2022 NRPA ANNUAL CONFERENCE

RESEARCH SESSION ABSTRACTS

National Recreation and Park Association
2237 Belmont Ridge Road, Ashburn, VA 20148

PREFACE

Welcome to the 45th year of research sessions at the National Recreation and Park Association (NRPA) Annual Conference. We are grateful for the opportunity to once again gather in person and provide research posters presentations of this year's NRPA Research Sessions (NRS). We hope you find this book of abstracts a beneficial way to review a sample of the existing research related to parks and recreation.

The NRS abstracts are intended to advance parks and recreation research and provide practical application for parks and recreation professionals and providers. Each abstract contains an overview of the research with an eye to how to apply the research to practice and how it is relevant to the day-to-day management of parks and recreation programs and facilities.

Our goal is to continue to strengthen the research-to-practice connection and ensure that research is provided in the service of the profession and the overall benefit of society. We believe that the research presented here does that, and we hope you will continue the conversation by attending the authors' onsite poster presentations. Contact information for the lead author is also provided at the end of each abstract.

The organization of NRS is a collaborative effort. We would like to thank the NRPA education team for their invaluable assistance and dedication to this year's endeavor. We also extend our thanks to the reviewers, whose commitment to service and the profession is much appreciated. Each NRS proposal was assigned both an academic as well as a parks and recreation professional reviewer. And of course, none of this would be possible without the many researchers. Thank you.

Bob Brookover, Ph.D.
Clemson University

Joseph Walker, Ph.D.
University of North Texas

2022 NRPA Research Sessions-Co-Chairs

2022 NRPA RESEARCH SESSION REVIEWERS

NRS Co-chair: **Bob Brookover,** Clemson University

NRS Co-chair: **Joseph Walker**, University of North Texas

Nick Aceves, MS, CPRP
Parks and Recreation Director
Salisbury Parks and Recreation

Jen Basham, MS, CPRE, CPO
Parks and Recreation Director
City of Burleson

Shannon Coates, PhD, MBA, CPRE
Director of Parks and Recreation
Frisco Parks & Recreation

Maggie Daniels, PhD
Professor of Tourism and Events Management
George Mason University

Andy Dotterweich, PhD
Professor and Coordinator of Long-term
Athlete Development
East Tennessee State University

Keith Fulthorp, EdD
Associate Professor
California State University, Long Beach

Brandon Harris, PhD, MBA
Assistant Professor of Practice
University of Arizona

Chris Nunes, CPRE
Director of Parks and Recreation, The
Woodlands Township

Tom O'Rourke
Professor of Practice
Clemson University

Wade Walcutt
Director of Parks and Recreation
City of Durham

Jamie Rae Walker, PhD
Associate Professor
Texas A&M University

Jo An Zimmermann, PhD, CPRE
Associate Professor, Department of Health
and Human Performance
Texas State University

CONTENTS

A LONGITUDINAL ANALYSIS OF LIFE SATISFACTION FOR PEOPLE WITH SPINAL CORD INJURY

AUTHORS

HaoAi Zhao
Indiana University
haoazhao@iu.edu

Shu Cole
Indiana University

Introduction/Rationale

Life satisfaction is one of the crucial areas in spinal cord injury (SCI) research (Post, & van Leeuwen, 2012; Jörgensen, Iwarsson, & Lexell, 2017). Achieving life satisfaction improvement following the injury is a goal of SCI-rehabilitation (Jörgensen, Hedgren, Sundelin, & Lexell, 2021). Although extensive research has investigated life satisfaction for people with SCI, limited studies have examined the long-term changes of factors impacting life satisfaction. In addressing injury-related secondary complications that develop in the years after injury, studies have found psychosocial changes in terms of perceived life satisfaction and quality of life (Charlifue, Lammertse, & Adkins, 2004), where predictors such as demographics and secondary health conditions change over time.

Review of the literature suggests that several demographic characteristics (gender, income level, and education level), participation in leisure and recreational activities, self-rated health condition, and increased mobility can contribute to the life satisfaction of people with SCI. Amongst those predictors, leisure activity is associated with several health benefits, such as reduced the risk of obesity, improved balance and reduced fear of falling, improved short-term and long-term memory, verbal reasoning, and a lower risk of cognitive impairment (Klieman, Hyde, Berra, & Haskell, 2007; Cassilhas, Viana, Grassmann, et al., 2007; Thobaben, 2009). Beside the physical and cognitive benefits, participating in leisure activities can positively impact life satisfaction (Chen, 2001; McGuire, Boyd, & Tedrick, 2009; White, Wójcicki, & McAuley, 2009; Schaie & Willis, 2011), also help individuals recover faster from negative life experiences (Kleiber, Hutchinson, & Williams, 2002; Janke, Nimrod, & Kleiber, 2008). It provides individuals with an outlet to gain control over their life when they are dealing with chronic health conditions (Nimrod & Hutchinson, 2010).

Specific objectives of the study are to (1) examine the patterns of changes in life satisfaction predictor variables: recreation activity participation self-rated health condition, and mobility level; (2) whether recreation participation of SCI people is influenced by self-rated health condition and mobility level; and (3) whether recreation participation, mobility level, gender, income level, and education level predict life satisfaction for people with SCI.

Methods

The data used in this study are from the National Spinal Cord Injury Model Systems (SCIMS)

Database sponsored by the National Institute on Disability, Independent Living, and Rehabilitation Research, collected in surveys from1973 to 2021. The data set is collected from patients with SCI at discharge of initial rehabilitation, and every five years post-discharge, for up to 45 years. 15,255 participants are retained in the study. This study uses the Craig Handicap Assessment and Reporting Technique short form (CHART-SF) to measure recreation hours/week and mobility level. Self-perceived health status is measured in a five-point Likert scale (1=excellent, 2=very good,3=good, 4=fair, 5=poor). Life satisfaction is measured by the Satisfaction with Life Scale, which is widely used to assess subjective wellbeing. The study applies growth curve modeling and generalized linear mixed model (GLMM) to examine the change patterns over time. To address potential bias, demographics including gender, income level, and education level are controlled. RStudio is the statistical tool used in this study.

Results

In Table.1, SCI persons' recreation participation (B=-.01, p=.09) and mobility level (B=-.45, p<.00) decreased over time, however, their self-rated health condition (B=-.01, p<.00), and life satisfaction increase (B=.07, p<.00). In Table.2, results show that all the predictors have statistical significance to participants' recreation participation and life satisfaction when sex, education, and family income are controlled. In the first recreation model, conditional R^2 (=.203) means SCI persons' mobility level, self-perceived health status, and the controlled demographic variables can explain 20.3% of the recreation variance. Recreation participation, SCI persons' mobility level, and self-perceived health status have positive impacts on total life satisfaction and can explain 53.3% the variance of life satisfaction with the controlled demographic variables.

Application to Practice

Participating in recreational activities regularly, having proper mobility to support daily going out or even days out of home, and being confident to own health status have positive impacts on SCI persons' total life satisfaction over time. For recreation participation, both mobility level and self-rated health status have positive impacts. One finding needs more attention is the difference between SCI persons' evaluation of their own health status and the objective measurement of mobility level. It is obvious that when SCI persons have high confidence on their own health, their recreation participation and life satisfaction increase. Comparing to mobility level, SCI persons' self-evaluation of health status increases over time, in contrast to the decreasing mobility level. Previous studies argue that relying on clinical outcomes may fail to capture the more complete and complex experience of individuals, such as in gerontology studies. In this study, the discrepancy between the mobility level and self-evaluated health status proves this concern. For future life satisfaction studies, what types of variables to include in the model needs more exploring.

Previous studies about recreation participation and life satisfaction usually use one-time survey which cannot fully detect the impact of recreation activities since individuals change over time and plenty of factors can influence the survey outcomes without being noticed. It is reasonable to explore the impact of recreation under repeated measurements since it can help to lower the variability and keep the validity of the results higher. The recreation variable from the dataset counts recreation activities together, including but not limit to sports, exercise, or watching movies (excluding watching TV or listening to the radio). Future studies could focus on exploring what types of recreation activity impact life satisfaction more among the SCI population, and what intervention can be applied to encourage more recreation participation among people with SCI and other disabilities.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Have a brief understanding on how longitudinal analysis can be applied to the recreation and wellness study.
2. See the difference between self-reported health data and objective health data in life satisfaction prediction.
3. Have a brief understanding on the special characteristics of people with disabilities in recreation and wellness study.

Tables and Figures

Table 1. Variables' Changes Across Time

		B	SE	95% CI (LL, UL)
Recreation	Intercept	11.8**	0.17	(11.49, 12.18)
	Post injury year	-0.01	0.01	(-0.03, 0.00)
Mobility level	Intercept	85.25**	0.33	(84.59, 85.91)
	Post injury year	-0.45**	0.01	(-0.48, -.042)
Self-perceived health	Intercept	2.56**	0.01	(2.53, 2.59)
	Post injury year	-0.01**	0.00	(0.00, 0.01)
Life satisfaction	Intercept	20.93**	0.10	(20.73, 21.13)
	Post injury year	0.07**	0.00	(0.07, 0.08)

Table 2. GLMM Output for SCI Persons' Recreation Participation and Life Satisfaction

		Recreation	
Predictors	*Estimates*	*CI*	*p*
(Intercept)	12.69	11.75 – 13.63	<0.001
Sex	-1.29	-1.76 – -0.81	<0.001
Education	-0.06	-0.20 – 0.08	0.42
Family Income	-0.25	-0.36 – -0.13	<0.001
Mobility	0.04	0.03 – 0.04	<0.001
Self-perceived health	-1.21	-1.39 – -1.03	<0.001
Random Effects			
σ^2	120.39		
ICC	0.19		
Marginal R^2 / Conditional R^2	0.021 / 0.203		
		Life Satisfaction	
Predictors	Estimates	CI	p
(Intercept)	22.06	21.52 – 22.60	<0.001
Sex	0.81	0.50 – 1.12	<0.001
Education	0.36	0.27 – 0.44	<0.001
Family Income	0.48	0.41 – 0.54	<0.001
Recreation	0.03	0.02 – 0.04	<0.001
Mobility	0.04	0.03 – 0.04	<0.001
Self-perceived health	-2.00	-2.09 – -1.90	<0.001
Random Effects			
σ^2	26.5		
ICC	0.45		
Marginal R2 / Conditional R2	0.158 / 0.533		

References

Charlifue, S., Lammertse, D. P., & Adkins, R. H. (2004). Aging with spinal cord injury: Changes in selected health indices and life satisfaction. *Archives of Physical Medicine and Rehabilitation*, 85(11), 1848-1853.

Schaie KW, Willis SL. (2011). Handbook of the Psychology of Aging (7th. Ed). San Francisco, CA: Academic Press.

Klieman, L., Hyde, S., Berra, K., & Haskell, W. (2007). Exercise and older adults. *Current Cardiovascular Risk Reports*, 1, 335– 339.

Thobaben, M. (2009). Fall prevention for older adults. *Home Health Care Management & Practice*, 21, 445– 447.

Cassilhas, R.C., Viana, V.A., Grassmann, V., et al. (2007). The impact of resistance exercise on the cognitive function of the elderly. *Medicine & Science in Sports & Exercise*, 39, 1401– 1407.

Chen, C. (2001) Aging and life satisfaction. *Social Indicators Research*, 54, 57– 79.

McGuire, F.A., Boyd, R., & Tedrick, R.T. (2009). Leisure and Aging: Ulyssean Living in Later Life. Champaign, IL: Sagamore.

White, S.M., Wójcicki, T.R., & McAuley, E. (2009). Physical activity and quality of life in community dwelling older adults. *Health and Quality of Life Outcomes*,7, 10.

Janke, M. C., Nimrod, G., & Kleiber, D. A. (2008). Leisure activity and depressive symptoms of widowed and married women in later life. *Journal of Leisure Research*, 40(2), 250–266.

Kleiber, D. A., Hutchinson, S. L., & Williams, R. (2002). Leisure as a resource in transcending negative life events: Self-protection, self-restoration, and personal transformation. *Leisure Sciences*, 24(2), 219–235.

Nimrod, G., & Hutchinson, S. (2010). Innovation among older adults with chronic health conditions. *Journal of Leisure Research*, 42(1), 1–23.

Post, M.W. & van Leeuwen, C.M. (2012). Psychosocial issues in spinal cord injury: A review. *Spinal Cord*, 50, 382-389.

Jörgensen, S., Iwarsson, S., & Lexell, J. (2017). Secondary health conditions, activity limitations, and life satisfaction in older adults with long-term spinal cord injury. *PM&R*, 9 (4), 356-366.

Jörgensen, s., Hedgren, L, Sundelin, A., &Lexell, J. (2021). Global and domain-specific life satisfaction among older adults with long-term spinal cord injury. *The Journal of Spinal Cord Medicine*, 44 (2), 322-330. doi: 10.1080/10790268.2019.1610618

A QUALITATIVE EXPLORATION OF LEISURE AND WORSHIP

AUTHOR

Paul Heintzman, PhD

University of Ottawa

pheintzm@uottawa.ca

Introduction/Rationale

This research study explores the relationship between leisure and Christian worship. Roman Catholic theologian and philosopher Josef Pieper (1963) in his classic book Leisure: The Basis of Culture wrote that "…leisure can only be made possible and justifiable on the same basis as the celebration of a festival. That basis is divine worship" (p. 56). He goes on to write: "The celebration of divine worship, then, is the deepest of the springs by which leisure is fed and continues to be vital" (p. 60). While several non-empirical studies explore the relationship between leisure and worship (Dahl, 1972; Joblin, 2009; Trunfio, 1991, Waller, 2010), to date there has been very little empirical research on this topic.

A few studies, while exploring related topics, have made small observations on leisure and worship. For example, a study of the meanings of leisure for aging black women observed that the women "expended great energy to maintain the place where they relax, serve, and worship: 'Church is not leisure and not work, it's worship'" (Allen & Chin-Sang, 1990, p. 739), while a study on lesbian women attending a LGBTQ-focused, straight-friendly church, noted that the women viewed the church "as a meaningful source of leisure" (Barbosa & Liechty, 2018, p. 91). More relevant is a study by Sonnenberg and Barnard (2015) who examined whether youth worship was recreation and concluded that it was, based on four themes: being free and informal, enjoying a stirring and silent atmosphere, expressing and actualizing the self, and recharging faith. Given the lack of research on this topic, this research study explores Pieper's assertion and will investigate both how worship influences leisure and how leisure influences worship in the lives of Christians.

Methods

This qualitative study consisted of in-depth interviews with a small sample to explore the relationship between leisure and Christian worship. The sample included male and female participants ranging in age from 20s to 60s from a diversity of ethnicities (e.g., African North American, Indigenous) and North American geographic regions as well as denominational (e.g., Presbyterian, Pentecostal) and theological traditions to explore the possible complexity of relationships between these two phenomena. The researcher followed an interview guide that could be adapted as the interview progressed. The interviews began by asking participants their understandings of leisure and their understandings of worship before asking questions about the relationships between these two phenomena. Probing questions were used to obtain a thorough and informative account of the participants' understanding of these relationships. The interviews were recorded with the participant's permission and then transcribed. Interpretive analysis was used to arrive at the themes that describe the relationships between these two phenomena.

Results

Most participants saw worship has having multiple dimensions. First, worship was associated with a certain attitude. One participant stated, "It's worship if I'm doing it…with gratitude and conscious that God put me in this place…joyfully…It's where your heart is." Another explained, "Worship is acknowledging God and everything he is…enjoying him is part of that too…'whatever you do, do it with all your heart as unto the Lord'." Second was corporate worship, described by one participant as "Coming together and acknowledging who God is and hearing Scripture read, singing songs that worship him, hearing scripture proclaimed, acknowledging our sin, asking for forgiveness."

Third was individual worship. One participant said, "I think it [worship] can be done individually during the week when I just read scripture and pray and acknowledge who God is." Another noted, "it's not a one-day thing, it's a seven-day thing." Leisure was primarily defined as being associated with some sense of freedom. One participant stated, "leisure is a choice…there are disciplines, obligations and burdens that come with work. Leisure usually does not have those." Another participant noted that "leisure is when there are no structures, disciplines…it's free time." A third explained, "It's free time…extra time you have in your day to relax. To do something that is not work and you don't even have to do anything that is productive per se…time to do what I want."

Most participants saw a relationship between worship and leisure. One participant explained that leisure permeated all of life including leisure: "there is worship called for in every aspect of life, every quadrant of life, so certainly for leisure too. God is worthy of praise, of thanksgiving every moment of our life." One participant claimed that worship helped her "be" which was a characteristic of leisure, not work: "Worship is connected to my leisure. Worship can help me be, just in connection with God…I don't think I have to do anything, I just have to be. I just have to know who God is and know who I am and just be…" Another participant connected free time to both worship and leisure: "In my free time, that's when I see I'm having that worship and leisure merge."

The leisure and worship connection was particularly evident for participants when they were in creation (nature): "Worship can help me be, just be in connection with God, but like…today just being out in beautiful nature and walking with my friend. I was just telling God, thank you for the beautiful world you made, you know, and I could just be." Specific leisure activities that participants associated with worship varied from participant to participant (e.g., drumming, singing, dancing, travel, knitting).

Application to Practice

The findings of this study reinforce previous research on leisure and spirituality. The understanding of worship as an attitude that permeates all of life is congruent with previous research that has documented how having an attitude during leisure that is characterized by a sense of gratitude, celebration, receptivity and being in the moment is conducive to spiritual outcomes (Anderegg et al., 2002; Heintzman, 2000; Kraus, 2009). The connection between worship and leisure in creation (nature) is consistent with many studies that have found being in nature to be conducive to spiritual outcomes (Anderegg et al., 2002; Ellard et al., 2009; Fox, 1997; Heintzman, 2000; Lafrance, 2011; Livengood, 2009; Lusby & Anderson, 2010; Schmidt & Little, 2007). Furthermore, participants in qualitative studies have identified numerous and diverse leisure activities that they associate with spiritual outcomes (Berkers, 2012; Heintzman, 2000; Schmidt & Little, 2007; Stringer & McAvoy, 1992).

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Have an attitude of receptivity, gratitude and celebration enhances the leisure/worship relationship.
2. Learn that the leisure/worship relationship is enhanced by providing and encouraging opportunities for leisure in nature.
3. Learn that the specific leisure activities that people associate with worship vary from individual to individual.

References

Allen, K. R., & Chin-Sang, V. (1990). A lifetime of work: The context and meanings of leisure for aging black women. The Gerontologist, 30(6), 734-740.

Anderegg, M., Cini, F., Godula, M., MacKenzie, S. N., Nason, S., Pearson, D., & Grafanaki. S. (2002). "When Heaven and Earth meet": A qualitative study on the experience of leisure and spirituality among mental health professionals (Unpublished master's research project). St. Paul University.

Barbosa, C. & Liechty, T. (2018). Exploring leisure constraints among lesbian women who attend a straight-friendly church, Journal of Leisure Research, 49(2), 91-108.

Berkers, V. (2012). Religion, spirituality and leisure: A relational approach. The experience of religion and spirituality of Dutch New Christians and New Spirituals during leisure activities [Unpublished master's thesis]. Utrecht University.

Dahl, G. (1972). Work, play, and worship in a leisure-oriented society. Augsburg.

Ellard, A., Nickerson, N., & Dvorak, R. (2009). The spiritual dimension of the Montana vacation experience. Leisure/Loisir, 33(1), 269–289.

Fox, R. J. (1997). Women, nature and spirituality: A qualitative study exploring women's wilderness experience. In D. Rowe & P. Brown (Eds.), Proceedings, ANZALS conference 1997 (pp. 59–64). Australian and New Zealand Association forLeisure Studies, and the Department of Leisure and Tourism Studies, The University of Newcastle.

Heintzman, P. (2000). Leisure and spiritual well-being relationships: A qualitative study. Society and Leisure, 23(1), 41–69.

Joblin, D. (2009). Leisure and spirituality: An engaged and responsible pursuit of freedom in work, play, and worship. Leisure/Loisir, 33(1), 95-120.

Kraus, R. (2009). Straddling the sacred and secular: Creating a spiritual experience through belly dance. Sociological Spectrum, 29, 598–625.

Lafrance, M. N. (2011). Reproducing, resisting and transcending discourses of femininity: A discourse analysis of women's accounts of leisure. Qualitative Research in Sport, Exercise and Health, 3(1), 80–98.

Livengood, J. (2009). The role of leisure in the spirituality of New Paradigm Christians. Leisure/Loisir, 33(1), 389–417.

Lusby, C., & Anderson, S. (2010). Ocean cruising—a lifestyle process. Leisure/Loisir, 34(1), 85–105.

Pieper, J. (1963). Leisure: The basis of culture (A. Dru, Trans.). The New American Library.

Schmidt, C., & Little, D. E. (2007). Qualitative insights into leisure as a spiritual experience. Journal of Leisure Research, 39(2), 222–247.

Sonnenberg, R., & Barnard, M. (2015). Youth worship as recreation. International Journal of Practical Theology, 19(1), 138-163.

Trunfio, M. (1991). A theological perspective on the ethics of leisure. In G. Fain (Ed.), Leisure and ethics: Reflections on the philosophy of leisure (pp. 151–59). American Association for Leisure and Recreation.

Waller, S.N. (2010). Leisure in the life of the 21st Century Black Church: Re-thinking the gift. Journal of CSKLS, 1(1), 2010, pp. 33-47.

