining identity formation outcomes resulting from the SCEC ODS experience, the ways that individuals described their life positions prior to SCEC ODS adds perspective in exploring the first research question as it contextualizes the meaning informants associate with SCEC ODS within their broader life trajectory. Individuals frequently identified with either environmental or educational interests that aligned with the mission of SCEC ODS. Informants generally identified these interests as a 'point of entry' into SCEC ODS or a way in which their identity already aligned with the programmatic mission. This initial point of identification then underwent 'reformulations' as individuals further identified with the specific social world of SCEC ODS (Kempton and Holland 2003).

Table 2. The four steps of Holland et al. (1998) social practice theory and connection to the SCEC ODS experience.

Stages of Identity Development as Described by Holland et al. (1998)	Connection to the SCEC ODS Experience
Prominence of a Social World	Individuals commit to work at SCEC ODS as a result a predisposed interest in environmental topics or educational leadership
Identification with a Social World	1.) Social Environmental Identity: Individuals adopt the environmental values of the SCEC ODS social world including a desire to share the outdoors with others and recognizing human interrelationships with the natural world
	2.) Social Actor Identity: Individuals begin to value the experiential leadership style encouraged by SCEC ODS and the interpersonal skills of increased confidence and valuing human connection
Development of Knowledge	Individuals develop their interpersonal skills and environmental knowledge and values as they continue to remain involved with SCEC ODS
Identity Barrier Navigation	Emerging adults describe a process of navigating how to integrate their SCEC ODS-related identities into their lives with adult informants describing a process of flexibility and compromise to live out these values

Individuals entering SCEC ODS because of the outdoor aspect of the experience often described spending frequent time outside as they grew up or having a family that enjoyed being outside. For example, Informant #4 discussed his previous outdoor experiences:

> You know family vacations were outside. We're going to national parks, we're going to the Caribbean, we were going out west and hiking and camping. My dad is just an avid outdoors-person, swimming and hiking and kayaking and biking, all the stuff that my brother and I love. He definitely put that into our brains at an early age. *(Informant #4; Sampling Category C)*

Informant #4 and many other informants had a predisposed interest with the natural world prior to SCEC ODS that was fostered within them at a young age. Identification with environmentalism already existed within these individuals prior to SCEC ODS, with the program providing an opportunity for them to build upon this interest.

Alternatively, others did not identify strongly with the outdoors prior to SCEC ODS but had previous educational experiences that drew them into working as a short-term instructor. A prior interest in education was articulated by Informant #26:

> The idea of being an educator in that kind of setting is something that really appeals to me just because I like education. I consider myself kind of non-traditional, like pretty experienced-driven and that kind of stuff. So I was like, that seems like kind of my thing. *(Informant #26; Sampling Category A)*

For some, like Informant #26, an interest in teaching existed as the primary 'point of entry' into the SCEC ODS social world, exemplifying Holland et al.'s (1998) first step of identity development via social practice theory.

This initial element of identification allowed individuals to take their generalized interests in one or several aspects of the SCEC ODS experience and open themselves up to broader opportunities for education and growth. In becoming more associated with this social world, these elements of individuals' identities begin to shift and change, leading to the development of social environmental and social actor identities within informants.

Identification with a social world

Through social identification with SCEC ODS, former short-term instructors described shifts in their identities. As Holland et al. (1998) write, through the lens of social practice theory, 'such

objectifications, especially those to which one is strongly emotionally attached, become core of one's proactive identities' (p. 4). This objectification developed through identifying oneself as a participant in SCEC ODS, integration into the social norms of the SCEC ODS community, and developing firsthand knowledge through participation in the program. Collectively, these factors led individuals to associate with the social world of SCEC ODS through two distinct yet interactive identities: a social environmental identity and a social actor identity.

Social environmental identity

Regarding former short-term instructors' social environmental identity, the most prevalent outcomes included a desire to share the outdoors with others and shifts in sustainable practices by recognizing humans' interrelationships with the natural world. Informants frequently discussed a desire to share positive outdoor experiences with others upon leaving SCEC ODS. By developing an appreciation for the power of education and bringing others into outdoor spaces, informants reformulated their self-concept regarding environmentalism to fit within SCEC ODS social world. Informant #3 (Sampling Category C) discusses this process in his reflections, saying 'I was already an environmentalist when I entered the program, but I changed. Outdoor School added an educational component to it, an understanding that an education is so vital, so vital for environmentalism long-term'. From his perspective, Informant #3 described a shift in how he viewed environmentalism by gaining knowledge through work at SCEC ODS.