A SNAPSHOT OF ACTIVITIES IN OUT-OF-SCHOOL TIME PROGRAMMING USING A SOCIAL JUSTICE FRAMEWORK

AUTHORS

Katrina Black Reed, PhD
Penn State Abington
kbr5388@psu.edu

Alexa Pagan
Penn State Abington

Terron Whitsett
Penn State Abington

Introduction/Rationale

In recent years, the implementation of Social Justice practices in both formal and informal spaces have attracted increased attention from youth development scholars (Black Reed, 2019; Fernandez et al., 2020; Murray & Milner, 2015; Stacy & Acevedo-Polakovich, 2018). Formal spaces such as school settings may not provide skillsets sustainable for the diverse perspectives in America (Ladson-Billings, 2011). Unfortunately, school settings can become a place where youth hide who they are, a place where "students are locked out of social and cultural benefits" (Ladson-Billings, 2011, p.36). In contrast, out-of-school time (OST) programs provide an informal space where youth can enhance their knowledge of social, political, economic and cultural concepts while learning to lead and mobilize change within their communities (Ginwright & Cammarota, 2002; Pryor & Outley, 2014; Carey, Akiva, Abdellatif, & Daughtry, 2020). Niblett (2017) contends that youth workers in these spaces are responsible for "planting the seeds that allow students to take social justice in their own direction" p.17. To this end, more research on justice-related practices, and specifically the activities implemented in informal spaces (e.g., out-of-school time programs), is needed to better understand the nature and impact of social justice programming within these spaces.

In response to the need for more systematic research in this area, this poster proposes a scoping review as a method to assess existing programming. This approach addresses the following characteristics unique to examining social justice programming within informal spaces: Firstly, there are literature reviews on the implementation of social justice pedagogy in a school setting (Berry & Walkowiak, 2012; Ford, 2011; Ladson-Billings, 2011; Milner, 2011; Meister, Zimmer, Wright, 2017), and there are literature reviews on implementing sociopolitical development that cultivate the social justice lens in OST organizations (Black Reed, 2019; Murray & Milner, 2015). What is lacking is a review of the social justice program's practices and how they correlate with a social justice framework. Although OST programs vary in approaches to youth development, analyzing the social justice activities of the program would be beneficial to both the youth and practitioner and transparent to stakeholders of the impacts for using such framework.

Secondly, the scoping review provides a snapshot of social justice activities implemented in OST programs and youth serving organizations in urban areas. Although useful by itself, this scoping review may be used as a precursor to a full systematic review. Lastly, the scoping review would identify knowledge gaps that can be summarized for practitioners who implement social justice activities and clarify concepts for policy makers who provide funding (Arksey & O'Malley, 2003; Munn, et al., 2018). The dissemination of such activities and practices could help shape the future of social justice programming among OST and youth serving organizations.

Not all programs with justice-oriented activities are guided by a framework that is proven to yield promising justice-related outcomes in youth. One such framework is the Social Justice Youth Development (SJYD) framework, which uses five principles to bring about social and cultural awareness while also empowering urban youth (Ginwright & Cammarota, 2002). The SJYD framework posits that youth can learn to navigate through the current injustices of the world and use that knowledge to be social agents of change. With these principles, youth discover the role they play in forging a democratic society and more equitable institutions that affect their well-being and thrive in adulthood. Moreover, youth attending OST programs can garner sociopolitical tools that can be used to help build their communities and provide opportunities for community-based careers (Murray & Milner, 2015). A scoping review of the OST programs that claim to implement social justice activities can help inform practitioners where strengths are prevalent and where gaps exist.

Methods

To obtain a preliminary understanding of the social justice activities according to the OST program practices, our research was guided by the following research questions: Do OST programs practices use principles from the SJYD framework to facilitate social justice activities? What are OST programs using as a guide to cultivate social justice among youth? The scoping review was conducted following the Arksey & O'Malley methodological framework. A keyword search of four databases followed by eligibility screening led to ten articles for this scoping review. The specific actions and outcomes of the social justice activities were highlighted, extracted, and explored. The SJYD principles were used as a guide to analyze the social justice activities conducted in the OST spaces.

Results

We used peer-reviewed articles and selected programs that urban youth between the ages of 11- 22 years old attended. Out of 110 articles, we were able to analyze and exclude 92 articles, resulting in 18 articles to review. Out of those 18, we evaluated and selected 9 peer-reviewed articles with specific programs that represented the five SJYD principles of the framework (indicated in Figure 1). Briefly speaking, we found that out of the 9 articles, 80% of the stated activities correlated with at least two SJYD principles: analyzing power in social relationships and making identity central. Additionally, we found that 50% of the stated activities correlated with two SJYD principles: encourages collective action and embrace youth culture. Finally, 33% of the stated activities correlated to the principle: promoted systemic social change.

Application to Practice

Acknowledging that OST activities correlate with the SJYD principles provides insight into potential outcomes from youth participation in in OST services. The SJYD framework is one way to support sociopolitical development and well-being among youth and it enhances youths' outlook on life. Significantly, our research found that that each program implemented at least one SJYD principle; however, no program implemented all five principles. Implementing all the principles in the framework is helpful in cultivating the optimal outcomes of youth development and consciousness building. Our findings from this review can support practitioners' attention to activities that foster young people's agency and bring about intentional practices to OST organizations. Additionally, our findings provide areas where justice-oriented OST programs can improve the activities and practices implemented to work towards a more effective and streamlined approach.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Identify which out-of-school time programs use a social justice youth development framework by attending our research poster.
2. Use the social justice youth development framework as a guideline to analze justice-oriented activities in an out-of-school time program.
3. Learn the benefits for using a specific social justice framework and learn how to conduct their own scoping review.

Tables and Figures

Figure 1.

Out of School Time Programs	Social Justice Youth Development Principles
	1
Good Trouble: Lessons in Social Justice for Minecraft: Education Edition	X
2. Targeting Urban African American Youth …	
3. Community Engaged Learning Courses Gives Students Exposure to Social …	X
4. 'And school won't teach me that!' Urban youth activism programs as …	
5. The role of youth engagement in positive youth development and …	X
6. The Potential for Youth Programs to Promote African American Youth's…	X
7. Building Youth Power Through Healing: How Healing is Critical to Youth…	X
8. The Impact of Oakland Freedom School's Summer Youth Program…	X
9. Community Engaged Learning Courses Gives Students Exposure to Social…	X
10. Just spaces: Urban recreation centers as sites for social justice youth…	X

Legend: Social Justice Youth Development Principles

1. Analyzing Power in Social Relationships
2. Makes Identity Central
3. Promote Systemic Social Change
4. Encourages Collective Action
5. Embracing Youth Culture

References

Arksey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. International journal of social research methodology, 8(1), 19-32.

Berry III, R., & Walkowiak, T. A. (2012). Using culturally relevant pedagogy and social justice to understand mathematics instructional quality in an urban context. African American students in urban schools: Critical issues and solutions for achievement, 4, 161-184.

Black Reed, K. "The Role of Out-of-School Time Programming in Predicting Critical Reflection and Positive Outcomes in Marginalized Youth" (2019). All Dissertations. 2535 https://tigerprints.clemson.edu/all_dissertations/2535

Carey, R. L., Akiva, T., Abdellatif, H., & Daughtry, K. A. (2021). 'And school won't teach me that!'Urban youth activism programs as transformative sites for critical adolescent learning. Journal of Youth Studies, 24(7), 941-960.

Fernandez, M., Lee, K. J., Larson, L., Johnson, C. W., Mowatt, R., Bush, K., Robinett, J., Sharaievska, I. & Stewart, W. (2020). Deepening diversity: A collection of teaching perspectives and strategies from social justice advocates. SCHOLE: A Journal of Leisure Studies and Recreation Education, 1-18. https://doi.org./10.1080/1937156X.2020.1763875

Ford, B. A. (2011). Culturally responsive school-community partnerships: Strategy for success. In J. G. Landsman & C. W. Lewis (Eds.), White teachers/diverse classrooms: Creating inclusive schools, building on students' diversity, and providing true educational equity (2nd ed.) (pp. 329-343). Sterling, VA: Stylus Publishing.

Ginwright, S., & Cammarota, J. (2002). New terrain in youth development: The promise of a social justice approach. Social Justice, 29(4 (90), 82-95.

Ladson-Billings, G. (2011). "Yes but how do we do it?" Practicing culturally relevant pedagogy. In J. G. Landsman & C. W. Lewis (Eds.), What teachers/diverse classrooms: Creating inclusive schools, building on students' diversity, and providing true educational equity (2nd ed.) (pp. 33-46). Sterling, VA: Stylus Publishing, LLC.

Meister, S. M., Zimmer, W. K., & Wright, K. L. (2017). Social Justice in Practitioner Publications: A Systematic Literature Review. Journal of Urban Learning, Teaching, and Research, 13, 90-111.

Milner IV, H.R. (2011). Culturally responsive school-community partnerships: Strategy for success. In J. G. Landsman & C. W. Lewis (Eds.), White teachers/diverse classrooms: Creating inclusive schools, building on students' diversity, and providing true educational equity (2nd ed.) (pp. 329-343). Sterling, VA: Stylus Publishing, LLC.

Munn, Z., Peters, M. D., Stern, C., Tufanaru, C., McArthur, A., & Aromataris, E. (2018). Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. BMC medical research methodology, 18(1), 1-7.

Murray, I. E., & Milner, H. R. (2015). Toward a pedagogy of sociopolitical consciousness in outside of school programs. The Urban Review, 47(5), 893-913.

Niblett, B. (2017). Social Justice Education: Stories and strategies for teachers. Bethany, OK: Woods N Barnes Publishing.

Pryor, B. N. K., & Outley, C. W. (2014). Just spaces: Urban recreation centers as sites for social justice youth development. Journal of Leisure Research, 46(3), 272-290.

Stacy, S. T., Acevedo-Polakovich, I. D., & Rosewood, J. (2018). Youth Go: An Approach to Gathering Youth Perspectives in Out-of-School Time Programs. Afterschool Matters, 28, 34-43.

A STUDY OF 5 – 13 YEAR OLDS USE OF PLAYGROUND EQUIPMENT AND THEIR PERSPECTIVES ON DESIGN

AUTHOR

Suzanne Quinn, PhD, FHEA, CPSI

KOMPAN Play Institute

suzqui@kompan.com

Introduction/Rationale

Playgrounds are places where children can play actively and obtain a range of physical, social, emotional, and cognitive benefits. This study provides insight regarding children's use of playground equipment and their perspectives on design. The findings will help playground owners and designers to make informed decisions about playground equipment choices that will support active social play

Methods

This case study is informed by observations of 21 children aged 5 – 13 using fixed playground equipment at an after-school program over the course of five days. The time of the playground use was scheduled by the staff at the program, but children were free to play how they wanted to and with whom. The researcher used a running record of the movements of the children on the playground, supported by video recordings. Children also participated in focus groups to discuss their opinions on the playground and outdoor play in general.

Current research on the use of outdoor playgrounds and play spaces provides a context for understanding that playground design has an effect upon children's play behaviors. Studies have found that children engage in more active play when there is fixed playground equipment (Adams et al., 2018; Farley et al., 2008; Stanton-Chapman et al., 2018), and that having more equipment facilitates more active play (Cohen, 2020; Nielsen et al., 2010). The current study allows us to be able to take a fine-grained look at the duration of play on specific play equipment as well as the use patterns of the playground in terms of how many pieces of equipment the children use in a typical play episode, and how many children play together.

Results

The play of the children in this case study was robust. Often the children played games of chase and tag and used the equipment as escape routes. In the analysis of how children move between pieces and in groups, there was no single pattern of movement from place to place, although there were common starting points. Younger children (aged 5 – 6) demonstrated more movement in the space, and more play episodes than the older children (aged 9 – 10) who played for longer times in less spaces. All movements observed between play pieces were Moderate to Vigorous Physical Activity (MVPA).

Of particular interest are those pieces of play equipment that are most visited and visited often, as well as those pieces that have long playtimes combined with a high capacity. It could be reasoned that these structures are ‘must haves’ for a playground. In this study, three pieces stand out. These are a high-capacity arched climber, a basket swing, and a high-capacity spinning structure. It is notable that the items express the diversity of what is available on the playground (climbing, swinging, and spinning), which resonates with the body of research that supports the need for variety in play on a playground.

The children’s perspectives shared in the interviews showed that the playground was a place that the children enjoyed spending time. The youngest children aged 5 – 6 were very enthusiastic about playing outdoors. The older children (both in the 11 – 13 age range and the 9-10 age range) spoke more about the details of the playground and were keen to offer their insights on what they liked and what they would like to see more of on a playground. Favorite pieces of equipment were the high-capacity spinner, the basket swing and the rope climbing structure. This supports what was observed with regard to structures that were used often when the children were observed.

The oldest children (ages 11 – 13) did not have specific recommendations for improvement of the equipment but did express a dislike of the playground surface (wood chips). The children in the middle age group (ages 9 – 10) had a range of ideas for what they would like in the outdoor environment, most of which went beyond the range of what is possible on a playground (for example, they desired equipment that could be used as a ‘trap’ for their games of chase, and heights that were beyond what is allowed by the safety regulations.

Application to Practice

This study deepens our understanding of how children in this age group use playground equipment. We have found that we can increase activity through design and encourage longer playtimes by creating an environment where children and the adults who care for them will want to stay and play. This is achieved by providing equipment that will support a range of bodily movements and opportunities for social interaction.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Be aware of the research that has examined childrenâ€™s dwell time on playgrounds.
2. Identify playground equipment features that enhance active social play for children 5 – 13 years old.
3. Apply research informed design principles for active social playgrounds.

References

Adams, J., Veitch, J. & Barnett, L. (2018). Physical activity and fundamental motor skill performance of 5–10 year old children in three different playgrounds, Int. J. Environ. Res. Public Health, 15, 1896; doi:10.3390/ijerph15091896

Cohen, D. A., Han, B., Williamson, S. et al. (2020). Playground features and physical activity in U.S. neighborhood parks, Preventive Medicine https://doi.org/10.1016/j.ypmed.2019.105945

Farley, T. A., Meriwether, R. A., Baker, E. T., Rice, J. C., & Webber, L. S. (2008). Where Do the Children Play? The Influence of Playground Equipment on Physical Activity of Children in Free Play Journal of Physical Activity and Health, 5, 319-331

Nielsen, G., Taylor, R., Williams, S., & Mann, J. et al. (2010). Permanent Play Facilities in School Playgrounds as a Determinant of Children's Activity, Journal of Physical Activity and Health, 7, 490-496

Stanton-Chapman, T. L., Toraman, S., Morrison, A., Dariotis, J. K., & Schmidt, E. L. (2018). An observational study of children's behaviors across two playgrounds: Similarities and differences. Early Childhood Research Quarterly, 44, pp. 114-123.

ARE WE INCLUSIVELY SERVING OUR COMMUNITY? RESIDENT REPRESENTATION IN PARKS

AUTHOR

Maggie Daniels, PhD

George Mason University

mdaniels@gmu.edu

Introduction/Rationale

As public entities, park and planning commissions seek to offer a broad array of spaces, programs and services that appeal to their diverse constituents. Park resolutions and visitor use management frameworks incorporate statements and strategies designed to address issues of engagement, representation, access, equity and inclusion in parks (Franchina et al., 2022; M-NCPPC, 2020). The commitment to inclusive excellence is genuine, yet the fact remains that park visitors are not always collectively representative of the local communities served.

Findings derived from visitor use studies offer an essential means of documenting existing conditions, activities, facility usage and service provision with the intent of maximizing experiences while protecting natural resources (e.g., IVUMC, 2016). More recently, issues of diversity, equity and inclusion (DEI) have emerged as key factors in determining whether park facilities and programs are holistically serving local residents (Mehta & Mahato, 2021).

The COVID-19 pandemic has resulted in unique dynamics that have impacted park access, visitation trends and data collection procedures (Jacobs et al., 2020). While indoor park facilities, spaces and services closed, demand for outdoor recreation grew exponentially. Park visitation patterns shifted on a continuum of subtle to dramatic and park management teams worked determinedly to address disparate needs while operating with constrained budgets and staffing shortages. Concurrently, onsite data collection has been complicated by social distance and masking requirements coupled with interaction hesitancies. The purpose of this study is to analyze resident representation in four diverse park settings during COVID-19. Factors that were documented to impact visitation patterns are highlighted.

Methods

Montgomery Parks, a system within the Maryland-National Capital Park and Planning Commission (M-NCPPC), is home to 424 parks across 37,072 acres (Montgomery Parks, 2022). As part of a larger study, a university research team partnered with Montgomery Parks to document information specific to activities completed as well as zip code distribution, group size, age composition and racial composition of park visitors. The four diverse settings included Black Hill Regional Park, Germantown Town Center Urban Park, Long Branch Local Park and Ten Mile Creek

Trail. The research team collected onsite data three times at each of the four parks, for a total of twelve days of data collection that took place between August 26, 2020, and October 18, 2020. Social distancing protocols were put in place to ensure the safety of the park visitors and research team. Data were analyzed and plotted using Microsoft Excel.

Results

The results discussed here offer a sample of findings using data from Ten Mile Creek Trail. During the conference presentation, data from all four parks will be highlighted. Figure 1 illustrates a ZIP code analysis, where 41 distinct ZIP codes were represented in total, while just three ZIP Codes comprised 42.22% of all respondents' residences. As a whole, 77.74% of all visitors indicated ZIP codes that fall within Montgomery County, with the remaining 22.26% representing tourism visits.

Figure 2 offers a standardized age analysis, allowing for a comparison of the sample data (all ZIP codes) to be compared with the age distribution within the primary residential ZIP code, as a proxy to determine if the range of visitors is representative of the primary residential population. This review suggests that the representation of teens and seniors is in line with the age distribution within the primary ZIP code, while the preteen group is underrepresented, and the adult group is overrepresented.

Figure 3 offers a standardized review of racial composition, allowing the sample data (all ZIP codes) to be compared with the racial distribution within the primary residential ZIP code, as a proxy to determine if the range of visitors is representative of the primary residential population. This review suggests a significant underrepresentation of individuals who are Black / African American, a slight underrepresentation of individuals who are Asian, and an overrepresentation of individuals who are Hispanic / Latino and White / Caucasian.

Two of the parks experienced high usage levels to the point of overcrowding during the data collection period while the other two were underutilized. The primary factors that were documented to influence the likelihood of inclusive park visitation during COVID-19 included: 1) closure of adjacent indoor facilities; 2) repurposing of adjacent indoor facilities; 3) types of park activities available; and 4) variety of park activities available.

Application to Practice

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Implement cost-effective methodologies that allow them to readily assess representation.
2. Implement strategies designed to enhance inclusive engagement in diverse park settings with respect to age and race.
3. Implement strategies designed to enhance the types and variety of park activities available to appeal to a broader constituent base.

Tables and Figures

Figure 1. ZIP code analysis: Ten Mile Creek Trail

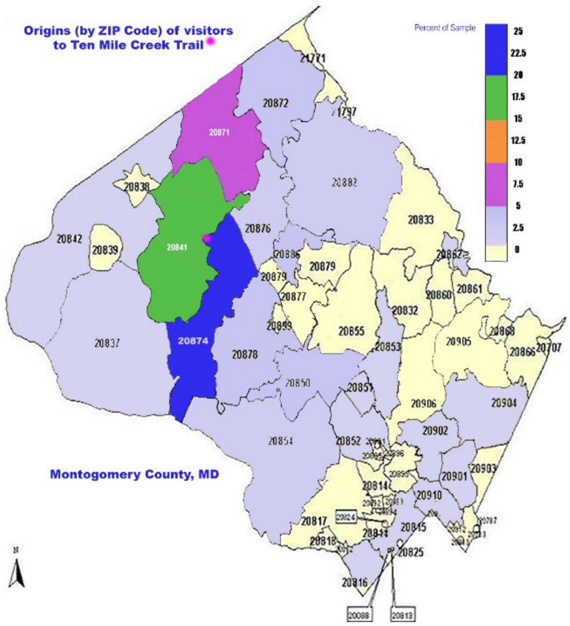
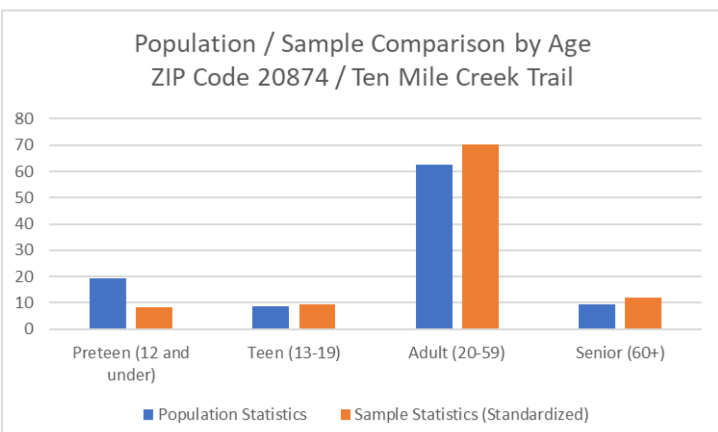
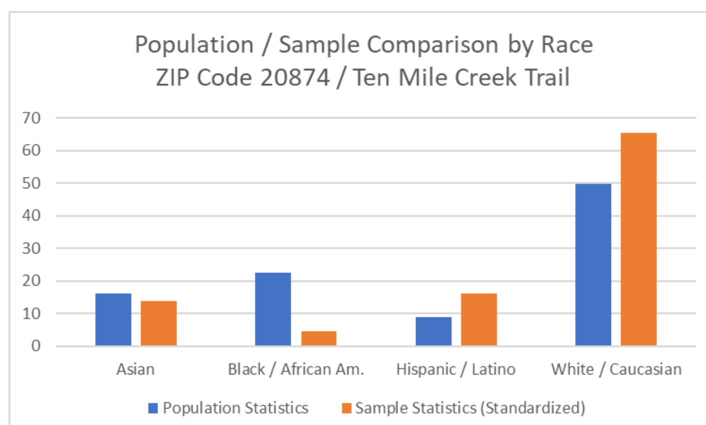


Figure 2. Comparison of local population and park visitors by age

Figure 3. Comparison of local population and park visitors by race





References

Francina, R., Collins, R., Covin, C., Pitt, A., Merigliano, L., & Tristant, E. (2022). Bold moves for visitor use management: Public health, public engagement and justice, equity, diversity, and inclusion, Journal of Park and Recreation Administration, 40(1). DOI: https://doi.org/10.18666/JPRA-2021-11004

Interagency Visitor Use Management Council - IVUMC (2016, July). Visitor use management framework: A guide to providing sustainable outdoor recreation. Retrieved 6 February 2022 from https://visitorusemanagement.nps.gov/content/documents/lowres_VUM%20Framework_Edition%201_IVUMC.pdf

Jacobs, L. A., Blacketer, M. P., Peterson, B. A., Levithan, E., Russell, Z. A., & Brunson, M. (2020). Responding to COVID-19 and future times of uncertainty: Challenges and opportunities associate with visitor use, management, and research in parks and protected areas. The Interdisciplinary Journal of Place-Based Conservation, 36(3). DOI: https://escholarship.org/uc/item/8cv2m126

Maryland-National Capital Park and Planning Commission – M-NCPPC (2020, June 17). Declaration of solidarity with the national movement to end injustice and violence against African Americans. Retrieved 31 January 2022 from https://www.mncppc.org/DocumentCenter/View/14661/Resolution-20-13-Declaration-of-Solidarity

Mehta, V. & Mahato, B. (2021). Designing urban parks for inclusion, equity, and diversity. Journal of urbanism: International research on placemaking and urban sustainability, 14(4). DOI: https://doi.org/10.1080/17549175.2020.1816563

Montgomery Parks (2022). About the parks. Retrieved 2 February 2022 from https://www.montgomeryparks.org/about/parks/

BREATHING FRESH AIR INTO DIABETES EDUCATION: A QUALITATIVE STUDY

AUTHORS

Eddie Hill, PhD, CPRP
Old Dominion University
ehill@odu.edu

Peter Nerothin, MA
University of San Diego

Introduction/Rationale

Type 1 diabetes (T1D) is an endocrine and metabolic disorder affecting approximately 1.4 million adults living in the U.S. Psychosocial factors, such as social support (Pyatak et al., 2013), self-efficacy, and motivation, have been identified as key to improving self-care among T1D adults. While some believe psychologists should play a central role in addressing these issues (Gonzalez et al., 2016), others consider diabetes distress "as an expected part of having T1D and not…requiring referral or specialized care" (Fischer et al., 2015, p.8). Given that many providers are unequipped to offer professional psychological support (Reeves et al., 2008), non-clinical approaches, such as peer-based outdoor adventure education (OAE) programs, could assist T1D adults with their psychosocial needs.

Past research has shown that OAE programs can help T1D patients overcome self-management barriers through peer mentoring and support (Hill et al., 2019). A meta-analysis of youth diabetes camp literature from 1952-2007 by Maslow and Lobato (2019) found evidence of improvements in self-concept, internal locus of control, attitude toward illness, diabetes skills and knowledge, and self-care adherence. However, little empirical research has explored the psychosocial impact of OAE programs for T1D adults.

This study used the relationships motivation theory (RMT) mini theory of self-determination theory (SDT) to explore the meaning that adults living with type 1 diabetes ascribe to participation in a wilderness backpacking trip. SDT seeks to understand "what humans really need from their psychological and social environments to be fully functioning and to thrive" (Ryan & Deci, 2018, p. 4). Ryan and Deci (2018) consider thriving to be a function of three basic psychological needs: autonomy, competence, and relatedness. In T1D research, positive perceptions of autonomy and/or competence have been shown to predict long-term improvements in HbA1c (Williams et al., 1998), food choices, and competence for self-management.

Methods

This qualitative study was based on a phenomenological approach, which allows participants to reflect on their personal experiences and develop personal meaning related to those experiences (Reeves et al., 2008). The phenomenon of interest was a backpacking expedition as experienced by

T1D adults with.This methodology was chosen as it allowed for a deep exploration of the meaning participants' ascribed to their experiences in an open and systematic way (Patton, 2002). Eighteen T1D participants (5 male, 13 female; 1 Hispanic, 17 Caucasian) completed a 33-mile backpacking trip on the Chilkoot Trail in Alaska and British Columbia. Participants were invited to participate in two casual interviews within 48 hours of the trip start and end date. Following the completion of the data collection process, transcripts were thematically analyzed using a three-step process that was both iterative and interpretative in nature.

Results

Results are presented as three constructed themes depicting the meaning that participants ascribed to their experiences on a backpacking expedition. The first theme *seeking and finding a diabetes community*, depicts the meaning that participants ascribed to the development of a diabetes community among participants. For example, Amanda recalled "I don't have any friends at home who has diabetes, so no one else understands what we do every minute of every day. It's so rare not to be thinking about diabetes with every decision you're going to make. Now, all of my friends with diabetes are from this. I'm surprised with how close we became in so little time."

The second theme, *revealing capabilities to yourself and the world*, highlighted the participants' views of OAE as an opportunity for them to prove to themselves and others that they were capable of completing a physically, mentally, and emotionally taxing experience. Supporting this theme, Jennifer recalled that "This trip to me was an opportunity to sort of dive head-first into something that's completely outside of my comfort zone…it really means for me proving to myself that I can do it, and that I can set a goal like this and accomplish it, and do it surrounded by other people like me that are going through the same challenges I am."

The final theme, *enhancing diabetes management and self-care on the trail and in life,* depicts the participants' reflections about the importance the trek had with regard to their personal diabetes management and self-care. For example, one participant noted, "Coming to this you meet more people with more different experiences. So, if I'm like 'I want to run a marathon,' I now know like four people in this group who have done that. Or, 'I want to have a kid,' a few people in this group have done that. All those things, it's like a bigger, better source of diabetes info that I can draw from."

Application to Practice

The backpacking experience provided participants the opportunity to learn about their capabilities by providing a time for them to step out of their comfort zone and try something new. This aligns with SDT regarding using outdoor experiences to teach new skills (e.g., competence) among T1D individuals (Taylor et al., 2012). It also allowed them to reflect on self-care and provided a new level of confidence for diabetes management at home and in future outdoor activities. The

SDT and mini-theory of RTM both suggest having an autonomy-supportive environment is critical for effective decision making of care. These findings were consistent with limited research on T1D adult OAE programs and the growing base of literature on youth diabetes camps.

The findings of this study have meaningful practical implications. For example, OAE service providers may better serve T1D adult participants by focusing on relationships. This could involve improvements to participant screening and selection through various program activities (e.g., focused onsite teambuilding) and other innovative approaches. For traditional health care providers, the role of peers could be further emphasized in promising innovative practices, such as group education (Mensing & Norris, 2013). Finally, this study highlights a need for all peers and diabetes educators to remain alert to practicing autonomy supportive environments. This includes not only focusing on the three SDT tenants of competence, autonomy, and relatedness, but also considering how to use rationale provision, perspective taking, and positive feedback while providing care/education (Hill et al., 2015). The data from this study provides a unique framework for adults with T1D as a means to more effective long-term management, and therefore living a longer high-quality life.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Learn about type 1 diabetes.
2. Demonstrate knowledge of recreation services that can to promote health.
3. Discover new ideas on programming for youth with diabetes.

References

Pyatak, E. A., Florindez, D., & Weigensberg, M. J. (2013). Adherence decision making in the everyday lives of emerging adults with type 1 diabetes. Patient Preference and Adherence, 7, 709.

Gonzalez, J. S., Tanenbaum, M. L., & Commissariat, P. V. (2016). Psychosocial factors in medication adherence and diabetes self-management: implications for research and practice. American Psychologist, 71(7), 539.

Fisher, L., Polonsky, W. H., Hessler, D. M., Masharani, U., Blumer, I., Peters, A. L., ... & Bowyer, V. (2015). Understanding the sources of diabetes distress in adults with type 1 diabetes. Journal of Diabetes and its Complications, 29(4), 572-577.

Hill, E., Reifschneider, K., Ramsing, R., Turnage, M., & Goff, J., (2019). Family diabetes camp: Fostering resiliency among campers and parents. Diabetes Spectrum, 32(2), 86-92. https://doi.org/10.2337/ds18-0001

Maslow, G. R., & Lobato, D. (2009). Diabetes summer camps: history, safety, and outcomes. Pediatric Diabetes, 10(4), 278-288.

Ryan, R. M., & Deci, E. L. (2018). Self-determination theory: Basic psychological needs in motivation, development, and wellness. Guilford Publications.

Williams, G. C., Freedman, Z. R., & Deci, E. L. (1998). Supporting autonomy to motivate patients with diabetes for glucose control. Diabetes Care, 21(10), 1644-1651.

Reeves, S., Albert, M., Kuper, A., & Hodges, B.D. (2008). Why use theories in qualitative research? British Medical Journal, 337(7670), 631-634.

Patton, M.Q. (2002). Qualitative research and evaluation methods (3rd ed). Los Angeles, CA: SAGE.

Taylor, J., Piatt J., Hill, E., & Malcolm T. (2012). Diabetes Camps and Self-Determination Theory: Controlling Glycemic Level in Youth with Type 1 Diabetes. Annual in Therapeutic Recreation (Vol. XX), 46-58.

Mensing, C. R., & Norris, S. L. (2003). Group education in diabetes: effectiveness and implementation. Diabetes Spectrum, 16(2), 96-103.

Hill, E., Gagnon, R., Ramsing, R., Goff, J., Kennedy, B., & Hooker, T. (2015). Measuring the impact of medical specialty camps: Using self-determination theory. Therapeutic Recreation Journal, 49(4), 310-325.

CLASSIFYING RURAL PARKS BASED ON AMENITIES

AUTHOR

Hans Klein-Hewett, PLA, ASLA

Iowa State University

Hansk@IAstate.edu

Introduction/Rationale

Jurisdictional ownership and scale curtail our ability to describe and understand park services and amenities. This inability to express how parks function means that researchers and park managers frequently view rural parks as discrete objects, or at best, parts of a jurisdictional system (e.g., state parks, county parks). For example, the park names of Joe Sheldon County Park and Dolliver Memorial State Park, both found in Iowa, don't indicate the amenities or programming found in those spaces. Their ownership may suggest the quality of amenities and/or scale of the park, but ownership does not indicate park use. Regardless, rural park managers understandably focus on park ownership because they must manage their parks. Similarly, most researchers focus on ownership to compare impacts and use between similar parks. On the other hand, rural users value rural parks based on their function and amenities (Evenson et al., 2016). Because most rural users drive to visit parks, they select and use their parks based on park function and proximity, not ownership. This presentation session will propose a new rural park classification structure that focuses on park amenities, not ownership, to rectify that naming problem.

Methods

The Rural Park Classification System was created by documenting the amenities in all publicly owned park and recreation spaces in an eight-county, majority rural region in north-central Iowa. Recreation spaces included all federal, state, county, and municipal park and recreation areas, including public school grounds. Private facilities (e.g., private schools, private golf courses, and indoor recreation facilities) were not included because they could limit access based on cost, affiliation, or membership.

Park amenities were cataloged by first reviewing state, county, and municipal websites to understand how the park owner described their amenities and marketed their space. Then, aerial imagery from Google Maps, Google Street View, and the Iowa Geographic Map Server (ortho.gis.iastate.edu) was reviewed to document park size, additional amenities, and understand the park's physiography and context. Each park was documented in a spreadsheet that tracked ownership, context, physiography, size or length, the park's renown, and its amenities (32 different categories). Based on that data, a park class was assigned. The Rural Park Classification Tree (see Figure 1) was developed as parks were documented. It was amended when a park didn't fit into other classes and revised to make the classification process as efficient as possible.

Two things must be noted: first, the classification structure is not final. It will change over time as more park areas and geographies are added. Second, the classification process aims to simplify multidimensional park and recreation spaces into a single, often nondimensional class. Doing so may obscure or privilege amenities based on the classifier's preference. However, the value of the classification process remains as it attempts to establish a collective definition and understanding of the park's amenities.

Results

In total, 464 rural parks and recreation areas were identified in the eight-county study region. Those parks were then classified into 24 rural park classes. Broadly speaking, the classification structure centers on whether the park's success is dependent on its physiography. That determination created two different park types. Non- physiographically dependent parks (e.g., sports parks and dog parks) tended to have flat topography, utilize constructed landforms, and/or include amenities that could be placed anywhere. Physiographically dependent parks (e.g., scenic recreation parks and nature observation parks) relied on the combination of landform, vegetation, and water to provide the park's value.

The park classes most identified were nature extraction parks (recreation areas dedicated to hunting or trapping), followed by play parks (dedicated to youth play), and nature observation parks (dedicated to wildlife and ecosystem observation). The class with the most acreage in the region was destination parks, though that was largely due to one park: Brushy Creek State Recreation Area, which, at over 65,000 acres, was the largest park in the region.

Application to Practice

This rural park classification structure will allow rural park researchers, practitioners, and managers to understand and document a park's core function. It does this by creating a new, non-jurisdictional lexicon that strips away the park's name, ownership, and scale. Crucially, this lexicon better aligns with how rural users utilize parks, making park comparisons and evaluations more equitable and appropriate for rural areas. On its own, the classification process illuminates the inherent multidimensionality of parks. Some parks may not fit well into any class or straddle two or more classes. That realization may aid park managers by highlighting that their parks may be trying to do too much or are missing essential amenities that would make the spaces more successful.

Second, the rural park classification can be used to analyze the distribution of rural parks. Researchers and park managers can determine where specific parks are needed and where others might be redundant by understanding the density of park types, say in proximity to urban areas or major transportation corridors. There are likely rural park deserts: not areas lacking parks, but areas lacking specific classes of parks. For example, Green County, Iowa has 55 park spaces. However, 85%

of the land dedicated to those parks are nature extraction parks, meaning they are primarily used for hunting. That analysis can be taken further by understanding demographic makeup and projections. Studies show that Hispanic residents value outdoor recreation amenities differently than White residents, specifically in terms of spaces for socialization and physical activity (Carr & Williams, 1993; Johnson, 2006; Perry et al., 2011). Therefore, rural parks in predominantly Hispanic rural areas might want to be customized to meet those needs. The rural park classification structure will aid in that process by documenting where park classes are located and where additional park spaces may be needed.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Understand the process and value of documenting rural park amenities and creating a rural park classification tree.
2. Understand how rural park classification can be used to describe existing parks and their function.
3. Understand how the rural park classification can be used to spatially analyze where existing parks are found and where others may be needed.

Tables and Figures

Figure 1: Rural Park Classification Tree

References

Carr, D.S., & Williams, D.R. (1993). Understanding the role of ethnicity in outdoor recreation experiences. Journal of Leisure Research, 25(1), 22-38.

Evenson, K.R., S.A. Jones, K.M. Holliday, D.A. Cohen, & T.L. McKenzie. (2016). Park characteristics, use, and physical activity: A review of studies using SOPARC (System for Observing Play and Recreation in Communities). Preventive Medicine, 86, 153-166.

Johnson, Kenneth. (2006). Demographic Trends in Rural and Small Town America. Carsey Institute's Reports on Rural America, Vol 1, No 1.

Perry, C.K., B.E. Saelens, & B. Thompson. (2011). Rural Latino youth park use: characteristics, park amenities, and physical activity. Journal of Community Health, 36(3), 389-397.

DEVELOPING PARK AND RECREATION MANAGERS THROUGH COMPETENCY DEVELOPMENT

AUTHORS

Stephen Wolter, CPP-I, CPRP
Eppley Institute for Parks and Public Lands
sawolter@indiana.edu

Kristina Anderson, PhD
Indiana University Bloomington

Stephanie Freeman-Day
Indiana University Bloomington

Introduction/Rationale

Park and recreation managers are essential professionals who protect and manage parklands, greenspaces, protected areas, and trails, while providing essential leisure and visitor services for national, regional, local, and nonprofit institutions. Their work is essential to the environment, health, and resilience of the communities and organizations they serve, as well as members of the public who benefit from their conservation efforts (Cohen et al., 2007; Hurd, A.R., 2005). Given the dynamic and complex nature of this field, highly competent professionals are needed—their work encompassing many job duties and subspecialities (Hurd, Barcelona, Zimmerman, & Ready, 2019). The successful management of human resources (HR), then, is crucial to the overall performance of park and recreation organizations (Minten, 2010).

This presentation will describe an evidence-based conceptual approach to furthering the professionalism of parks and recreation through competency-based management. To illustrate the case for competency-based management, the research team will highlight their applied research via three examples: (1) a 17-year, award-winning collaboration with the National Park Service (NPS) facility management team, (2) continued progress with international competencies on behalf of the World Parks Academy (WPA), and (3) a new project developing nationwide trail professional competencies with American Trails. The presentation will conclude with demonstrating how attendees can adopt this research-to-practice approach and employ competency-based management in their own organizations.

Competency-Based Management. Competency-based management is a managerial model that focuses on the personal characteristics of an employee to meet overall organizational goals (Shet, Patil, & Chandawarkar, 2019). Competencies have been described as the "essential skills, knowledge, abilities and personal characteristics needed for effective job performance" (Hurd, 2005, p. 46). In simpler terms, competencies represent "the language of performance" (Armstrong, 2019, p. 159). Hurd (2005) proposed four methods through which managers can effectively employ competency-based management within their organization. Competencies can be used as (a) standards for training and development, (b) mechanisms to determine hiring standards, (c) tools for employee evaluation, and (d) frameworks for career advancement (Hurd, 2005).

Example Competency-Based Research-to-Practice Applications.

1. ***Record of Success – Competency Development for the National Park Service.*** Beginning in 2005, the researchers' institution has guided the NPS in developing competencies for facility management professionals. The research-based set of facility manager competencies were based on industry standards that were tailored to fit the NPS's unique government agency profile and were validated to meet federal standards for competency formulation. Development of these competencies also allowed the researchers' institution and NPS partners to conduct a "gap analysis" that identified gaps between employee performance and required competencies. This ultimately resulted in building training, development programs, and applied learning for workforce development. Over time, minor and major updates have been enacted through evidence-based approaches. Ultimately, the NPS Facility Manager Leaders Program resulted from the competency gap analysis and became the first Department of Interior program to win the federal W. Edwards Deming Award for workforce development.
2. ***Emerging Efforts – Aligning Global Competencies for the World Parks Academy.*** The researchers' institution has also led a process which identified competencies for park, recreation, and public lands managers that would be applicable internationally. Because not all countries have an existing national certifying body, the WPA fills that void. As a result, this project developed a list of validated competencies for the WPA utilizing a Modified Delphi Technique from 2013-2014. Generally, Delphi research methods are processes seeking to reliably obtain a consensus opinion of experts through a structured process (Dalkey & Helmer, 1963); a modified Delphi is characterized by replacing one round with face-to-face interactions (Keeney, McKenna, & Hasson, 2011). Ultimately, this list of international competences spurred the development of two parks and recreation certificate programs, wherein park professionals can earn an international certification. Currently, a rigorous process is underway to examine and revise the competencies based on review of literature, current trends, and expert consensus through a second Modified Delphi Process.
3. ***New Applications – Developing National Competencies with American Trails.*** In the past, trail professionals have acquired their skills through training from a network of trail organizations and on-the-ground experience. This serves many people well, but a clear, cohesive path of skill and professional development has been lacking. At the same time, trail work often requires training and skill that is not consistently recognized. In this current 2021 – 2022 study, the research team, together with a nationwide group of trail professionals led by partners at American Trails, developed a common set of core trail competencies to promote professionalism and a higher level of skill for those working in trails through shared competency language in trail skills and expertise. This will, in turn, create opportunities to align, integrate and coordinate trail trainings nationwide; communicate needs for technical trail expertise; and increase the overall skill level of

the trail workforce. As of February 2022, more than 200 nationwide trail experts have evaluated and provided feedback on a list of 49 competencies. Once those are finalized, a subsequent project to develop online e-course training deriving from a competency-based gap analysis is underway.

Application to Practice

Attendees of this research presentation will be able to understand and apply learnings in several ways. First, attendees will be able to describe several applications of the competency-based management approach at three scales—institutional, national, and global. Second, attendees will be able to brainstorm ways through which they can initiate, develop, and apply competencies in their own workplace. Third, attendees will be able to select a mechanism through which to validate competencies, such as via a modified Delphi process.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Describe several applications of the competency-based management approach at three scales—institutional, national, and global.
2. Brainstorm ways through which they can initiate, develop, and apply competencies in their own workplace.
3. Select a mechanism through which to validate competencies, such as via a modified Delphi process.

References

Armstrong, M. (2019). A handbook of human resource management practice. Kogan Page Limited.