In addition to this educational component, informants also discussed gaining a new understanding of meaningful practices regarding the environment as well. This reformulation was largely driven by lesson content taught at SCEC ODS and social norms built around certain practices like striving to have no food waste at meals. Informant #10 described this in stating:

> So that in particular was something that I really took away, and they were part of a more broad and abstract feeling that we all developed together at Outdoor School of caring for the environment, and being stewards, which I definitely felt some before Outdoor School as well, but I think there were a couple of specific things like that sentiment that were more cultured. It's really great to be around a group of people where everyone wants to be a part of that, and you really feel empowered to care about nature, and to be respectful of nature, and it's so much easier to do that when you're surrounded by a lot of people who also feel like that. *(Informant #10; Sampling Category B)*

Clearly for Informant #10, the social norms surrounding pro-environmental practices at SCEC ODS drove him to reformulate his social environmental identity in a meaningful way.

Informant #15 provides other thoughts about this general socialization process, in this case specifically discussing the meaningful practice of zero food waste that is the norm at mealtimes:

> I think it really cemented kind of a lot of the environmental ethics that I had before doing Outdoor School, and I think Outdoor School does a really good job of giving you like small ways to live out those values. For example, like zero waste. It's something I think about all the time and am very conscious of now and have been since college. *(Informant #15; Sampling Category B*)

This represents a concrete way in which an individual changed their self-conception in relation to the environment because of the knowledge gained through SCEC ODS. Striving to reduce food waste became a value-laden practice that many individuals attached to their identity moving forward in life.

By reworking their self-conception to match those reinforced by the social world of SCEC ODS, former short-term instructors developed unique social environmental identities as a primary outcome of their work at SCEC ODS. Throughout the provided quotes, individuals continually described how their identification as a member of the SCEC ODS community pushed them to shift their self-perception and subsequently their relationship to meaningful practices.

Social actor identity

In tandem with the development of a social environmental identity, individuals began to identify with expectations placed on counselors of being interpersonally confident leaders. This identity formation was described as a parallel process through which individuals begin to reformulate their thoughts as a social actor to meet those that exist as the norm for SCEC ODS instructors. Upon working at SCEC ODS, individuals described a realignment of their views on education to be more experiential and inquiry driven. Furthermore, individuals described a level of inter-personal growth, specifically seeing themselves as being more socially confident and valuing human connection.

Throughout their experience at SCEC ODS, individuals identified strongly with the educational style of SCEC ODS and embodied it in their self-perception. Informant #26 discusses this:

> I think it's also made me focus a lot more on inquiry-based and experiential education. 'Cause I feel like I've seen it work so much. You know, like if you can tell a kid about that, that's fine, but they're not going to remember that truly and honestly. Like kids remember how you make them feel, and kids remember if you gave them power. *(Informant #26; Sampling Category A)*

Association with SCEC ODS and learning skills through the program pushed this informant to also see herself as an educator that values utilizing these approaches.

In conjunction with these shifts in personal views on pedagogy, interpersonal outcomes were also described by former short-term instructors. Informant #18 shares what she feels the accepting community at SCEC ODS taught her:

> There is something that connects you to everyone and it's up to you whether or not you want to find it. And I think that's something really awesome Outdoor School has taught me, that all of these people that I would have never guessed would have been friends with me, we were all friends. *(Informant #18; Sampling Category B)*

For Informant #18, the shifting practices in relation to human relationships came from SCEC ODS. It was tied closely to her relationships within the social world of SCEC ODS and the connections it brought her.

The development of a social actor identity through the social world of SCEC ODS merged effective leadership and educational techniques with improved interpersonal skills, specifically openness to human connection and social confidence. As individuals began to identify with the educational style and social community present at SCEC ODS, they frequently described changing their previous conceptions of leadership, education, and social skills to fit with this identity.