Cohen, D. A., McKenzie, T. L., Sehgal, A., Williamson, S., Golinelli, D., & Lurie, N. (2007). Contribution of public parks to physical activity. American Journal of Public Health, 97(3), 509-514. doi: 10.2105/AJPH.2005.072447

Dalkey, N., & Helmer, O. (1963). An experimental application of the Delphi method to the use of experts. Management Science, 9(3), 458-467.

Hurd, A. R. (2005). Competency development for entry level public parks and recreation professionals. Journal of Park & Recreation Administration, 23(3).

Hurd, A. R., Barcelona, R. J., Zimmerman, J. A. M., & Ready, J. (2019). Leisure services management. Human Kinetics.

Keeney, S., McKenna, H., & Hasson, F. (2011). The Delphi technique in nursing and health research. John Wiley & Sons.

Minten, S. (2010). Managing human resources in the leisure industry. Managing Leisure 15,1-3 doi:10.1080/13606710903447964

Shet, S. V., Patil, S., & Chandawarkar, M. R. (2019). Competency based superior performance and organizational effectiveness. International Journal of Productivity and Performance *Management. 9*(3), 753-773. doi:10.1108/IJPPM-03-2018-0128

EQUITY IN YOUTH SPORTS: PERSPECTIES OF PARK AND RECREATION PROFESSIONALS

AUTHORS

Sammie Powers, PhD
George Mason University
spower5@gmu.edu

Nicholas Pitas, PhD
University of Illinois

Introduction/Rationale

Participation in recreational sport provides many benefits to youth, including improvements to physical and mental health, positive youth development, and social wellbeing (e.g., Brunner et al., 2017). However, research has consistently identified disparities in youth sport access and participation based on socio-demographic factors including income, gender, and race and ethnicity (Aspen Institute, 2020). Although public park and recreation agencies are an important youth sport provider, they are not immune to these disparities. Public agencies, often funded largely by taxpayer resources, have a responsibility to serve all youth. Coupled with the known benefits of sport participation, it becomes clear that addressing disparities in youth sport access is of paramount importance. Park and recreation professionals are in a unique and influential position to either uphold the status quo or, ideally, to advance equity in youth sport access. However, little research has assessed professionals' understanding of equity in youth sports. Given their influential role, understanding strengths in existing knowledge of professionals as well as areas where additional training could be beneficial is key to informing educational/professional development opportunities.

Methods

This qualitative study explored perceptions of equity in youth sports from the perspectives of park and recreation professionals. We conducted semi-structured, pre-project focus groups with representatives from 12 public park and recreation agencies receiving grant funding from NRPA's 2021 Youth Sports and Play initiative. The lead contact for the grant was invited to participate and was also asked to recruit one additional participant from their agency with expertise in youth sports. A total of 22 agency representatives agreed to participate in a focus group; each agency was represented in the sample. We grouped agencies together based on their population size and community type, and ultimately conducted four focus groups via Zoom which were recorded and transcribed. Transcriptions were analyzed using thematic content analysis (Braun & Clarke, 2014). They were descriptively coded, and our codebook was continually updated throughout the process (Corbin & Strauss, 2014). Codes were organized into themes and subthemes.

Results

Results were organized in three main themes: participation and barriers, decision-making influence, and practices to advance equity. Regarding participation and barriers, participants recognized a variety of disparities in youth sports participation based on income, gender, and race and ethnicity. Generally, participants perceived less participation among females compared to males, and among youth with lower household incomes compared to those with higher household incomes. In some cases, race and ethnicity were perceived to be associated with participation, but this was less frequently discussed. Participation disparities were perceived primarily as a function of barriers faced by youth and their families (e.g., cost; transportation; safety related to gang violence; gender inequities in program offerings, playing time, and coaching; lack of programs or facilities to meet the interests of certain ethnic groups; and language barriers for non-English speakers). Participants also commonly discussed organizational barriers including limited facilities; difficulty finding qualified coaches; competition and collaboration among different youth sports providers; challenges with marketing and outreach relative to language diversity, the digital divide, and virtual school operations during the pandemic; and recovering agency costs while keeping participant costs low. Although not as pervasive of a sub-theme, some participants discussed historic inequities and alluded to systemic barriers impacting their communities, and in turn, youth sport access and participation relative to the intersections of race and income.

Participants identified a variety of stakeholders influencing youth sport decision-making including their own agencies (i.e., public parks and recreation), program partners, organizations and leagues with license agreements, organizations controlling/managing facilities, schools, local officials, and youth and their parents. Beyond their own agencies, local officials, schools, and partners and organizations with facility control or license agreements were generally seen as most influential, with local officials having a particularly strong role in budget and facility investment decisions. Most agencies did not have formal representation of youth in decision making (the few that did primarily had youth advisory boards/councils), but there was a shared interest in expanding youth voice in the future. When discussing who had influence on youth sport decision making, several participants identified inequities based on money and power such that individuals from wealthier neighborhoods were often more vocal with local officials or park and recreation agencies, and in turn, had more influence than those from lower-income communities, demonstrating some participants' awareness of the interplay between money, voice, and influence.

Participants identified a variety of strategies for advancing equity in youth sports. The most common approaches included lowering and eliminating participation costs; seeking funding and sponsorships to offset costs; and establishing facility use agreements with schools and other youth sport providers. Several agencies were working to increase girls' sports offerings to advance gender equity. Although less commonly discussed, some agencies had also established policies for gender equity related to playing time, facility assignments, and coaching. Finally, there was a common consensus across the groups that it was important to advance outreach and engagement to diverse communities who have been under-resourced in terms of programs and facilities, but only some participants identified specific practices for equitable engagement and outreach. Practices included establishing partnerships with trusted organizations embedded within immigrant communities and communities of color, working to build trust with neighborhood leaders, and when possible, hiring more diverse staff that are representative of the communities they serve.

Application to Practice

Results suggest that youth sports professionals could benefit from educational opportunities focused on understanding the influence of historic inequities and systemic barriers in youth sports, such as the impact of systemic racism on access and participation in youth sports. Furthermore, educational materials and opportunities focused on the value of youth voice in decision making and equitable outreach, engagement, and representation would be of value.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Describe the importance and relevance of equity in youth sport.
2. Distinguish between equity and equality as it relates to youth sport.
3. Describe the current barriers to more equitable youth sport and recognize effective practices for advancing equity.

References

Aspen Institute. (2020). State of Play. Retrieved from https://www.aspenprojectplay.org/state-of-play-2020/introduction

Braun. V. & Clarke, V. (2014). What can "thematic analysis" offer health and wellbeing researchers? *International Journal of Qualitative Studies on Health and Well-Being*, *9*, 9-10.

Bruner, M. W., Balish, S. M., Forrest, C., Brown, S., Webber, K., Gray, E., ... & Shields, C. A. (2017). Ties that bond: Youth sport as a vehicle for social identity and positive youth development. *Research quarterly for exercise and sport*, *88*(2), 209-214.

Corbin, J., & Strauss, A. (2014). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage publications.

EVALUATING AQUATICITY IN COLLEGE STUDENTS: A PILOT STUDY

AUTHORS

Jo An Zimmermann, PhD, CPRE
Texas State University
jz15@txstate.edu

Stacey Bender, EdD
Texas State University

Emily Weeks, MSRLS
Texas State University

Introduction/Rationale

The benefits of participating in recreation, leisure and sports activities at both the individual and community level have been written about extensively (American Camp Association, 2011; Crompton, 2008; Gomez et al., 2015; Jordan & DeGraaf, 2019; Mowen et al., 2016; World Health Organization, 2010). However, the literature documenting the specific measurement of benefits is limited. For years recreation and sport managers have been advised and instructed to conduct data-based research as a means of improving programs and services to their constituent groups (Edginton et al., 2001; Hurd & Anderson, 2011; Hurd et al., 2020; Shivers & Halper, 2012). Conducting good research in an agency typically implies conducting evaluations. As such, there is a need to identify and quantify measurable program indicators that can be used to create evidence-based programs designed to produce specific outcomes and inform future plans (Hirschland and Kreisberg, 2017; Zimmermann et al., 2001).

The purpose of this pilot study was to begin the process of developing a 'generic' method of evaluating swimming and/or aquatics programs. Drowning is a leading cause of death around the world. Current literature suggests drowning can be prevented by people becoming more comfortable and secure in an aquatic environment. Rather than using level-specific or program-specific skills tests, we combined the use of an aquaticity skills test (Varveri et.al., 2016) with measures of motivation, standard customer-service and demographics to create a lens through which aquatics program can be evaluated. The goal is to have community agencies teach and measure basic skills of aquaticity as a means of reducing the drowning rate among children.

Methods

In fall 2021, a descriptive survey design was used with two different groups of university students: the first group were in a required aquatics class and the second were voluntarily enrolled in swim lessons offered by the campus recreation center. Data collection took place on-campus for this pilot research and consisted of the following procedures: 1. Pre-participation survey using Qualtrics consisting of basic demographics and a couple of questions from one scale of the Intrinsic Motivation Inventory developed by Ryan et al. (1991) (perceived competence). Participants were asked to choose a 4-digit personal identifier. This number was used to link all data collected relative to each participant. 2. Physical skill tests: There was a pre-and post-participation test of six aquaticity skills to measure the efficacy of the lessons. 3. Post-participation survey using Qualtrics which will include questions from 4 scales from the Intrinsic Motivation Inventory (interest/enjoyment, perceived competence, perceived choice, and value/usefulness) and customer service items. The researchers hypothesized the following: 1. Participants in aquatics programs and structured swim lessons will show improvement in their level of aquaticity; 2. There is a positive correlation between students who improve their skills and those who are intrinsically motivated to be involved in the activity; and 3. Students who voluntarily sign up for a swimming program will improve more and have a higher intrinsic motivation than those who are participating as part of degree requirements.

Results

A total of 31 university students participated in all parts of the pilot study (18 in a required aquatics class, 13 in voluntary swim classes). There were 21 female and 10 male participants with an average age of 21.6. Preliminary analysis shows an improvement in aquaticity across the board. Students in the aquatics class improved on average 0.145 points, while those in swim lessons improved on average 1.23 points, both on a 5-point scale. Thus, it would appear those who enrolled in a swim lesson improved more than those in an aquatics class. 100% of participants reported that their skill level had improved as had their comfort in the water. In-depth analysis has not yet been completed on the motivation data but will be in time to present this session.

Application to Practice

Focus groups with public recreation staff conducted by Zimmermann in 2018 confirmed that measuring the effectiveness of recreation programs is a challenge for many agencies. Most agencies were using the same evaluation process which they have followed for years, and they question if the information obtained is useful. Participants stated that what they really wanted to do was benchmark against other agencies/programs so there could be a true measure of impact. Interviews with key informants from the original focus groups suggested that it would be helpful to work on one area of programming. Discussions included many types of programs. In the end, the consensus was to start with aquatics. It was noted that their agencies were looking for more effective means of teaching swimming and/or providing outreach aquatics safety programs because a large percentage of people in Central Texas either cannot afford or do not have access to swim lessons and potentially not to pools with lifeguards either. Therefore, this population is more likely to swim in the local rivers and lakes with no lifeguards present.

When surveying the literature on drowning prevention (WHO, CDC, AAP, Bloomberg Philanthropies) one common aspect was that providing swim lessons should absolutely be part of the solution. The AAP suggests that basic swim survival skills should include “ability to enter the water, surface, turn around, propel oneself for at least 25 yards, float on or tread water, and exit the water” (Denney et al., 2019, p.6). Further, Water Safety USA has identified a need to prioritize components of water competency including the development of standards, policies/legislation, and implementation models for all ages (US National Water Safety Action Plan, 2021). With the drowning rate in Texas being higher than the national average, there is no shortage of organizations, schools and public agencies interested in providing swimming lessons to their constituents. Additionally, there are many swim lesson providers who sell programs and/or train people to teach swim lessons (i.e., Red Cross, Starfish Aquatics Institute, Swim America, and YMCA). The challenge becomes how do we know which programs work? Further, how does one measure and compare the effectiveness of swim lessons and/or aquatics programs when each organization (public, private, non-profit) can choose which swim lesson provider to use or even create their own approach to teaching swimming and aquatics skills?

The next steps of this study are being partially funded through a Strategic Priorities Grant from the World Leisure Organization.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Define the term 'aquaticity'.
2. Describe how aquaticity skills might be used to improve the drowning rate in their city.
3. Discuss how incorporating measures of aquaticity into the evaluation of aquatics/swimming programs might improve the overall evaluation process.

References

American Camp Association. (2011). *Detailed Version: Camper Outcomes Scales*. www.ACAcamps.org

Bloomberg Philanthropies. (n.d.). *Preventing Drowning*. https://www.bloomberg.org/public-health/preventing-drowning/#overview

Centers for Disease Control and Prevention (CDC). (2021). Drowning Data. Retrieved August 26, 2021 from https://www.cdc.gov/drowning/data/index.html

Crompton, J. L. (2008). Evolution and implications of a paradigm shift in the marketing of leisure services in the USA. *Leisure Studies*, *27*(2), 181–206.

Denny, S. A., Quan, L., Gilchrest, J., McCallin, T., Shenoi, R., Yusuf, S., Hoffman, B., & Weiss, J. (2019). Prevention of drowning. *Pediatrics, 143*(5), e20190850.

Edginton, C. R., Hudson, S. D., & Lankford, S.V. (2001). *Managing recreation, parks, and leisure services*. Champaign, IL: Sagamore Publishing.

Gomez, E., Baur, J.W., Hill, E., & Georgiev, S. (2015). Urban parks and psychological sense of community. *Journal of Leisure Research*, 47(3), 388–398. doi:10.1080/00222216.2015.11950367

Hirschland, H., & Kreisberg, A. (2017, Nov. 8). U*sing a data-driven management paradigm to improve performance and morale*. Presentation at American Evaluation Association 2017, Washington, D.C., United States.

Hurd, A.R. & Anderson, D.M. (2011). *The park and recreation professional's handbook*. Champaign, IL: Human Kinetics.

Hurd, A.R., Barcelona, R.J., Zimmermann, J.M. & Ready, J. (2020). *Leisure services management, 2nd Ed.* Champaign, IL: Human Kinetics.

Jordan, D.J. & DeGraaf, D.G. (2019). *Programming for parks, recreation, and leisure services: A servant leadership approach*. Urbana, IL: Sagamore Venture.

Mowen, A.J., Graefe, A.R., Barrett, A.G., & Godbey, G.C. (2016). *Americans' use and perceptions of local recreation and park services: A nationwide reassessment*. Ashburn, Virginia: National Recreation and Park Association

Ryan, R. M., Williams, G. C., Patrick, H., & Deci, E. L. (2009). Self-determination theory and physical activity: The dynamics of motivation in development and wellness. *Hellenic Journal of Psychology*, *6*(2), 107–124.

Shivers, J. & Halper, J. (2012). *Strategic recreation management*. New York NY: Routledge.

Water Safety USA. (2021, July). *U. S. Water Safety Action Plan*. https://www.watersafetyusa.org/uploads/7/0/6/0/70608285/usnwsap_newsletter_july_2021.pdf

Varveri, D., Flouris, A. D., Smirnios, N., Pollatou, E., Karatzaferi, C., & Sakkas, G. K. (2016). Developing and testing an instrument to assess aquaticity in humans. *Journal of Bodywork & Movement Therapies*, *20*(3), 497–503. https://doi.org/10.1016/j.jbmt.2015.12.013

World Health Organization (WHO). (2010). Community-based rehabilitation: CBR guidelines. Geneva: World Health Organization. Retrieved August 26, 2021, from https://www.ncbi.nlm.nih.gov/books/NBK310922/

Zimmermann, J.M., Cooper, N., & Allen, L.R. (2001). Performance measurement: It's a benefit!. *Parks and Recreation Magazine*, 36 (6).

EVALUATING HAPPINESS COURSES AND MODES OF DELIVERY

AUTHOR

Charles Hammersley, PhD

Northern Arizona University

Charles.Hammersley@nau.edu

Introduction/Rationale

Philosophers, theologians and more recently psychologists have attempted to define happiness. A Google search using the term "happiness" lists 975,000,000 results. Happiness is a universal pursuit with people from all over the world rate happiness more important than wealth and material goods (What is Happiness, n.d.). In March of 2019 the 7th World Happiness report was published. This report surveys the state of global happiness by ranking 156 countries on how happy their citizens perceive their citizens to be (World Happiness report, 2019). According to HH the 14th Dalai Lama "… the very purpose of our life is to seek happiness" (Dalai Lama & Cutler, 2009, p. 13). He suggests that happiness can be achieved by 'training the mind' through methods that identify factors that lead to happiness and those factors that lead to suffering (Dalai Lama & Cutler, 2009). In 1997, Martin Seligman founded the relatively new field of positive psychology. A growing body of research shows that much of an individual's happiness is under their control. An acceptable definition of happiness is "… happiness is a state of well-being that encompasses living a good life, one with a sense of meaning and deep contentment" (What is Happiness, n.d., para 1).

An increasing amount of research reveals that happiness can improve physical health; that positivity and fulfillment may benefit cardiovascular health, the immune system, inflammation levels, and blood pressure. Happiness has also been linked to a longer lifespan as well as a higher quality of life and well-being. The agreement between many positive psychology, spirituality and happiness researchers (Seligman, 2002; Gilbert, 2006; Ricard, 2006; Lyubomirsky, 2007; and Dalai Lama, 2009) that happiness can be taught, was summed up by the Dalai Lama (2009) when he stated, "…our moment-to-moment happiness is largely determined by our outlook" (p. 22). But can happiness be taught? A growing and diverse organizations and educational institutions have developed and applied happiness programs and courses. So now the question is, are the outcomes of happiness courses measurable?

Methods

Participants in this study were Northern Arizona University students enrolled in the PRM 205 Happiness courses (campus/in person and distance/online) from 2015 to 2019 spring and fall semesters. Participants enrolled in the course to satisfy an Aesthetic and Human Inquiry liberal study requirement, satisfy a PRM major requirement or for personal interest. This was a pre-experimental study using a pre-test and post-test design with a convenience sample. Northern Arizona University students enrolled in the PRM 205 Happiness courses (campus/in person (N=459) and distance/online (N=331) from 2015 to 2019 spring and fall semesters completed a Pre and Post online Fordyce Emotions Questionnaire (Authentic Happiness, Questionnaire Center, 2015). The Fordyce Emotions Questionnaire is a brief measure of current happiness, which research supports that it is a valid measure of emotional well-being and global health (Fordyce, 1988). A t-Test Paired Two Samples for Means was employed taking each student's Pre and Post-survey scores. A separate t-Test was applied to the scores for the campus/in person and distance/online courses to determine if any change in the students happiness scores had occurred between the beginning and the end of the course. The t-Test analysis reduces the chance that a confounding variable will influence the results. A third t-Test: Two Sample Assuming Unequal Variances was used comparing the differences in student Pre-survey and Post-survey scores between the campus/in person or distance/Internet delivery mode. An alpha of 0.05 was used as the cutoff for significance. If the p-value is less than 0.05, we reject the null hypothesis and conclude that a significant difference does exist.

Results

The results of this study conclude that happiness can be taught, as measured by the Fordyce Emotions Questionnaire, and that the course can be delivered on campus/in person or distance/Internet with equally positive results.

Table 1 shows the campus courses t-Test Paired Two Samples for Means. The results show the difference between Pre and Post scores was positive ($t = 5.2$, $df = 48$, $p = 3.96x10-6$). The course resulted in a significant increase in student happiness.

Table 3 shows the distance course t-Test Paired Two Samples for Means. The results show the difference between Pre and Post scores was positive ($t = 4.765$, $df = 22$, $p = 9.3x10-5$). The course resulted in a significant increase in student happiness.

Table 4 shows the Campus vs Distance Course Delivery t-Test: Two Sample Assuming Equal Variances. The results show $t = -1.313$, $df = 70$, $p = 0.193$ the null was accepted. This indicates there were no statistically significant differences increasing student happiness between the campus/in person and distance/online delivery modes.

Application to Practice

A variety of studies have found that happy people live longer, are creative, tolerant, constructive, generous, undefensive and playful. Happy people have higher job satisfaction, better health habits, lower blood pressure, endure pain better, have a stronger immune system, and are less likely to become disabled. They have more casual and close friends, are more likely to be married, and are more involved in group activities than unhappy people (Seligman, 2002). One explanation for the growing interest in positive psychology and happiness may be from the increasing rates of depression in the United States. "Rates of depression are ten times higher today than they were in the 1960's, and the average age for onset of depression is fourteen and a half compared to twenty-nine and a half in 1960" (Ben-Shahar, 2007, p. ix). In our high tech, hi-speed, consumer driven society individuals are reaching out to find purpose and meaning in their lives. Happiness is not just about moments of joy, flow, pleasure, contentment, hope, or ecstasy, which are fleeting and inconsistent emotions. The nature of happiness is that its pursuit is an ongoing process on an infinite continuum and not a final destination. Teaching happiness in our educational institutions and communities will assist individuals in creating a purposeful and meaningful life.

The impetus for teaching "happiness" is best summed up by the Dalai Lama (2009) when he said, "Cultivating greater happiness benefits not only oneself, but also one's family, community and society" (p. xxiii).

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Identify the benefits from increased happiness related to higher quality of life and well-being.
2. Identify a variety of happiness resources related to personal growth.
3. Practice one happiness increasing personal experience.