Development of knowledge

Individuals frequently discussed an expansion of their social environmental and social actor identities as they became further involved in SCEC ODS, solidifying their unique self-perceptions. Individuals often returned to serve as a counselor multiple times and identified strongly with the associated social world in between these weeks. Throughout this time, individuals described growing into their identities, developing skills and knowledge on how to exist and embody meaningful practices within and beyond the SCEC ODS community.

Informant #12 discusses this growing identification with SCEC ODS upon returning for multiple weeks by sharing:

> It's become something that it went from something that I did once a year, and I did once, and just didn't really think about, but the second time I did it, being like, 'Okay, now I have some more friends in here,' to the third time being like, 'Alright, Outdoor School is my thing. I do this.' *(Informant #12; Sampling Category A)*

This informant exemplified the process described by many informants of further growing into one's identity through continued programmatic involvement.

Specifically, regarding social environmental identity, this integration with SCEC ODS reinforcing self-perception is further outlined by Informant #23:

> The more time I've spent in the natural world and the more time that I've heard from people who are really experienced and really care about it, the more important it is to me that more people know about it. I think especially now that the carbon footprint of humanity has become so big and so threatening to the way we live, planting that seed of loving nature that most kids get at a place like Outdoor School, is so important. *(Informant #23; Sampling Category A)*

Informant #23 talks about how his social connections and spending time with people who are knowledgeable about the outdoors has further shifted his perspective on how to act regarding the environment. He specifically mentions the important practice of sharing the outdoors with others growing in significance to him, reinforcing his social environmental identity.

For both social environmental and social actor identities, informants often described further growth into the social world of SCEC ODS over time, solidifying these self-perceptions within individuals. This exemplifies the third stage of identity development within social practice theory as described by Holland et al. (1998), with former short-term instructors further growing into this sense of self inspired by SCEC ODS.

Identity barrier navigation

The final portion of the results section reports how individuals perceive SCEC ODS-related outcomes across the three sampled categories informed by emerging adulthood. The navigation process individuals go through to live out their identities in light of social, developmental, and cultural pressures are often referred to as 'barriers' within social practice theory (Kitchell et al. 2000). As individuals within emerging adulthood explore various self-concepts, emerging adults often cited difficulty in living out their identities outside of SCEC ODS. This aligns with the concept of 'identity fragmentation' reported within emerging adults (Schwartz et al. 2013). This was discussed by both those still in their undergraduate education and those who were removed from it (Sampling Categories A and B). In contrast, those in adulthood (Sampling Category C) described a process of recognizing the values associated with their identities and becoming flexible with them to find ways to live them out.

Emerging adults often identified strongly with the SCEC ODS social world but discussed difficulty in transferring these associated identities to other life situations. Individuals often shared how they felt supported to be themselves at SCEC ODS while other social worlds did not provide this. In discussing her self-perceptions upon leaving SCEC ODS, Informant #12 (Sampling Category A) shared, 'We joked when I left camp, how am I going to find ways to still be my counselor self when I'm in the real world?' This sentiment is further illustrated by another emerging adult:

> It's like the rules feel different, does that make sense? You spent this entire week in this very special community where people were looking out for each other, and things didn't revolve around your phone, and things like that. Then coming back to reality it's like all of these little things that maybe you forgot about or didn't really matter when you were away, it's like they matter again. *(Informant #21; Sampling Category A)*

As emerging adults explored their sense of selves, they reported difficulty in understanding where their social environmental and social actor identities fit into the broader lives. While they placed strong values on their association with the social world of SCEC ODS, they discussed

feeling a separateness between these identities, the associated practices, and the rest of their lives.

Alternatively, individuals past emerging adulthood (Sampling Category C) were better able to navigate these barriers. This was often described as a process of flexibility and introspection where informants recognized the values associated with their social actor and social environmental identities and found ways to live out meaningful practices associated with their identities. This was discussed by Informant #6:

> I was sort of romantic about it at first, like, 'I want to be a camp counselor forever. When I graduate from college, I want to go found my own camp.' You know? That didn't happen and my dreams changed but there was definitely this romantic sense about it like, 'Oh, I could do this forever' and then as I moved forward, I could see, you know, the camp life is tricky. *(Informant #6; Sampling Category C)*

Informant #6 was currently working as a public school elementary teacher when interviewed. She described her profession choice as a way for her to continue to live out her love for education in a more stable way, incorporating experiential and environmental themes into her teaching. While emerging adults described a sense of fragmentation and difficulty in transferring their self-perceptions developed at SCEC ODS into other life scenarios, those who had made the transition into adulthood described a sense of flexibility and compromise while also staying true to their identities.