Tables and Figures

Table 1 - Campus Courses

t-Test: Paired Two Sample for Means	*Variable 1*	*Variable 2*
Mean	54.25490196	68.10893246
Variance	455.2776779	378.4160554
Observations	459	459
Pearson Correlation	0.653021826	
Hypothesized Mean Difference	0.05	
df	458	
t Stat	-17.44452368	
P(T<=t) one-tail	6.28215E-53	
t Critical one-tail	1.648187415	
P(T<=t) two-tail	1.25643E-52	
t Critical two-tail	1.965157098	

Table 2 - Distance Courses

t-Test: Paired Two Sample for Means	*Variable 1*	*Variable 2*
Mean	53.9305136	67.77643505
Variance	501.8042479	405.1680491
Observations	331	331
Pearson Correlation	0.693265206	
Hypothesized Mean Difference	0.05	
df	330	
t Stat	-15.06075929	
P(T<=t) one-tail	1.11039E-39	
t Critical one-tail	1.649484178	
P(T<=t) two-tail	2.22078E-39	
t Critical two-tail	1.967178675	

Table 3 - Campus vs Distance Courses

t-Test: Two-Sample Assuming Unequal Variances	*Variable 1*	*Variable 2*
Mean	16.40740741	16.32024169
Variance	214.1546175	206.9577405
Observations	459	331
Hypothesized Mean Difference	0	
df	718	
t Stat	0.083420084	
P(T<=t) one-tail	0.466770386	
t Critical one-tail	1.646978626	
P(T<=t) two-tail	0.933540771	
t Critical two-tail	1.963273465	

References

Authentic Happiness. (2015). Questionnaire Center. https://www.authentichappiness.sas.upenn.edu/testcenter

Ben-Shahar, T. (2007). Happier. New York: McGraw-Hill

Dalai Lama, & Cutler, C. (2009). The Art of Happiness. New York, Penguin Group, Fordyce, M. W. (1988). A review of research on the happiness measure: A sixty second index of happiness and mental health. Social indicators Research, 20(4), 355-381

Gilbert, D. (2006). Stumbling on Happiness. New York: Vintage Books.

Helliwell, J., Layard, R., & Sachs, J. (2019). World Happiness Report 2019, New York: Sustainable Development Solutions Network.

Lyubomirsky, S. (2007). The How of Happiness: A New Approach to Getting the Life You Want. New York: Penguin Books.

Magyar-Moe, J. L. (2009). Positive Psychological Tests and Measures. Therapist's Guide to Positive Psychological Interventions. https://books.google.com/books?id=B_j-ZTAJ-CUC&pg=PA56&lpg=PA56&dq=fordyce+emotions+questionnaire&source=bl&ots=4s8MMc2QxG&sig=aUeHBFT0Lmav9TlOrUUNjkANs_g&hl=en&sa=X&ved=0CF8Q6AEwDWoVChMIk4TFkIT_yAIVB89jCh1RkgBq#v=onepage&q=fordyce%20emotions%20questionnaire&f=false

Mental Health America. (2020). Depression. https://www.mhanational.org/conditions/depression

Ricard, M. (2006). Happiness: A Guide to Developing Life's Most Important Skill. New York: Little, Brown and Company.

Seligman, M. E. p., (2002). Authentic Happiness. New York, Atria The Science of Happiness Course. (n.d.). Greater Good Science Center. https://ggsc.berkeley.edu/what_we_do/online_courses_tools/the_science_of_happiness

What is Happiness. (n.d.). Psychology Today. https://www.psychologytoday.com/us/basics/happiness

EXAMINING PARK DISTRICTS' DIVERSITY INITIATIVES FOR UNDERSERVED POPULATIONS

AUTHORS

Monika Stodolska, PhD
University of Illinois Urbana-Champaign
stodolsk@illinois.edu

Corky Emberson, BS
Urbana Park District

Elsie Hedgspeth
Urbana Park District

Kimberly Shinew, PhD
University of Illinois Urbana-Champaign

Introduction/Rationale

Parks and recreation services play critical roles in making neighborhoods and cities livable, helping to improve mental and psychological health, increasing physical activity, decreasing obesity and hypertension, and increasing community pride (Hua et al., 2003). However, low-income neighborhoods often have lower access to parks and recreation facilities, and African Americans and Latinx are less likely to use parks and recreation programs compared to non-Hispanic Whites and thus are less likely to obtain these benefits (Rigolon, 2016). To date, limited studies have investigated what public recreation agencies are doing to promote diversity and inclusion (e.g., Camarillo et al., 2019; Lee et al., 2019; Santucci et al., 2014). While a few agencies "attempted to conduct more research to better understand how people of color use their facilities and recreation programs" (Lee et al., 2019, p. 99), none have undertaken systematic evaluations to determine whether such diversity and equity initiatives have actually led to increased access among their underserved constituents. In light of this, the objectives of the study, conducted in two phases over the span of 6 years (from 2016-2022) were to: 1) identify constraints experienced by underserved users and non-users of recreational services offered by the Urbana Park District (UPD), 2) conduct a formal evaluation of the steps undertaken by the UPD to better serve their underserved residents, 3) identify additional strategies UPD can employ to engage local residents, and 4) develop a blueprint that could be adopted by managers and stakeholders of federal, state, and local parks and recreation services across the U.S. on how to increase access to recreation among underserved populations.

Methods

Data collection for the study included two phases. In **Phase I** conducted in 2016-2017, our team worked collaboratively with the UPD to identify constraints experienced by underserved users and non-users of recreational services offered by the UPD. Data collection in Phase I included interviews and focus groups with community residents and stakeholders (community groups and recreation organizations). Seven Latino users and seven Latino non-users; and eight Asian users and eight Asian non-users participated in interviews. In total, 12 men and 34 women between the ages of

23 and 71 took part in the study. Latino(a) users and non-users included people of Mexican, Chilean, Salvadoran, Peruvian, Puerto Rican, and Colombian origin. Asian users and non-users represented people of Chinese, Pakistani, Iraqi, Taiwanese, Thai, and Indonesian origin. The interviews lasted from 30-90 minutes and were conducted in English and Spanish by the two authors of the study. In addition, five interviews and focus groups were held with recreation managers. The data analysis included four phases: initial/open, focused, axial, and theoretical coding (Charmaz, 2006).

Phase II of the study, conducted between September 2021 and May 2022 involves: 1) interviews (N=4) and focus groups (N=5) with UPD leadership and staff; 2) Focus groups (N=3) with the UPD Board of Commissioners, Advisory Committee (UPDAC), and Community Outreach & Support Team (COAST); 3) Interviews (N=10-15) and a survey (N=200) of new <u>users</u> of UPD recreation programs; and 4) Interviews (N=10-15) and a survey (N=200) of <u>non-users</u> of UPD recreation programs). Users are defined as those who, in the last 4-5 years, participated in the new or significantly redesigned activities provided by the UPD as a result of the Phase I of the study. Non-users are defined as residents of 12 neighborhoods where the new/redesigned programs have been delivered but who were not engaged in any of these programs.

Results

Phase I - The findings revealed that the types and the strength of constraints were affected by the participants' socio-economic status (e.g., cost, lack of knowledge of opportunities, transportation, being too tired after work), culture (e.g., programs not at desired level, language barrier), context of arrival among immigrants (e.g., undocumented status that lead to lack of credit cards); quality and availability of facilities and programs; and outside factors (e.g., climate, transportation system). Results were presented to various UPD stakeholders and administrators, who then presented the findings at a staff retreat. As a result, the UPD has implemented a variety of programs and policies that have led to greater outreach efforts, not only to the communities of color but to other underserved populations such as older adults, people with disabilities, and the LGBTQ+ community. The findings lead to multiple program and policy changes in athletics (pop-up free programming), aquatics (Spanish language signage), community outreach (restructuring the scholarship system), environmental activities (on-site programming), marketing/public information (reducing idioms and abbreviations in program guide, You Belong Here campaign), outreach and wellness (multicultural events), and summer programs (free days in the park). UPD staff estimated that the new summer outreach efforts alone led to 2,046 "new" users taking advantage of UPD activities and programs.

Phase II of the study is currently being conducted. The preliminary results of user and non-user surveys and interviews indicate that although new programs have been delivered and thousands of new users have been involved in recreational activities provided by the UPD, there are still some pockets of the population (primarily people of color) who are not engaged in UPD programming.

Lack of information and overly complex registration procedures are often cited as factors dissuading people of color from engaging in recreational programs offered by the UPD.

Application to Practice

The impacts of Phase I of the research project is evident through the UPD efforts to make a difference and better serve community residents. Phase II of the study has the potential to lead to lasting programmatic and policy changes in local, state, and national recreation, park, and natural resource organizations across the country that will result in increasing access for underserved populations. Following the analysis of the Phase II study findings, a Blueprint will be developed that will cover, among other issues, suggestions on a) organizational changes and processes that are needed to better position agencies to serve underserved populations (including, but not limited to, agency's needs assessments, comprehensive and strategic plans, capital and annual budgets, and short- and long-term goals), b) recommended leadership and staff trainings, c) strategies to engage with historically marginalized communities, and d) suggestions for how to dismantle barriers to access and recreation participation rooted in historical systems of oppression and contemporary inequality.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Identify constraints to participation that are common among underserved populations.
2. Describe the need for systematic evaluations to determine whether diversity and equity initiatives actually lead to increased access among their underserved constituents.
3. Apply the steps taken by the Urbana Park District as a result of phase one of the study in an effort to better meet the needs of their underserved constituents.

References

Camarillo, L.N., Stodolska, M., & Shinew, K.J. (2020). Marketing recreation services in the changing landscape of interracial relations. *Journal of Park and Recreation Administration, 38*(1), 50-66.

Charmaz, K. (2006). *Constructing grounded theory: Practical guide through qualitative analysis.* London: Sage Publications.

Hua, C., Payne, L., Orsega-Smith, E., & Godbey, G. (2003, April). Parks, recreation, and public health. *Parks and Recreation,* 18–26.

Lee, K-J., Casper, J., Floyd, M. (2019). Racial and ethnic diversity and inclusion efforts of public park and recreation agencies. *Journal of Park and Recreation Administration, 38*(1), 88-106.

Rigolon, A. (2016). A complex landscape of inequity in access to urban parks: A literature review. *Landscape and Urban Planning,* 153, 160–169.

Santucci, D. C., Floyd, M. F., Bocarro, J. N., & Henderson, K. A. (2014). Visitor services staff perceptions of strategies to encourage diversity at two urban national parks. *Journal of Park and Recreation Administration, 32*(3), 15–28.

HIGH SCHOOL CAMPUSES AS PUBLIC PARKS: A WHOLLY UNTAPPED RESOURCE

AUTHORS

Shannon Mulhearn, PhD
University of Nebraska At Kearney
mulhearns@unk.edu

Thomas Orr, MS, PhD
University of Nebraska At Kearney

Hans van der Mars, PhD
Arizona State University

Introduction/Rationale

Public health agencies have all provided clear recommendations that physical activity can decrease risks related with cardiovascular disease, obesity, other non-communicable diseases, and even depression and anxiety (CDC, 2019; USDHHS, 1996, 2018, 2021; World Health Organization,2020). Access to spaces such as parks which are conducive to and supportive of safe engagement in physical activity (PA) is an acceptable precursor to community members meeting PA recommendations (e.g., Giles-Corti et al., 2005; Loukaitou-Sideris & Sideris, 2009; Powell et al., 2006). However, an obstacle in this acknowledgement is that not all people live close to park spaces (Trust for Public Land [TPL], 2019).

A strategy proposed for overcoming a lack of local park spaces is the suggestion for US communities to make use of the approximately 100,000 public school campuses across the country through the use of shared-use agreements (Vincent, 2014; Young et al., 2014); such agreements outline acceptable use and liability expectations. However, only about 10% of public schools allow informal access to community members to their facilities (TPL, 2019). In an initial study related to this topic, Authors (2020) found that during non-school hours PA areas on public high school campuses were accessible a little over half of the time, but that actual use by non-school community was minimal. Although gaining entry to a facility must precede its use, access alone may not be the sole determinant of community use of public high school PA facilities. This study was informed by the Behavioral Ecological Framework, which places the role of environmental variables as the primary determinants of people's PA behavior (Hovell et al., 2009). The purpose of this study was to assess the current access to and use of high school PA areas as recreational facilities by community members over the course of four seasons.

Methods

This study took place in the metro-Phoenix, Arizona region. Researchers were granted access to 19 out of 89 (21%) public high schools across four school districts. The research project was approved by the IRB of a local University. The four school districts encompass 320 square miles. Student enrollment at the participating schools averaged 2,309 (SD=750.63). Student race and ethnicity averaged 58.84% (SD=17.15) White, 29.42% (SD=15.36) Latino American, 4.53% (SD=2.09)

Black, 3.26% (SD=1.59) Asian American, and 2.11% (SD=2.64) Native American students. Students receiving free/reduced lunch averaged at 36.8% (SD=20.58). Per capita income in the four districts ($23,978 - $48,506) were relatively higher than the districts that did not consent ($17,975 - $31,856), which may suggest additional constraints for lower income areas. Schools averaged 14 (SD=3) dedicated PA areas, with a range of 8 to 22. Examples of areas included multiple gymnasiums, wrestling rooms, weight rooms, tennis courts, practice field, football fields with surrounding track, and dance studios.

Data were collected over the course of a year, from February 2018 through January 2019. Data were analyzed to determine possible differences in facility use based on seasonal changes and use of indoor versus outdoor facility. The latter was included as outdoor facilities may be more easily accessible than indoor facilities outside of school hours. While at the same time use of indoor facilities may be more attractive to users during excessively low or high temperature.

Results

Over the course of the year, 729 individual PA areas were visited and 7918 people were observed present across these locations. Although facilities were *Accessible* an average of 55.9% of the time and *Usable* 45.7% of the time, they were also *Empty* about 85% of the time. A statistically significant difference [$F(3,725)=371.509$, $p < .001$] was identified in seasonal temperature with averages of 68.4° in Winter (n=182; SD=10.07), 91.2° in Spring (n=186; SD=11.04), 103.7 ° in Summer (n=178; SD=4.52), and 76.7° in Fall (n=183; SD=15.10). Activities were coded as *Organized* the most in Spring at 14% while the lowest was in Winter at 6.6%. AVOVA results indicated significant differences in several contextual variables. Tukey's HSD test for multiple comparisons confirmed these differences emerged between Spring and Summer in *Accessible* (p=.036), *Usable* (p=.010), and *Lighted* (p=.009); in all three cases, Summer data were lower than Spring. In all three contexts, Spring was also significantly higher than Fall with p=.008, p<.001, and p<.001 respectively.

Accessible facilities were most often outside, representing an average of 68.6% of the total available PA areas. Of persons observed in PA areas, 81.29% were observed in outdoor areas. Based on seasons, in Summer, 90.3% of people were observed in outdoor PA areas, while the Fall season produced a virtual even split with 50.11% of all persons being observed in outdoor PA areas. When people (both participants and spectators) were present at facilities, they were most often *Sedentary* with the highest frequency of sedentariness observed in Summer (80.9%). In Spring, observed persons were engaged in MVPA at the highest frequency with 27.7%.

Application to Practice

This study considered public high school grounds during non-school hours as public parks since the facilities are publicly funded and centrally located within their communities. Some key aspects stood out related to access and seasonality that could be harnessed for community benefits through increased collaboration and coordination between public schools and parks and recreation departments' management.

During more harsh weather (e.g., extremely high temperatures in central Arizona or winters in the mid-west, community members need ample access to indoor PA facilities. As parks spaces tend to be limited in these types of locations, partnering with public schools to permit supervised use of indoor gyms, courts, weight rooms, etc. would give community members the opportunity to personally make use of facilities built through tax dollars.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Know the current usage of high school physical activity facilities by community members as recreational sites.
2. List at least three areas of need within policies overseeing high school physical activity facility use by community members.
3. Identify future initiatives that could lead to increased access and use of physical activity facilities within their communities.

References

Giles-Corti, B., Broomhall, M. H., Knuiman, M., Collins, C., Douglas, K., Ng, K., Lange, A., & Donovan, R. J. (2005). Increasing walking: How important is distance to, attractiveness, and size of public open space? *American Journal of Preventive Medicine, 28*(2-Supp), 169-176.

Hovell, M., Wahlgren, D., & Adams, M. (2009). The logical and empirical basis for the behavioral ecological model. In DiClemente, R. J., Crosby, R. A., & Kegler, M. C. (eds). Emerging theories in health promotion and research, p.347-385.

Loukaitou-Sideris, A., & Sideris, A. (2010). What brings children to the park? Analysis and measurement of the variables affecting children's use of parks. *Journal of the American Planning Association,* 76(1), 89-107.

Powell, L. M., Slater, S. Chaloupka, F. J., & Harper, D. (2006). Availability of physical activity related facilities and neighborhood demographic and socioeconomic characteristics: a national study. *Research and Practice, 96*(9), 1676-1680.

The Trust for Public Land (TPL). (2019). *Press Release-August 7-Opening schoolyards to the public during non-school hours could alleviate the problem of park access for nearly 20 million people*. https://www.tpl.org/media-room/

United States Department of Health and Human Services. (USDHHS; 1996). Physical activity and health: A report of the Surgeon General. Atlanta, GA.

United States Department of Health and Human Services (USDHHS). (2018). Physical Activity Guidelines for Americans (2nd ed.). Washington, DC: Author. Retrieved from https://health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf

USDHHS. (2021). Healthy People 2030. Retrieved from https://health.gov/healthypeople/objectives-and-data/browse-objectives/physical-activity.

Vincent, J. M. (2014). Joint use of public schools: A framework for promoting healthy communities. *Journal of Planning Education and Research, 34*(2), 153-168.

Young, D. R., Spengler, J. O., Frost, N., Evenson, K. R., Vincent, J. M., & Whitsel, L. (2014). Promoting physical activity through the shared use of school recreational spaces: a policy statement from the American Heart Association. *American Journal of Public Health*, *104*(9), 1583-1588.

Yu, H., Mulhearn, S. C., van der Mars, H., Griffo, J. M., & Kulinna, P. H. (2020): Off-Hours Facility Use in Public High Schools: Physical Activity Potential vs. Reality, Research Quarterly for Exercise and Sport, DOI: 10.1080/02701367.2020.1844128

IDENTIFYING HOW COVID-19 AFFECTED PLACE ATTACHMENT OF STATE PARK VISITORS IN ARKANSAS: A FOUR PARK PILOT STUDY

AUTHORS

Glendon VanSandt
Arkansas Tech University
gvansandt@atu.edu

Michael Bradley, PhD
Arkansas Tech University

Curtis Clemens, PhD
Western Illinois University

Kevin Fink, PhD
University of Central Oklahoma

Introduction/Rationale

During the Covid-19 pandemic, many recreation sites around the country have seen a rise in visitation numbers. It was hypothesized that the social and cultural changes associated with the pandemic have increased the level of visitor place attachment towards these sites. This study worked to understand the connection guests had towards Arkansas State Parks and determine whether Covid-19 has impacted their level of place attachment.

Currently, there is a gap in research conducted to understand visitor place attachment within Arkansas State Parks. Additionally, there has been very few studies focused on determining the impacts of Covid-19 on visitor-park dependency. To fill these gaps, this study examined the place attachment of adult users throughout Arkansas State Parks. Furthermore, it helped to understand the concerning differences that may exist between park connections before and after Covid-19 regulations were in place.

Methods

Working in coordination with the Arkansas State Parks superintendents, researchers solicited respondents (N=273) at four parks throughout the state. To ensure the results were not skewed to one user group, a combination of cluster and systematic random sampling procedures were used when soliciting guests. The investigator considered three criteria when determining which individuals/groups to approach: respondents must be older than 18 years of age, respondents must have been previously or be currently recreating in the park, the investigator would contact every 3rd individual

Each location was selected due to their general popularity, park type, and location. The sites chosen were Petit Jean State Park, Devil's Den State Park, Ozark Folk Center State Park, and Crater of Diamonds State Park. Specific data collection dates, times, and intercept methods were determined in consultation with each superintendent but selected in a manner to ensure that the resulting sample was statistically and conceptually representative of the visiting population and stakeholder sub-groups.

The research instrument created for this study was comprised of 24 separate questions/statements split into three categories. The first section contained eight multiple-choice questions which identified the respondent's demographics and visitation habits. The second set contained 10 statements to which respondents utilized a 5-point "5 - Strongly Agree" "1 - Strongly Disagree" scale to determine their overall level of place attachment to the site. Statements used in this section were adapted from Bradley's (2012) study, "Comparing Place Attachment and Environmental Ethics of Visitors and State Park Employees in Oklahoma." The last section contained six statements and utilized the same 5-point scale to determine the individual's experience in the park since the start of the Covid-19 pandemic. These statements were crafted based on themes depicted in the literature review.

Results

Survey results showed that 71.49% of guests would continue to visit Arkansas State Parks after Covid-19 restrictions are lifted. This suggests that most guests have enough of a connection to the available resources for them to justify traveling back to the site. 51.9% of survey participants stated that their level of connection to the state park they were currently visiting had increased during the Covid-19 pandemic. Roughly 45% of all survey participants had visited the park for the first time after the start of Covid-19. This statistic could suggest that social distancing measures recommended throughout the pandemic encouraged new people groups to utilize the outdoor amenities available throughout Arkansas State Parks.

Application to Practice

Results from this study will aid park managers in successfully implementing their pandemic recovery plans and highlight areas of improvement to best serve the changing recreation and leisure needs of visitors. Managers of public places can benefit from this information as they better understand the impacts Covid-19 had on visitor-place dependency. With individual state park systems being unique, it is valuable for each to conduct their own place attachment study to gather relatable data. By sharing the methodology used in this study with other recreation sites in the region, researchers will gain insight into the regional and national impacts Covid-19 had on the recreation field.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Identify and discuss levels of place attachment at state parks, specifically in Arkansas.
2. Evaluate and discuss how a pandemic and how pandemic protocol affect visitors use and attachment to parks.
3. Analyze and develop avenues to develop attachment to parks and initiate visitorship to state parks.

References

Bradley, M. J. (2012). *Comparing Place Attachment and Environmental Ethics of Visitors and State Park Employees in Oklahoma* [Doctoral dissertation, Oklahoma State University]. https://shareok.org/bitstream/handle/11244/7098/Environmental%20Sciences%20Program_06.pdf?sequence=1

IF YOU BUILD IT, WILL THEY COME? THE NONUSE PHENOMENON

AUTHORS

Jamie Rae Walker, PhD
Texas A&M University
Jamie-Rae-Walker@TAMU.edu

Kelsey Coats, MRP
Texas A&M University

Suzanne Formanek, CPRP, CPSI
Texas A&M University

Emily Gunderson
Texas A&M University

Jeongseup Lee, PhD
Texas A&M University

Anna Stehling
Texas A&M University

Introduction/Rationale

Understanding what attributes and/or conditions influence park nonuse can assist park providers and policy makers in acquiring, designing, managing, and funding initiatives which encourage or support increased park usership. Attractive, proximate parks have been publicly provided for urbanites in the United States since the 1850s when Central Park was developed to provide city dwellers an escape from busy, overloaded, unnatural city life (Edinton et al., 1995).

While nonuse is a historic issue, the body of research focusing on this issue has been limited and sparce overtime. Existing literature focusing on or relating to nonuse informs us that key themes explaining nonuse have emerged over time such as: street design, traffic, proximity, and connectivity (Wang et al., 2015; Hatry and Dunn, 1971; Kaplan, 1989; Bangs and Maher, 1970; Berg and Medrich, 1980); safety (Wang et al., 2015); maintenance and perceptions (Gold, 1977; Godbey, 1985); lack of interest in amenities (Loukaitou-Sideris & Sideris, 2009); limited affinity for nature (Lin et al., 2014), time constraints (Wang et al., 2015); and cultural relevance (Wang et al, 2015). In addition to these reasons deterring citizens from using their local parks, ten studies highlight issues related to lack of knowledge that specific parks exists and lack of information about parks in general (Godbey, 1985; Hatry & Dunn, 1971; Godbey, 1985; Howard & Crompton, 1984; Spotts & Stynes, 1984; Schroeder & Wiens, 1986; Scott & Munson, 1994; Virden & Yoshioka, 1992, Scott & Kim, 1998; Godbey et al., 1992).

The purpose of this study was twofold, (a) to present a survey design opportunity to better understand lack of knowledge when gathering park use data and (b) to continue to explore and verify self-reported themes underlying nonuse.

Methods

Data were collected as part of a community parks and recreation citizen survey from 244 households representing 620 total residents. The sample of respondents was comprised of 51% male and 49% female and represented consistent geographic distribution of households throughout the city.

To improve our understanding about nonuse, residents were asked about their park use for every park in the city. Furthermore, if participants indicated they did not use a park at all, they were asked to specify if they knew if that particular park existed. Participants were also prompted to list up to three reasons why they did not use parks or recreation services.

Results

Of the 244 participants, 22% were classified as nonusers. That is, they did not use at least one park in the city at least once a month. However, when looking at data tied to individual parks both park users and nonusers were unaware that many of the parks existed within the system. When looking at the percentage of respondents who did not know about specific parks, 13 parks were not used nor known about by more than 70% of participants; 19 parks were not used or known about by 50%- 69% of respondents; eight parks were not used or known about by 30% - 49% of respondents; and five parks were not used or known about by less than 20% of respondents with only one of these parks not used or known about by less than 10% of respondents.

Thematic analysis of qualitative comments provided by survey participants explaining reasons for nonuse indicate lack of knowledge, lack of interest in park amenities, distance and accessibility, age or age appropriateness, and use of other resources as overarching reasons cited for nonuse.

Application to Practice

Communities with extensive, proximate, and attractive park spaces tend to be cited as restorative, active, and friendly communities. Parks contribute significantly to making communities places where people desire to live. Developing a better understanding of the extent to which proximity, appeal, and communication relate to park use is important not only for providing information pertinent to improving service levels, but also for understanding the broader benefits accruing from increased park use at the community level.

While nonuse only impacts 22% of respondents in this case, there is a widespread lack of use of specific parks. Learning more about attributes and conditions influencing nonuse of specific parks, by whom, and why can improve design, management, and programming of these public spaces. And in turn, improve usability as well as enhance related health and community vitality.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Describe self-reported elements influencing nonuse.
2. Explain implications of these themes and lack of knowledge for design, maintenance, and programming of local parks.
3. Evaluate the importance of better understanding residentâ€™s lack of knowledge of specific parks to their design and programming standards.

References

Bangs, H.P., and Maher, S. 1970. Users of local parks. Journal of the American Institute of Planners, 36 (Sept.), 330-334.

Berg, M. and E. A. Medrich 1980. Children in four neighborhoods: the physical environment and its effect on play and play patterns. Environment and Behavior, 12(3), 320-348.

Dong Wang, Gregory Brown, Yan Liu (2915) The physical and non-physical factors that influence perceived access to urban parks. Landscape and Urban Planning, 133, 53-66, https://doi.org/10.1016/j.landurbplan.2014.09.007.

Edginton, C.R., Jordan, D.J., DeGraff, D.G., and Edginton, S.R. 1995. Leisure and life satisfaction: foundational perspectives. Dubuque, IA: Brown and Benchmark.

Godbey G. 1985. Nonuse of public leisure services: a model. Journal of Recreation and Park Administration, 3(2), 1-12.

Gold, S. 1972. Nonuse of neighborhood parks. Journal of American Planning Association. 38(6), 369-378.

Gold S. 1977. Neighborhood parks: the nonuse phenomenon. Evaluation Review, 1(2), 319-328.

Howard, D.R. and Crompton, J.L. 1984. Who are the consumers of public park and recreation services? As analysis of the users and nonusers of three municipal leisure service organizations. Journal of Park and Recreation Administration, 2(33-48).

Kaplan, R. and Kaplan, S. 1989. The experience of nature: A psychological perspective. New York: Cambridge University Press.

Lin BB, Fuller RA, Bush R, Gaston KJ, Shanahan DF (2014) Opportunity or Orientation? Who Uses Urban Parks and Why. PLoS ONE 9(1): e87422. doi:10.1371/journal.pone.0087422

Loukaitou-Sideris, A. & Sideris, A. (2009) What Brings Children to the Park? Analysis and Measurement of the Variables Affecting Children's Use of Parks, Journal of the American Planning Association, 76:1, 89-107, DOI: 10.1080/01944360903418338.

Schroeder, TD, and Wiens, M. 1986. The non-use of public park and recreation facilities in Tulsa. Journal of Park and Recreation Administration, 4(3), 75-87

Scott, D., and Jackson, E.L. 1996. Factors that limit and strategies that might
encourage people's use of public parks. Journal of Park and Recreation Administration,14, 1-17.

Scott, D. and Munson, W. 1994. Perceived constraints to park usage among individuals with low incomes. Journal of Park and Recreation Administration 12(4) 79-96.

Spotts, D.M. and Stynes, D.J. 1984. Public awareness and knowledge of urban parks: a case study. Journal of Recreation and Park Administration, 2(4), 1-12.

INNOVATIVE RESPONSES TO SUPPORTING RURAL LOW-INCOME FAMILIES DURING THE COVID-19 PANDEMIC

AUTHORS

Mary Sweatman, PhD
Acadia University
mary.sweatman@acadiau.ca

Rachel Bedingfield
Town of Kentville

Laura Fisher, MA
Dalhousie University

Megan Fortune, MA
University of New Brunswick

Jackie Oncescu, PhD
University of New Brunswick

Introduction/Rationale

Recreation and leisure are important resources that can support residents' capacity to cope with stress and deal with traumatic community events and are a critical source of community resilience in the aftermath of traumatic events. However, living in low-income contexts in rural regions can complicate families' capacities to access recreation services and resources. Municipal parks and recreation departments across Canada were significantly affected by the COVID-19 pandemic as many were forced to suspend all programming and access to public spaces and services. Municipal recreation providers had to re-evaluate their approach and adapt to meet community needs, especially for families with low incomes.

The purpose of this study was to first examine the lived experiences of rural low-income families during the pandemic, and second, to examine the role of a municipal recreation department in supporting rural low-income families' access to recreation services and resources during the pandemic.

Methods

Utilizing feminist participatory action research (FPAR) approach, a methodology that integrates feminist theory with participatory action research methods, we engaged in a year-long research study during the first and second waves of the COVID-19 pandemic. Our community partners guided our research through a community advisory board of community organizations and mothers who identified as low-income who resided in the study site.

Our research project involved interviews with 29 low-income mothers from the study site and three focus groups with community organizations and the local municipal recreation department about their experiences with Covid-19 and local recreation services. The study site was a rural county located in the Western region of Nova Scotia (NS), Canada, and is part of Mi'kma'ki, the unceded, ancestral territory of the Mi'kmaq people. The population of the study site is just over 6,000 residents and has high child poverty rates, food insecurity, housing insecurity, and limited or no public transportation access.

Results

The research first highlighted the inequities faced by low-income rural mothers in NS, from job loss, internet and digital divides, food insecurity, experiences of racism, and lack of support for both parents and children with disabilities. Social isolation experienced by adults and children during the COVID-19 pandemic was generally universal. However, the isolation was particularly noticeable for those in more rural areas (distance from bus routes), those without internet or technology, and those with disabilities requiring support and resources. To address these issues, the recreation department dedicated staff time to connect with citizens through delivering food boxes and engaging in casual learning conversations to better understand their recreation needs. As a result, staff then developed resources, such as an equipment loan program, that was delivered to families directly. The mothers reported that having resources delivered to the door and having a chance to chat with the staff dropping off the equipment helped mothers feel connected while addressing existing barriers such as transportation and specifically COVID-19 related experiences of isolation.

The second theme surrounded racialized communities and people with disabilities and their access to recreation and leisure. Some barriers were systemic; for instance, communication channels with organizations that serve Black, Indigenous, People of Colour and people with disabilities were weak or not yet established with municipal services, so these populations were excluded by default. Other barriers to participation were overt experiences of racism and discrimination within their communities. These comments and actions left equity-deserving groups feeling afraid to access parks and outdoor recreation opportunities and less likely to reach out to municipal services departments such as recreation.

The third theme was families' lack of access to personal outdoor space, particularly when parks, playgrounds, and trails were closed (early in the first wave) in the province due to pandemic restrictions. Parks, playgrounds, and trails were the most valued recreation resource mentioned by the mothers in the study. One of the main ways that the recreation department reached families during the first wave of the pandemic was by delivering play kits both directly and through supporting partner community organizations (*i.e.,* family resource center). The play kits included games and art supplies with directions to help kids get active and engaged during the first wave's lockdown. The play kits were made in recognition that not everyone had backyards or safe neighborhoods to access. In addition, online workshops were offered for those with internet access, and an equipment loan program was active with such items as skateboards available to borrow.

Application to Practice

Below are three applications to practice that originate from this study. *1) Getting Connected: Cultivating Empathy & Understanding***.** We found that an ethic of care was evident in the recreation department's approach to cultivating empathy and understanding among citizens with low incomes.

Dedicating staff time to connect with citizens through was an act of intentionally caring for others. The staff wanted to understand what citizens needed in terms of recreation support and resources. When the staff cultivate empathy and understanding of the needs of low-income citizens, they increase their awareness of diversity in the community and can better develop recreation provisions that address the social and economic inequities that prevent access to recreation for low-income families. *2) Leisure education: Working with other sectors to create awareness of leisure opportunities and benefits.* The recreation department partnered with other local organizations to increase leisure awareness and opportunities. One way that this was done was through play kits delivered in local food bank food boxes or by partnering organizations. *3) Decentralization and individualization: Taking leisure resources to citizens and considering family capacity.* Limited access to financial resources to purchase recreation and leisure equipment and limited access to transportation confined low-income families at home without the leisure and recreation supports to mitigate the stress of the pandemic. Relocating programs to nearby parks and offering recreation equipment with drop-off services created better access to recreation services and resources.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Develop strategies to connect respectfully and authentically with citizens in order to cultivate reciprocity, trust and understanding.
2. Advocate for leisure education through working with other sectors to create awareness of leisure opportunities and benefits.
3. Work towards decentralization and individualization so that leisure resources and tools are accessible to all citizens and consider the diverse capacities and needs of rural low-income families.

References

Alon, T., Doepke, M., Olmstead-Rumsey, J., & Tertilt, M. (2020). *The Impact of COVID-19 on Gender Equality* (No. w26947; p. w26947). National Bureau of Economic Research. https://doi.org/10.3386/w26947

Alonzo, D., Popescu, M., & Zubaroglu Ioannides, P. (2021). Mental health impact of the Covid-19 pandemic on parents in high-risk, low income communities. *International Journal of Social Psychiatry*, 0020764021991896. https://doi.org/10.1177/0020764021991896

Beery, T., Olsson, M. R., & Vitestam, M. (2021). Covid-19 and outdoor recreation management: Increased participation, connection to nature, and a look to climate adaptation. *Journal of Outdoor Recreation and Tourism*, *36*, 100457. https://doi.org/10.1016/j.jort.2021.100457

Fortier, N. (2020). COVID-19, gender inequality, and the responsibility of the state. *International Journal of Wellbeing*, *10*(3), 77–93. https://doi.org/10.5502/ijw.v10i3.1305

Frank, L., & Fisher, L. (2020, January). *2019 report card on child and family poverty in Nova Scotia*. Canadian Centre for Policy Alternatives. https://www.policyalternatives.ca/sites/default/files/uploads/publications/Nova%20Scotia%20Office/2020/01/2019%20report%20card%20on%20child%20and%20family%20poverty.pdf

Kono, S., & Shinew, K. J. (2015). Roles of Leisure in the Post-Disaster Psychological Recovery after the Great East Japan Earthquake and Tsunami. *Leisure Sciences*, *37*(1), 1–19. https://doi.org/10.1080/01490400.2014.935836

Olson, C. J., Reid, C., Threadgill-Goldson, N., Riffe, H. A., & Ryan, P. A. (2013). Voices From the Field: Social Workers Define and Apply Social Justice. *Journal of Progressive Human Services*, *24*(1), 23–42. https://doi.org/10.1080/10428232.2013.740407

Oncescu, J., & Loewen, M. (2020). Community recreation provisions that support low-income families' access to recreation. *Leisure/Loisir*, *44*(2), 279–302. https://doi.org/10.1080/14927713.2020.1760120

Sharma, S. V., Chuang, R.-J., Rushing, M., Naylor, B., Ranjit, N., Pomeroy, M., & Markham, C. (2020). Social Determinants of Health–Related Needs During COVID-19 Among Low-Income Households With Children. *Preventing Chronic Disease*, *17*, E119. https://doi.org/10.5888/pcd17.200322

Wang, D., Chonody, J. M., Krase, K., & Luzuriaga, L. (2021). Coping With and Adapting to COVID-19 in Rural United States and Canada. *Families in Society: The Journal of Contemporary Social Services*, *102*(1), 78–90. https://doi.org/10.1177/1044389420960985

Whitehead, M., Taylor-Robinson, D., & Barr, B. (2021). Poverty, health, and covid-19. *BMJ*, n376. https://doi.org/10.1136/bmj.n376

Wolfson, J. A., & Leung, C. W. (2020). Food Insecurity and COVID-19: Disparities in Early Effects for US Adults. *Nutrients*, *12*(6), 1648. https://doi.org/10.3390/nu12061648

ITS MY NEIGHBORHOOD: PERCEPTIONS AND EXPERIENCES ON THE IMPACT OF 606 TRAIL IN CHICAGO

AUTHORS

Darrien Watson, MS
University of Illinois Urbana-Champaign
Darrien2@Illinois.edu

Jazmin Pazmino, MS
University of Illinois Urbana-Champaign

Alessandro Rigolon, PhD
The University of Utah

Kimberly Shinew, PhD
University of Illinois Urbana-Champaign

Monika Stodolska, PhD
University of Illinois Urbana-Champaign

Introduction/Rationale

Parks practitioners, community residents, and environmental justice advocates have increasingly advocated establishing new green spaces in historically marginalized urban communities around the United States, to help alleviate notable inequities in green space provision (Immergluck, 2017; Rigolon, 2018; Garcia, 2017; Anguelovski, 2018; Gould, 2017; Smith, 2016). These advocacy efforts have often led to the creation of new green spaces in marginalized communities (Fernandez, 2015). Yet, successful instances of adding green spaces in urban areas such as Atlanta's Beltline, Chicago's 606 greenway, and the revitalized Los Angeles River have also contributed to the displacement of neighborhoods with lower socioeconomic status. For example, a growing number of studies have documented that large new parks established in restoration-susceptible neighborhoods are possibly contributing to the displacement of low-income renters (Immergluck, 2017; Rigolon, 2018; Garcia, 2017; Anguelovski, 2018; Gould, 2017; Smith, 2016).

While research (Rigolon, 2018; Gould, 2017; Pearsall, 2016; Checker, 2011; Shaw, 2015; Fernandez, 2015) has noted that some housing advocates and developers have sought to combat displacement from green gentrification by implementing a variety of policies and initiatives, limited research has focused on whether these types of actions are effectively integrated with efforts to create large urban green spaces. Thus, this study is one of the few to assess the impacts of particular policies designed to limit the displacement of low-income citizens in neighborhoods undergoing green gentrification and to examine (1) whether visitation to the new green space affected the health and well-being of low-income people who stayed in place due to anti-displacement policies; (2) if participation in recreation programs in the new green space influenced physical activity; (3) Analyze if participation in recreation programs impacted the perception of the 606 Trail.

Methods

The study focused on the 606 Trail in Chicago. Access points to the trail expand across four

Chicago neighborhoods (e.g., Wicker Park, Bucktown, Logan Square, and Humboldt Park), and the Bloomindale Trail portion of the 606 Trail is a 3-mile, elevated, linear rail-trail. Individuals who reside near the 606 Trail have income that range from high to moderate income and/or low to moderate income (City of Chicago, 2021). Existing Chicago residents with low-to moderate income who reside near the 606 Trail and gentrifying areas are protected from displacement due to an anti-deconversion ordinance that aids towards the replacement of 606 demolition moratorium. Specifically, the anti-deconversion ordinance "is designed to preserve affordable housing" and protect Chicago residents from displacement (City of Chicago, 2021).

The study employed a mixed methods approach, including a survey of residents of traditionally marginalized communities within proximity to the 606 Trail and interviews with selected survey respondents. The current presentation will draw from the qualitative data collected in the project. The in-depth, semi-structured interviews were conducted with eight Chicago residents selected from the survey. Each interview lasted approximately 30 minutes and included questions regarding the 606 Trail and the impact that the trail has on the participants' health and neighborhood. For instance, the interviewees were asked (1) if they visit the 606 Trail and if so, what activities are performed while at the 606 Trail; (2) If they feel that the 606 Trail is a welcoming and a safe environment; (3) what impacts, if any, did the trail have on their health and; (4) which neighborhood they reside in. Interviewees that completed the initial survey were contacted for the in-depth interview and only if participants consented to participating in the semi-structured interview. The sample consisted of 3 females and 5 males. Participants' income ranged from low to moderate income. Interviews in English, via-phone call, audio recorded, and transcribed. We coded and analyzed the semi-structured interviews utilizing a thematic analysis (Gibbs, 2007) approach.

Results

Two themes were drawn out of the transcriptions. One theme was related to the contributions of the 606 Trail to the physical and mental health of residents. Some participants reported visiting the trail to maintain physical health and that the space created a conducive environment for mental health. One participant reported that they were in "a lot better shape by being active [on the trail]." A participant reported "I think because [the 606 Trail] helps mentally because you are taking care of yourself. So yeah, it does affect you a little bit more." For another participant, the 606 Trail provides an environment for a "clarity break and clear [their] mind."

The second theme that emerged from the data was related to a sense of belongingness in the community attributed to the presence of 606 Trail. For instance, one participant reported that the 606 Trail was "a positive thing to do [in the neighborhood] and brought more people out." Several participants also reported that they felt like they belonged in their community despite the gentrification that the 606 Trail has engendered. A participant was quoted stating that "gentrification is definitely going on. I wouldn't consider it a problem." Another quote from a participant when asked if they felt they belonged in their neighborhood was “it is my neighborhood…. I belong here.” Participants also reported having comfortable and stable house regardless of the new businesses and residents who moved into the community after the construction of the trail. Participants attributed policies such as “controlled rent” as one of the reasons that they had a comfortable housing situation.

Application to Practice

Upon reviewing the past study, three possible outcomes can be achieved when applied to practice 1) Policy makers will be able to utilize this type of research when considering adding green spaces and creating anti-displacement policies. Gaining direction driven by resident input is a great indicator on sustaining success. 2) Stakeholders can better understand the value of resident perspectives and feedback to better serve the community. It is not enough to just input a green space, but it must be something that residents connect to and properly services their needs. 3) Scholars should continue to conduct future research in analyzing experiences and perspectives of residents in areas undergoing green gentrification.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Utilize this type of research when considering adding green spaces and creating anti-displacement policies.
2. Better understand the value of resident perspectives and feedback to better serve the community.
3. Conduct future research in analyzing experiences and perspectives of residents in areas. undergoing green gentrification.