Discussion

The interpretivist findings in this study indicate that identity development supported by social learning processes may effectively describe instructor growth in a ROEE setting, providing implications for both future research and environmental education practice. The process of integration into a social world can potentially serve as an effective mechanism to promote meaningful long-term identity-related outcomes for emerging adults. This builds upon previous research done in a ROEE setting, providing insight into how learning processes are unique for short-term instructors rather than students or campers who have been the focus of prior research (e.g. Liddicoat and Krasny 2014; Williams and Chawla 2016). Additionally, the novel findings from the quota sampling approach taken in this study revealed a potential alignment between emerging adulthood developmental processes, as recalled at different points in time since the SCEC ODS experience, and the integration into social worlds as outlined by social practice theory. The findings therefore demonstrate that integrating these two complementary theoretical perspectives yields better understand of long-term ROEE outcomes for instructors, a connection lacking in prior research. Lastly, our results also provide further understanding on the link between identity and meaningful practices throughout and beyond emerging adulthood. Each of these implications for further research and practice are discussed more extensively below.

A large body of previous research has explored how various self-concepts, such as ethnic identity (Ghavami, Katsiaficas, and Rogers 2016; Syed and Azmitia 2008) and gender identity (Padilla-Walker et al. 2008), develop during the period of emerging adulthood. Findings from this study indicate that ROEE programs may be able to incorporate the social nature of these identity development processes inherent in emerging adulthood into designing effective learning processes for short-term instructors in ROEE settings as well. Williams and Chawla (2016) highlight how campers retrospectively cited social learning processes in a ROEE setting as contributing to their environmental identities later in life, specifically citing that past participants developed an ecological identity and a social environmental identity. Findings from the current study provided similar evidence that short-term instructors developed social environmental

identities from their ROEE experience. Yet in contrast to Williams and Chawla (2016) study on campers, short-term instructors also identified more strongly with the social and leadership aspects of the experience by describing a post-program social actor identity. These parallels and divergences from Williams and Chawla (2016) indicate that short-term instructors may identify with the social aspect of learning processes in ROEE settings more strongly than campers in the same environment. Given that findings from this study indicate that continued involvement and social integration into the SCEC ODS community shifted emerging adults' identities in a meaningful way, explicitly reinforcing social norms (Heberlein 2012) and incorporating community learning (Smith, DuBois, and Krasny 2016) into program design may be an effective way to promote identity-related outcomes for short-term instructors.

Additionally, study findings suggest that integrating social practice theory (Hards 2011; Holland et al. 1998; Kempton and Holland 2003) with emerging adulthood perspectives (Arnett 2000; Bynner 2005; Reifman, Arnett, and Colwell 2007) may be an effective way to study emerging adults in environmental education settings in the future. Emerging adults have broadly been an understudied community within the environmental education literature, with few studies explicitly incorporating this developmental period into study design. Despite this lack of attention, their general connection to identity exploration processes (Arnett 2000; Schwartz et al. 2013) make emerging adults an ideal population to target for identity-related learning outcomes. Social practice theory provides the opportunity to bridge the identity exploration processes emerging adults are naturally engaged in with how individuals develop meaningful identities via integration into a meaningful social world. The social nature of learning processes, like those documented in this study, have been explored to an extent in previous environmental education research (Heberlein 2012; Smith, DuBois, and Krasny 2016). The benefit of social practice theory to this broader field of literature is that it embeds the social nature of this learning into the dynamic temporal aspects of emerging adulthood development. Therefore, this integration of theoretical perspectives may be an effective link for future environmental education research on emerging adults.

Furthermore, this incorporation of emerging adulthood and social practice theory also connects identity development processes to individuals' ongoing struggle to live out meaningful practices, similar to McGuire's (2015) assertion that identity acts as a 'meta-attitude' that broadly shifts behavior in a particular direction. Individuals throughout this study shared their ongoing attempts to live out meaningful practices following the SCEC ODS experience. These stories included practices such as striving to have zero food waste at meals or sharing the outdoors with others. While this study did not explicitly measure post-program behavior, many emerging adults described a struggle to embody their social environmental and social actor identities through meaningful practices in settings outside of the ROEE experience. This disconnect has been coined the 'intention-behavior gap' in previous psychological research (Kollmuss and Agyeman 2002; Sheeran and Webb 2016). Findings from this study add nuance and context to this empirical phenomenon with short-term instructors discussing factors such as diverging social norms or structural barriers keeping them from living out their desired practices after they left the SCEC ODS community. Those beyond emerging adulthood, alternatively, were better able to act on their identities by being flexible with how they chose to live out meaningful practices. This may represent a form of 'identity flexibility' (Sinnott 2017), with individuals working to maintain a stable self-perception despite various barriers to embodying meaningful practices. Future research may aim to explore how this identity flexibility can be better fostered in emerging adults to enhance the application of post-program outcomes in other settings.

Limitations

Regarding theoretical foundations of the present study, the limitations associated with emerging adulthood as a theory and developmental period should be acknowledged. Côté (2014) presents

a critique of this conceptualization and its implications, arguing that many structural barriers (e.g. economic, social) prevent many young adults from entering the exploratory period characterized as emerging adulthood. Rather, individuals such as those that enter the labor force directly out of secondary school may be excluded from this theory. While these critiques are valid, the process of prolonged exploration asserted by emerging adulthood theory is generally supported by studies of individuals pursuing higher education (Arnett 2000). Given the population of SCEC ODS counselors only consists of individuals enrolled in a higher education program, this theory was ultimately viewed as an appropriate component of this study.

Furthermore, this study examines a single ROEE program following a specific curriculum and procedures. Short-term instructors at SCEC ODS only attend camp for a week at a time. While they often return for multiple weeks, there is a significant period between these weeks. This contrasts with most ROEE programs where counselors generally work a full season, consisting of several months of work. Given this difference from the general environmental education experience, some aspects of the ROEE experience (e.g. burnout from working multiple weeks in a row or developing a community consistently separated from the outside world) are not aspects of SCEC ODS. While this program diverges from other ROEE programs in this manner, the findings from this study indicate that it has long-term effects on participants. In spite of methodological limitations regarding camp length and type represented in this study, our findings offer fruitful recommendations for a broad array of ROEE organizations.

Conclusion

ROEE experiences may exist as an educational setting for short-term instructors as well as the campers and students for whom they are primarily designed. Short-term instructors, as emerging adults engaging in their own unique identity exploration processes, may specifically be an ideal population to foster identity-related learning processes. This is especially important as outcomes related to developing an environmental identity have been shown to have a variety of positive outcomes in previous environmental education research (Green, Kalvaitis, and Worster 2016; McGuire 2015; Williams and Chawla 2016). ROEE organizations have an opportunity to further enhance their programmatic results by intentionally fostering learning outcomes for their short-term instructors in this manner.

Findings from this study show that identity development was driven by integration into a social world for short-term instructors in a ROEE program intentionally designed to promote learning amongst this population. By becoming associated with the norms and culture of SCEC ODS, individuals began to see themselves differently and act out meaningful practices that embodied this unique self-perception. This involved the development of both a social environmental and social actor identity, highlighting how individuals integrated leadership outcomes with pro-environmental outcomes in their post-program sense of self. Those within emerging adulthood specifically cited difficulty in living out meaningful practices outside of SCEC ODS, while those beyond emerging adulthood more easily negotiated ways to live out their SCEC ODS-related identities. This study determined that social learning may be a promising future avenue of research for emerging adults in environmental education settings as well as a way for current ROEE programs to enhance their impact. Although research has examined camper outcomes in ROEE programs previously (Mullenbach, Andrejewski, and Mowen 2019; Williams and Chawla 2016), this study presents the first evidence that short-term instructors may also be an important and impactful population gaining learning outcomes from ROEE experiences.

Disclosure statement

ORCID

Timothy J. Mateer 🆔 http://orcid.org/0000-0002-6828-4340
B. Derrick Taff 🆔 http://orcid.org/0000-0001-9536-527X
Carter A. Hunt 🆔 http://orcid.org/0000-0001-6319-8171
Pete Allison 🆔 http://orcid.org/0000-0002-9118-011X
Ellen Will 🆔 http://orcid.org/0000-0002-9362-3762

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