References

Immergluck, D.; Balan, T. Sustainable for whom? Green urban development, environmental gentrification, and the Atlanta Beltline. Urban Geogr. 2017, doi:10.1080/02723638.2017.1360041.

Rigolon, A.; Németh, J. "We're not in the business of housing:" Environmental gentrification and the nonprofitization of green infrastructure projects. Cities 2018, doi:10.1016/j.cities.2018.03.016.

García, R.; Mok, T. Whitewashing the Los Angeles River? Displacement and equitable greening; The City Project: Los Angeles, CA, 2017;

Anguelovski, I.; Connolly, J. J. T.; Masip, L.; Pearsall, H. Assessing green gentrification in historically disenfranchised neighborhoods: A longitudinal and spatial analysis of Barcelona. Urban Geogr. 2018, 39, 458–491, doi:10.1080/02723638.2017.1349987.

Gould, K. A.; Lewis, T. L. Green gentrification: Urban sustainability and the struggle for environmental justice; Routledge: New York, NY, 2017; ISBN 8920163.

Smith, G.; Duda, S.; Lee, J. M.; Thompson, M. Measuring the impact of the 606: Understanding how a large public investment impacted the surrounding housing market; Institute for Housing Studies at DePaul University: Chicago, IL, 2016;

Anguelovski, I. From toxic sites to parks as (green) LULUs? New challenges of inequity, privilege, gentrification, and exclusion for urban environmental justice. J. Plan. Lit. 2016, 31, 23–36, doi:10.1177/0885412215610491.

Pearsall, H.; Anguelovski, I. Contesting and resisting environmental gentrification: Responses to new paradoxes and challenges for urban environmental justice. Sociol. Res. Online 2016, 21, 1–7, doi:10.5153/sro.3979.

Checker, M. Wiped out by the "Greenwave": Environmental gentrification and the paradoxical politics of urban sustainability. City Soc. 2011, 23, 210–229, doi:10.1111/j.1548-744X.2011.01063.x.

Shaw, K. S.; Hagemans, I. W. "Gentrification without displacement" and the consequent loss of place: The effects of class transition on low-income residents of secure housing in gentrifying areas. Int. J. Urban Reg. Res. 2015, 39, 323–341, doi:10.1111/1468-2427.12164.

Fernandez, M., Shinew, K. J., & Stodolska, M. (2015). Effects of acculturation and access on recreation participation among Latinos. Leisure sciences, 37(3), 210-231.

Gibbs, G. R. (2007). Thematic coding and categorizing. Analyzing qualitative data, 703, 38-56.

City of Chicago (2021). City Council Passes Anti-Deconversion Ordinances for Pilsen and the 606. https://www.chicago.gov/city/en/depts/doh/provdrs/housing_resources/news/2020/december/mayor-lightfoot-and-department-of-housing-introduces-ant--deconv.html

LINKAGES BETWEEN ACCESS TO PUBLIC SPACES AND COMMUNITY WELL-BEING

AUTHOR

Josephine Godwyll, MA

Arizona State University

Jmgodwyl@asu.edu

Introduction/Rationale

The purpose of this study is to examine how communities and technical experts (*i.e.,* planners, building and landscape architects) perceive of the linkages between access and community well-being, which emerge from public space related exchanges. This study draws on the nexus between Lefebvre's (1991) *Tripartite Framework* and Bishop's (2005) *Network Theory of Well-being*, a novel combination of two theoretical bodies of work that have yet to intersect in the empirical examination of access (Godwyll & Buzinde, 2022). *Lefebvre's Tripartite Framework* of social space production and *Bishop's Network Theory of Well-being* respectively conceptualize the exchanges that take place in the development of locales, and the realization of well-being ideals that facilitate the continuous existence of groups (*e.g.,* communities of place).

This research study specifically focuses on marginalized and/or minoritized contexts and it has profound implications for the field of parks and recreation which often addresses the complex interactions between technical agents and communities of place with goal of enhancing community wellbeing. Extant studies which have focused on examining access to public spaces in such contexts have studied the intersections between environmental justice, access to public spaces, and well-being in vulnerable contexts (Agyeman, Schlosberg, Craven, & Matthews 2016; Bullard 1993). Such studies have predominantly examined access as an outcome of individual environmental justice constructs, which facilitates well-being. For example, as an outcome of distributive justice (*i.e.,* fair allocation) access has been asserted to facilitate physical and mental health.

Similarly, access as relates to procedural justice (*i.e.,* meaningful involvement) has been found to translate into ideals such as agency and sense of ownership. Likewise, access resulting from interactional justice (*i.e.,* fair user experiences) has translated into ideals such as social cohesion and sense of belonging. As such, in all the existing studies, access has been studied as an enabler of well-being. Yet to be examined however, is how access emerges from well-being ideals realized from the exchanges that take place in connection to public spaces, particularly those located in vulnerable neighborhoods. Historical tensions and barriers to well-being exist especially as relates to environmental justice or the lack thereof in the allocation, development, and management of public resources. Hence, the exchanges that take place across different dimensions of public space *(i.e.,* communities of place, technical agents, and physical characteristics of locales), and their perceived linkages to well-being, can indeed add augment knowledge on the concept of access.

Methods

This study draws on research conducted in Maryvale, an economically developing, Hispanic majority urban village in Phoenix, Arizona. Through participatory mapping interviews, 19 community representatives and 4 key technical informants participated in the study. The community representatives comprised neighborhood leaders and community organizers and technical informants included the village planner, 2 landscape architects and a recreational manager in the Phoenix Parks and Recreational Department. Responses were deductively coded guided by the aforementioned conceptual framework.

Results

The results show that both community representatives and technical agents describe the ability or inability to benefit from a public space (*i.e.,* access) as emerging from the realization or the lack thereof of community ideals. Positive ideals from public space related exchanges were described as connected to the ability to benefit from a public space (*i.e.,* access).

Three thematic categories emerged in describing the positive outcomes related to the ability to benefit from public spaces. These categories comprised *Beneficial Spatial Characteristics* (connected to ideals such as convenience and opportunity for healthy practices), *Beneficial Planning and Design Processes* (connected to ideals such as sense of agency and sense of ownership) and *Beneficial User Experiences* (connected to ideals such as social cohesion and safety). Contrastingly, negative ideals from public space related exchanges were described as related to the inability to benefit from a public space (*i.e.,* lack of access).

Three thematic categories emerged in describing the negative conditions related to the inability to benefit from public spaces, namely *Unbeneficial Spatial Characteristics* (connected to conditions such as community dissatisfaction and danger), *Strained Planning and Design Engagement* (connected to conditions such as distrust and marginalization) and *Strained User Experiences* (connected to conditions such as threats to wellness and social tensions).

Application to Practice

The linkages between access and community well-being, described by both community and technical representatives, offer insights related to the connection between justice, community well-being and access. The findings go beyond the predominant examination of access as an outcome of justice that leads to well-being (*i.e.,* see Figure 1 a to c) to demonstrate that access is a dynamic construct which emanates from the realization of community well-being ideals (*i.e.,* see Figure 1 b to d). Such ideals, provide a lens through which to examine how the outcomes of spatial interactions, planning and design engagements, and user experiences, are linked to access. For instance, the continuous occurrence of crime in public parks, stifles access to such locales, even if they are within proximity (i.e., distributive justice).

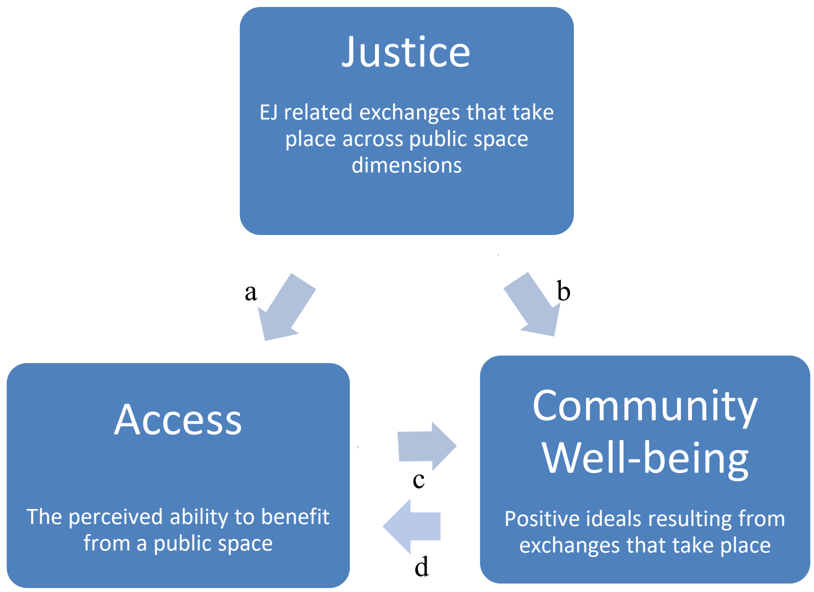
The references participants made to safety related facilities (*e.g.,* police stations and firehouses) in the immediate locale provide valuable insights that can inform the creation of plans and layouts that can support access to public spaces in the mentioned contexts. Similarly, the references made to the history of disengagement and fear of victimization when describing the connection between negative conditions such as distrust and marginalization and the inability to benefit from a public space highlights the conversations and approaches that need to be advanced in planning and design engagement processes (*i.e.,* procedural justice). Comparably, impediments to the ability to benefit from public spaces described as linked to unideal user experiences in vulnerable contexts (as relates to interactional justice), also provide insights to public space management.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Learn about the connection between justice, community well-being and access as relates to public spaces
2. Learn about how community involvement in planning and design can enhance or thwart perceived access to public spaces
3. Learn about how community perceptions can inform planning and design of public spaces

Tables and Figures

Figure 1 Access Demonstrated as a Dynamic Construct



References

Agyeman, J., Schlosberg, D., Craven, L., & Matthews, C. (2016, October 17). Trends and Directions in Environmental Justice: From Inequity to Everyday Life, Community, and Just Sustainabilities. *Annual Review of Environment and Resources*. Annual Reviews Inc. https://doi.org/10.1146/annurev-environ-110615-090052

Bishop, M. A. (2005). *The good life : unifying the philosophy and psychology of well-being*.

Bullard, R. D. (1993). *The legacy of American apartheid and environmental racism*. *John's J. Legal Comment*. Retrieved from https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/sjjlc9&section=23

Godwyll, J. M., & Buzinde, C. N. (2022). Conceptualizing linkages between community well-being and access to public space : an environmental justice perspective, 1–23.

Lefebvre, H., & Nicholson-Smith, D. (1991). *The production of space*. Retrieved from https://books.google.com/books?hl=en&lr=&id=b9WWAwAAQBAJ&oi=fnd&pg=PA289&dq=social+production+of+space+lefebvre&ots=KV1rDJnnD9&sig=4m7Hdcqp22dyhdokcr4NV6NgyZI

PLAYGROUND SAFETY SURFACING FIELD TESTING: PERFORMANCE TRENDS FOR THE DEVELOPMENT OF MAINTENANCE GUIDLINES

AUTHOR

Eric Kennedy, PhD

Bucknell University

eric.kennedy@bucknell.edu

Introduction/Rationale

Many different playground surfaces are used in the United States for fall-related injury protection. These surfaces are categorized as unitary or loose-fill, and standardized methods exist for the evaluation of the impact attenuation performance of playground surfacing materials. ASTM F1292 (2018) and ASTM F3313 (2020) establish testing and performance standards for both laboratory-based and field-testing evaluation of playground safety surfaces. Additionally, the US Consumer Product Safety Commission's Public Playground Safety Handbook provides recommendations for minimum loose fill surface depth at generalized fall heights. These recommendations are not intended as a substitute for standardized testing, they provide useful guidance for easily observable metrics which can be a useful guide for monitoring between impact tests. The purpose of this study was to evaluate a randomized national sample of field-tested impact attenuation data to evaluate and refine playground surfacing maintenance guidelines for a variety of loose-fill surfaces.

Methods

Data analyzed for the development of safety surfacing performance trends was reported from a randomized sample of 103 public playgrounds across the United States with appropriate surfacing, collected on behalf of the United States Consumer Product Safety Commission (Olsen 2018). Field testing data included analysis of safety surfacing, including fall height, depth of the surface material, and resulting head injury criteria (HIC) score. The data analysis focused on fall height, surface depth, and HIC scores for each test site to interpret performance trends in ASTM-compliant HIC scores (HIC < 1000).

Results

A total of 618 test sites were evaluated for three different loose-fill surface categories: pea gravel (120 test sites), sand (102 test sites), and engineered wood fiber (396 test sites). The vast majority of test sites were found to be compliant by ASTM F1292/3313 standards, with an overall pass-rate of 93%. It was expected, and demonstrated for each of the three surfacing materials, that the compliance rate is lowest for drops from a large height onto surfaces with a low surface depth. Ineffective surface depth is potentially due to insufficient maintenance cycles and lack of clarity on readily observable “triggers” that indicate performance-degradation. Additionally, surfacing types demonstrated unique fall heights / surface depth combinations at which performance decrements were experienced, potentially exposing an opportunity for improved maintenance guidelines tailored to specific surfacing.

Field-test data for each surface material can be used to create recommendation tables for consumers and maintenance teams, based on accessible metrics of fall height and surface depth. Recommendation tables are presented for pea gravel (Table 1), sand (Table 2), and engineered wood fiber (Table 3), where “expected high-compliance” indicates greater than 95% compliance with ASTM F1292/3313. It is important to note that a surface depth of 0-2.9 inches is not recommended (regardless of whether safety standards are met) because the surface would need frequent maintenance to maintain performance.

Application to Practice Outcomes

Playground surfacing is a critically important element of playground injury prevention, where falls account for over 75% of playground injuries. The recommendation tables are specifically intended to provide a generalized, cost-efficient alternative to using an impact testing device for maintenance guidance. While they are not intended to replace field testing of surfaces, the development of field-test based recommendation tables provides evidence-based suggestions to trigger maintenance practices and ensure the adequacy of safety systems throughout a maintenance cycle.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Identify relevant guidelines and standards for playground safety.
2. Advocate for the importance of data-driven playground maintenance practices.
3. Distinguish complaint and non-compliant playground surfacing systems.

References

ASTM. F1292-18e1 (2018) Standard specification for impact attenuation of surfacing materials within the use zone of playground equipment. West Conshohocken, PA: ASTM International.

ASTM. F3313 (2020) Standard test method for determining impact attenuation of playground surfaces within the use zone of playground equipment as tested in the field. West Conshohocken, PA: ASTM International.

CPSC. (2015) Handbook for public playground safety. Bethesda, MD: U.S. Consumer Product Safety Commission.

Olsen HM & Kennedy EA. (2018) Report for National Study of Public Playground Equipment and Surfacing. US Consumer Product Safety Commission CPSC- S-16-0061.

QUANTIFYING GREENHOUSE GAS EMISSIONS FROM TOUR BUS CRUISING IN URBAN PARKS

AUTHORS

Minkyung (Min) Park, PhD
George Mason University
mparka@gmu.edu

Maggie Daniels, PhD
George Mason University

Introduction/Rationale

Climate change is one of the most critical and pressing issues our society currently faces and it challenges various aspects of our lives, including within the environmental, social, economic, and health domains. In particular, urban populations are highly vulnerable to the effects of climate change, as cities produce more than 60 percent of greenhouse gas (GHG) emissions (United Nations, n.d.). While urban parks have received growing attention as part of the climate solution by reducing GHG emissions (Groth, et al., 2008; Schottland, 2019), park visitors, particularly tour bus users, inadvertently contribute to climate change.

According to the *Inventory of U.S. Greenhouse Gas Emissions and Sinks 2021* Report developed by the U.S. Environmental Protection Agency (EPA), carbon dioxide accounted for 80% of U.S. GHG emissions in 2019 and transportation accounted for 29% of U.S. GHG emissions, followed by electricity (25%), industry (23%), commercial & residential (13%) and agriculture (10%). Lenzen et al. (2018) note that tourism is responsible for about 8% of the world's carbon emissions. While various tourism-related goods and services (i.e., lodging) contribute to tourism's carbon footprint, the transportation sector (i.e. planes, cars, and tour buses) is the main contributor, representing 49% of tourism's GHG emissions (Sustainable Travel International, n.d.).

Among various modes of tourism transportation, traveling by tour buses is generally perceived as being relatively fuel efficient and environmentally friendly in comparison to passenger vehicles because buses travel the same distance with more than 10 times the amount of people. However, within the realm of urban tourism, this presumption can change. Tour buses parking in urban destinations is often complicated, resulting in drivers circulating while empty (i.e., cruising) with areas adjacent to main attractions and/or idling while parked while passengers are off the bus (Daniels et al., 2018). Research that measures the impact of tour bus cruising on greenhouse gas emissions in an urban destination is scant. Thus, the purpose of this study is to quantify the GHG impact of tour bus cruising in and around an urban park situated in a capital city to inform planning and policy decisions in urban parks and introduce practical methodologies for estimating GHG emissions.

Methods

The destination chosen was the National Mall and Memorial Parks (National Mall), a 684-acre unit of the National Park Service (NPS) in Washington, DC. Each year, the National Mall hosts approximately 32 million visitors, approximately one-third of whom arrive by tour buses (NPS, 2010; NPS 2022). Over a period spanning seven months to account for seasonal variations, eight days of on-bus/off-bus data were collected by a research team using four standardized instruments to systematically collect quantitative and qualitative data specific to group walking activities, tour bus cruising, operational efficiency, mobility, access, and safety. There were four target groups: school, adult, cultural, and senior citizen veterans. Researchers collaborated with the NPS and Destination DC to identify diverse user groups and secure permission to join tours. All tour participants and drivers were aware of the purpose of the study and the presence of the researchers on the tours.

Data collection instruments were electronically administered using iPads, allowing researchers to be immersed in tour activities. Map My Tracks software was utilized to document the bus driving route. iPads tracking the bus movement were kept on the buses at all times, so that the full route selected by the driver could be mapped. At least one researcher stayed on the bus at all times in order to document the day through the experiences of the driver. Data were organized and analyzed using Microsoft Excel software. Spatial data files were converted into Arc GIS format for analysis. Each data point was geocoded by zone before creating graphical illustrations of key variables.

Results

Table 1 offers an overview of select variables documented for this study across tour bus groups. Tour lengths varied from half-day visits of 4-5 hours for the two cultural groups up to full-day sojourns of 13+ hours for the school groups. The study found tour buses drove the bus empty (cruising) while their passengers were off the bus and walking for sightseeing. Cruising miles in Washington, DC varied between 2.3 miles on the low end and 22 miles on the high end. Cruising occurred when a driver elected to drive the bus empty rather than search for a place to park or is forced to drive the bus empty because no parking is available or convenient.

Based on the average empty vehicle cruising miles we obtained from the sample, we estimated the overall contribution of tour bus cruising within the city to GHG emissions. As Table 2 presents, daily empty tour bus cruising miles are estimated from 9,120 miles (peak season) to 4,560 miles (off-peak season), which translates to 829 (peak) to 415 (off-peak) gallons of diesel consumption on a daily basis and 302,618 (peak) to 151,309 (off-peak) annually. This level of diesel consumption generates 3,080,653kg (peak) to 1,502,346kg (off-peak) greenhouse gas emissions annually. Putting this number in the context, this level of CO_2 emissions is equivalent to CO_2 emissions from 560 homes' electricity use for one year or 3,404,995 pounds of coal burned (U.S. EPA, n.d.). In addition to cruising, idling (which is illegal after a 3-minute period) contributed to greenhouse gas emissions. Five of the tours had temperatures that went either below 35 degrees or above 80 degrees, compelling the drivers to keep the bus running beyond to Washington, DC idling laws in order to keep the temperature regulated.

Application to Practice

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Evaluate methodology that can document greenhouse gas emission impact of tour bus cruising in urban parks.
2. Identify the key factors that contribute to the tour bus cruising in spatially complex urban parks.
3. Indicate a minimum of three ways to reduce tour buses' contribution to greenhouse gas emission.

Tables and Figures

Table 1. Overview of Study Sample

Variable	School Age 1	School Age 2	Adult 1	Adult 2	Cultural 1	Cultural 2	Veteran 1	Veteran 2
Place of Origin	South Dakota	Massa-chusetts	Virginia	North Carolina	South Korea	South Korea	Gathered in DC from various U.S. locations	Gathered in DC from various U.S. locations
Temp. Low / High (°F)	33° / 59°	71° / 90°	57 ° / 86°	55° / 72°	32° / 61°	50° / 70°	72° / 91°	56° / 73°
Total Tour Hours /Minutes	13 hr 25 min	14 hr 9 min	9 hr 8 min	14 hr 7 min	4 hr 18 min	5 hr 5 min	12 hr 9 min	12 hr 30 min
Total Number of People on Tour	15	41	23	31	19	12	52	54 (Bus 1) 55 (Bus 2)
Number of Stops Made by Driver*	14	19	6	19	7	11	15	12
Total Vehicle Miles Traveled	92.7	63	15	98.8	45.4	17.6	91.5	112
Cruising "Empty" Vehicle Miles in DC	22	6	5.5	12.5	1.5	3	8	2.3

* Including parking locations and meals.

** Excluding parking locations and meals. Multiple sites in one stop counted separately.

Table 2: Estimated CO2 Emission by Tour Bus Cruising Empty Vehicle Miles

Trip Type	Miles[1]	Gallon Consumed[2]	CO_2 Emission[3] (Kilograms)
School Age Trip	14.0	1.27	12.96
Adult Trip	9.0	0.82	8.33
Cultural Trip	2.3	0.20	2.08
Veteran Trip	5.2	0.47	4.77
Average	7.6	0.69	7.03
High End[4] Daily	9,120	829	8440
Annually	3,328,800	302,618	3,080,653
Low End[5] Daily	4,560	415	4,220
Annually	1,664,400	151,309	1,502,346

*All numbers in the table are rounded up. [1] Averages by Trip Type. [2] Estimated based on the average gas mileage of 11 miles per gallon of fuel by CoachWest. https://coachwest.com/average-gas-mileage-for-executive-buses-sprinter-vans-and-limos/ [3] Estimated based on the U.S. EPA conversion factor of 10,180 grams of CO2 emissions per gallon of diesel consumed. https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references [4] Estimated based on the daily total of tour busses (1200) visiting D.C. during the peak season. [5] Estimated based on the daily total of tour busses (600) visiting D.C. during the off-peak season.

References

Daniels, M. J., Harmon, L. K., Vese, R., Park, M., and Brayley, R. E. (2018). Spatial dynamics of tour bus transport within urban destinations. Tourism Management, 64, 129-141.

Daniels, M. J., Harmon, L. K., Vese, R., Park, M., Brayley, R. E., and Schintler, L. (2015). National mall and memorial parks: Tour bus study. Available at https://www.nps.gov/nationalmallplan/Documents/Trans/NationalMall_TourBusStudy_FinalReport_June%202015.pdf

Groth, P., Miller, R., Nadkarni, N., Riley M., and Shoup L. (2008). Quantifying the greenhouse gas benefits of urban parks. White Paper. http://cloud.tpl.org/pubs/benefits_greenhouse_gases_and_parks_whitepaper.pdf

Hertel, O., Hvidberg, M., Ketzel, M., Storm, L., & Staugaard, L. (2008). A proper choice of route significantly reduces air pollution exposure: A study on bicycle and bus trips in urban streets. Science of the Total Environment, 389, 58-70.

Lenzen, M., Sun, Y-Y., Faturay, F., Ting, Y-P., Geschke, A., and Malik, A. (2018). The carbon footprint of global tourism. Nature Climate Change, 8, 522-528.

National Park Service (2010). National Mall Plan. Available at https://www.nps.gov/nationalmallplan/FEISdocs.html

National Park Service (2022). National Mall and Memorial Parks: Frequently asked questions. Available at https://www.nps.gov/nama/faqs.htm

Schottland, T. (2019, April 5). Parks as a solution to climate change. Parks & Recreation. https://www.nrpa.org/parks-recreation-magazine/2019/april/parks-as-a-solution-to-climate-change/

Sustainable Travel International (n.d.). Carbon footprint of tourism. Available at https://sustainabletravel.org/issues/carbon-footprint-tourism/

United Nations (n.d.). Climate Action: Cities and pollution. Available at https://www.un.org/en/climatechange/climate-solutions/cities-pollution

US Environmental Protection Agency (2013). Heavy trucks, buses and engines. Available at http://www.epa.gov/otaq/hd-hwy.htm

US Environmental Protection Agency (2021). Inventory of U.S. greenhouse gas emissions and sinks: 1990-2019. Available at https://www.epa.gov/sites/default/files/2021-04/documents/us-ghg-inventory-2021-main-text.pdf?VersionId=uuA7i8WoMDBOc0M4In8WVXMgn1GkujvD

RECREATION FOR LGBTQ YOUTH IN THE FACE OF ANTI-LGBTQ LEGISLATION

AUTHORS

Eric Knee, PhD
Adelphi University
eknee@adelphi.edu

Austin Anderson, PhD
University of North Texas
austin.anderson@unt.edu

Introduction/Rationale

More anti-LGBTQ laws have been proposed and passed in 2021 than any prior year in U.S. history (ACLU, 2021). Many of these laws have disproportionately targeted transgender and gender nonconforming youth with outcomes including, but not limited to, the denial of gender-affirming healthcare, limiting access to gender-affirming educational opportunities and spaces, and limiting access to sport and recreation spaces. In some states, these anti-LGBTQ laws directly impact the provision of recreation services by providing additional barriers to participation. As such the question on how to promote LGBTQ inclusion, create affirming recreational spaces, and advocate for LGBTQ persons, particularly trans and gender nonconforming youth, has never been more important.

Even prior to the recent onslaught of anti-LGBTQ legislation, multiple barriers to participation for LGBTQ youth have been noted in park and recreation research. Such barriers include gender-exclusive spaces and/or programming, lacking cultural competency among administrators, heterosexist policies, cisnormativity, non-affirming marketing materials, perceptions of recreation spaces as unsafe, and the general homophobic/transphobic associations of youth recreation and sport (Anderson et al., 2020; Elling-Machartzki, 2017; Oakleaf & Richmond, 2017; Pecoraro & Pitts, 2020). Such barriers are particularly troubling as societal stigmas attached to an LGBTQ identity put such youth at a much higher risk for multiple negative public health outcomes including, being disproportionally affected by homelessness, increased negative mental health outcomes, higher suicide risk, increased substance abuse, and higher rates of HIV (Gattis, 2013; Ream, 2020). However, recreation has been discussed as an opportunity to both alleviate some of these negative outcomes (Woodford, et al., 2015) and as a space that can promote queer resistance to heterosexist social structures (Theriault, 2017).

In other words, a positive/affirming recreation practice can promote protective factors and overall wellbeing among youth. While limited prior research has outlined ways to promote LGBTQ inclusive recreation services (Gillard, et al., 2014; Oakleaf & Richmond, 2017; Theriault, 2017), such research rarely considers the expertise of LGBTQ-specific recreation providers nor are the recreation needs and interests of LGBTQ youth considered. Furthermore, this research rarely integrates discussions of advocacy beyond the immediate recreation setting. As such, this study drew on data from both experts in LGBTQ recreation delivery and the voices of LGBTQ youth to illustrate the role of recreation providers in both promoting inclusive and affirming park and recreation spaces and advocating against anti-LGBTQ legislation.

Methods

This study utilized qualitative, semi-structured interviews with (a) recreation administrators who run programming specifically for LGBTQ youth and (b) LGBTQ youth. Data from the former group represents individuals with expertise in service provision for the LGBTQ population, offering insight into best-practices, knowledge gaps, advocacy, and practical applications in the promotion of inclusive/affirming spaces. Such providers run LGBTQ-youth camps or work with LGBTQ nonprofit recreation providers. Data from the latter group is grounded in discussions on the role of recreation in the lives of LGBTQ youth, specific needs from recreation service providers, and actions taken that can either inhibit or promote participation. Data were collected and analyzed using the constructivist grounded theory method (Charmaz, 2014).

Results

LGBTQ recreation providers emphasized practices around: (a) policies, (b) physical space, (c) organizational culture, (d) programming, (e) youth leadership, (f) advocacy, (g) promotion/marketing, and (h) moving beyond well-intended placations to meaningful change. Data specifically drew attention to practical places to get started in advocacy for this population. LGBTQ youth specifically discussed: (a) existing barriers to participation, (b) definitions and views on safe versus unsafe spaces, (c) specific programmatic recreation needs and desires, (d) recreation as resistance, and (e) general perceptions of recreation and sport. Data from youth specifically emphasize the expectations youth have in their recreation participation.

Application to Practice

Previous research has outlined the importance of LGBTQ-inclusive recreation practices and has provided specific suggestions to better create LGBTQ affirming spaces (Gillard, et al., 2014; Oakleaf & Richmond, 2017; Theriault, 2017). To its credit, NRPA has published resources for practitioners in promoting LGBTQ inclusive practices (Coleman, 2018). However, while these resources are promising, there is limited data from both experts in LGBTQ recreation provision and from the voices of LGBTQ youth themselves, and thus limited data-driven initiatives to create inclusive recreational spaces.

The results of this study can allow recreation providers to gain a better understanding of what LGBTQ youth want and need in their recreation experiences and how to best create affirming spaces from a practical perspective. Furthermore, given the impact the recent anti-LGBTQ legislation can have on public recreation providers, specific tools for working against inequitable social structures in order to advocate for inclusive recreation provision is an essential skill for today’s recreation professional. This study, by highlighting the importance of recreational programming and spaces to LGBTQ youth populations, provides practitioners within park and recreation settings with vital information regarding LGBTQ youth participation in recreational programming, perceptions of park and recreational spaces with regards to safety and openness, and programmatic needs. Park and recreation professionals in a variety of settings can utilize these results to positively impact the inclusion, wellbeing, and participation of LGBTQ youth in these spaces.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Understand anti-LGBTQ legislation's impact on recreation programming.
2. Implement evidence-based affirming practices for the inclusion of LGBTQ youth.
3. Advocate for the equitable inclusion of LGBTQ youth in recreation programming.

RECREATION SPECIALIZATION AND PLACE ATTACHMENT: LINKS UNDERSTANDING

AUTHOR

Kolsoum Heidari, MA

University of Ottawa

kheid087@uottawa.ca

Introduction/Rationale

Recreational behaviors and their benefits are crucial to creating sustainable recreational programs in cities (Jensen & Ouis, 2008). Recreation is a leisure activity that involves physical, cognitive, emotional, and social aspects (Broadhurst, 2002). Therefore, the formation of recreational behaviors is complex. Recreational behaviors of amateur athletes are relatively poorly understood. This is because their behavior is generally viewed as similar to that of professional athletes (Stebbins, 1922). It has been argued that recreational specialization influences the formation of recreational behaviors, and that it is one of the predictors of attachment to the places of amateur athletes (Lee & Scott, 2013; Mueller, 2016). This study examines how recreational specialization affects amateur athletes' attachment to their place.

Recreation specialization. Some recreationists want to get more involved in recreation than simply taking part in activities. This idea led to the emergence of the concept of recreation specialization (Bryan,1977). In the view of Bryan (1977), recreation specialization is more than just measuring the internal content of participation and shows how people progress from one stage of involvement to another (Scott & Shafer, 2001) and it has three dimensions: past experience, related to the activity and familiarity with a recreational area, and the frequency of attending these activities. As the level of recreational specialization increases, participants' recreational experiences are likely to shift from general to specific activities (Hurd & Anderson, 2010). Economic commitment is an indicator of specialization that allocates money to recreation and indicates a recruiter who is willing to spend money on recreational activities (McFarlane,1994). The last dimension is a lifestyle. Scott & Shafer (2001) claim that people involved in recreational activities are committed to their personal lives and behaviors, because their leisure activities can be considered to be "the main interests of their lives (Scott & Shafer, 2001).

Place attachment. The process of forming and severing emotional bonds between people and places is called place attachment. It refers to the emotional connection between individuals and places (Hummon,1992). Place attachment incorporates three dimensions: place dependence, place identity, and social bonding (Kyle et al., 2005). Dependence on the place is a cognitive-emotional connection between individuals and important places in which a common human experience emerges (Scannell & Gifford, 2017). Place identity refers to the symbolic and emotional importance of place as a source of psychological relationships and attachments that immerse people in specific places (Williams & Vaske, 2003). In the third dimension of place attachment, social interactions between participants in recreation generate the basic concept of the physical environment, through which places become for a person a place for social communication, which is a place where people come together. A place has emotional significance to a person and establishes an emotional connection with it (Kyle et al, 2005).

Methods

The research method is applied from the perspective of purpose and is based on structural modeling. A study was conducted on people who spend their leisure time at the largest and most modern sporting facility in Tehran, the Enghelab Sports Complex.

PASS software was used to estimate sample size based on research objectives and hypotheses in this study (Hintze, 2011). Therefore, based on the assumptions underlying the alpha level of 0.01 Statistical Power 0.90 R2 (0/05) for each criterion variable, the sample size was estimated at 334 (Cohen, 1988). The required data were collected using McFarlane's recreation specialization questionnaire (1994) and place attachment questionnaire (Kyle et al, 2005). These questionnaires were distributed among individuals with at least 6 months of membership in Enghelab Sports Complex for their leisure. The majority of them played multiple sports.

Results

The results of this study showed recreation specialization could predict 39% of place attachment variance (Figure 1). As a result of structural equation modeling, the effect of recreation specialization on the place attachment of amateur athletes was adequately modeled (SRMR=0.071) (Table 2). Place attachment is most influenced by lifestyle and is the best predictor that can measure the impact of recreation behavior on attachment to a place. Thus, amateur athletes' lifestyles and interactions with people who have similar behaviors can lead to increased place identity.

Application to Practice

Attending the Enghelab Sports Complex in Tehran will give amateur athletes effective and positive experiences (like meeting and connecting with new friends), so they will become more socially attached to the place and more likely to spend their recreation there. In addition, since amateur athletes are required to purchase an annual membership to attend the Sports Complex, which demonstrates their economic commitment, they are likely to expect a secure location. As a result of the security provided, athletes, especially women and children, will become dependent on these places and will pursue recreational activities as an institutional behavior that is of primary interest to them. According to the results of the present study, specialized participation in recreational activities can contribute to more social bonds, place identity, and place dependence.

Recreation planning should consider this issue when making decisions. Armature athletes may consider recreational activities as part of their lifestyle. Therefore, trying to change simple recreational activities to Specialized recreation can be considered as a guideline for recreational program policymakers.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Understand recreational behaviors and their benefits to creating sustainable recreational programs.
2. Understand the recreational behaviors of Iranian amateur athletes.
3. Assess the effect of recreation specialization on the place attachment of Iranian amateur athletes.

Tables and Figures

Table 1. Fornell-Larcker criterion

	Past experience	Economic commitment	Place attachment	Lifestyle
Past experience	0/807			
Economic commitment	0/567	0/886		
Place attachment	0/240	0/253	0/751	
Lifestyle	0/604	0/477	0/424	0/741

Table 2. Quality indicators of the model

	Standard state	Significant state	Place attachment
SRMR	0/071		
d_ULS		0/001	
d_G1		0/001	
d_G2		0/001	
R^2			0/207
Q2			0/473

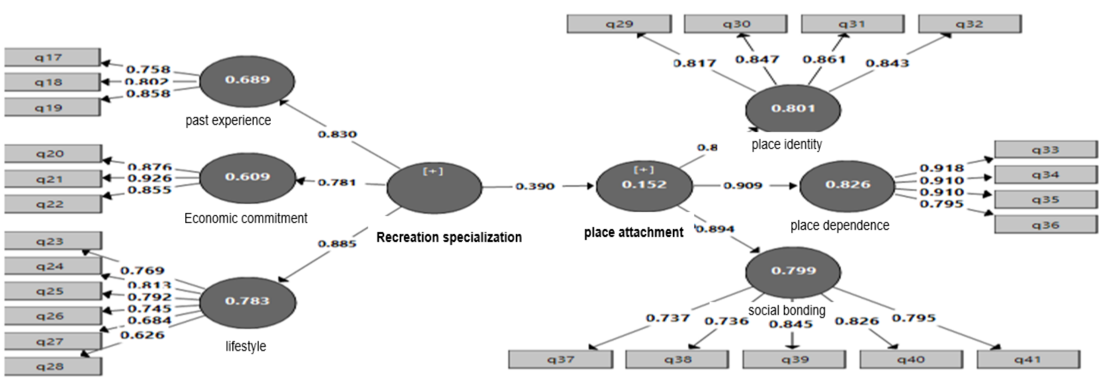


Figure 1. The model of research hypotheses (recreation specialization and place attachment) using Smart PLS 3.

References

Hummon, D. M. (1992). Community attachment. In Place attachment (pp. 253-278). Springer, Boston, MA.

Kyle, G., Graefe, A., & Manning, R. (2005). Testing the dimensionality of place attachment in recreational settings. Environment and behavior, 37(2), 153-177.

Scannell, L., & Gifford, R. (2017). The experienced psychological benefits of place attachment. Journal of Environmental Psychology, 51, 256-269.

Williams, D. R., & Vaske, J. J. (2003). The measurement of place attachment: Validity and generalizability of a psychometric approach. Forest science, 49(6), 830-840.

Jensen, E. L., & Ouis, P. (2008). Contested construction of nature for city fringe outdoor recreation in southern Sweden: The Arrie case. Urban Forestry & Urban Greening, 7(3), 171-182.

Broadhurst, R. (2002). Managing environments for leisure and recreation. Routledge.

Lee, S., & Scott, D. (2013). Empirical linkages between serious leisure and recreational specialization. Human Dimensions of wildlife, 18(6), 450-462.

Mueller, J. T. (2016). Conflict, Specialization, and Place Attachment among North American Rock Climbers.

Bryan, H. (1977). Leisure value systems and recreational specialization: The case of trout fishermen. Journal of leisure research, 9(3), 174-187.

Scott, D., & Shafer, C. S. (2001). Recreational specialization: A critical look at the construct. Journal of leisure research, 33(3), 319-343.

Hurd, A. R., & Anderson, D. M. (2010). *The park and recreation professional's handbook*. Human Kinetics.

McFarlane, B. L. (1994). Specialization and motivations of birdwatchers. Wildlife Society Bulletin (1973-2006), 22(3), 361-370.

Stebbins, R. A. (2012). Comment on Scott: Recreation specialization and the CL-SL continuum. Leisure Sciences, 34(4), 372-374.

Hintze, J. (2011). Power analysis and sample size (PASS) 11. Kaysville, UT: NCSS, LLC.

Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). New York: Routledge.

RESEARCH ON LEISURE AND SPIRITUAL DIVERSITY: PRACTICAL APPLICATIONS

AUTHOR

Paul Heintzman, PhD

University of Ottawa

pheintzm@uottawa.ca

Introduction/Rationale

Spirituality may increasingly become more central to leisure expression and recreation activity, with resulting implications for recreation practitioners (Godbey, 2006). At the same time, spirituality is becoming more diverse within the Western world (Stebbins, 2013). Although research on leisure and spirituality has been increasing (e.g., Heintzman, 2016) it is important that the findings of this research inform the inclusive and equitable delivery of recreation services in an increasingly diverse society. Thus, the purpose of this paper is to present and synthesize research on critical issues related to spiritual diversity pertinent to recreation, parks, and leisure services, and the application of this research for recreation and leisure service delivery.

Methods

This study was based on an extensive review of literature focused on spiritual diversity and the delivery of recreation and leisure services. The review primarily focused on research conducted in the North American context but also included a few relevant studies from beyond North America.

Results

For purposes of synthesis, critical issues related to spiritual diversity and the delivery of recreation and leisure services were organized according to three dimensions of leisure: time, activity, and place. Time issues included the issues of spiritual diversity and holy days as well as secularization and lack of a common pause day. Activity issues included: whether or not to provide spirituality-related activities and programs; inclusive practices; integration versus segregation of specific spiritual groups; and partnerships with spiritually oriented organizations. Place issues included: place-related legal issues; issues related to natural and historic site interpretation; issues related to sacred site management and indigenous lands; issues at New Age destinations

Recreation service providers have responded differently to an increasing variety of spiritually related holidays (e.g., deLisle, 2004). With secularization, holidays which previously had religious meaning may now be primarily viewed as days of leisure which require more services to be provided by recreation practitioners. With greater diversity, there is no longer a common weekly holy/rest day (Topley, 2002), but different times each week during which people of diverse spiritual traditions might not be able to participate in leisure opportunities. Provision of spirituality-related activities and programs varies within and between recreation agencies (Tafel, 2019; YMCA Canada, 2017). While some members of spiritual groups feel excluded from recreation settings (e.g., Tirone & Goodberry, 2011) some agencies have implemented inclusive practices (deLisle, 2004). Organizational practices and policies have been found to both facilitate and inhibit social inclusion (Maxwell, 2012). While some groups such as the Jewish Community Centre Association provide segregated services, integrating people from different spiritual traditions may have positive outcomes (Leitner, 2014).

Partnerships between spiritually oriented organizations and public recreation agencies have both advantages and disadvantages (VanderSchoot (2005). Place-related legal issues involving leisure service agencies and spirituality usually have to do with what is allowed or not allowed on park lands (e.g., Dolesh, 2019). Another concern is public funding of facilities and places owned by religious organizations (Koslowski, 2017). Many interpretive sites are intertwined with spiritual values and thus effective interpretation requires supportive management, staff training on these values and staff openness to different viewpoints (Beck et al., 2018). As sacred sites are often major tourist attractions, tourist developers need to be sensitive to these sacred places, and visitors need to be informed on how and why the place is considered sacred, in addition to the appropriate behaviors to respect the sacred place (Salk et al., 2010). Concerns about environmental degradation, commercialization of spirituality and commodification of culture have arisen at New Age sites (Timothy & Conover, 2006).

Application to Practice

As spirituality becomes more diverse, recreation practitioners need to adapt to the current situation. First, they need to become knowledgeable about the leisure understandings and practices within diverse spiritual traditions. Understandings of leisure differ within and between different spiritual traditions (See Table 1). Understanding how individuals from various spiritual traditions understand leisure may help inform practitioners to critically analyze both the types of leisure services provided and the manner in which they are offered to people of various spiritual traditions.

Second, practitioners need to develop awareness of diverse spiritual perspectives in their recreation sub-field and adapt services to participants' spiritual traditions. For example, New Age, Christian, and generic spiritual perspectives have been applied to therapeutic recreation practice (Heintzman, 1997), while Kaza (1996) explored eight major spiritual traditions (Buddhism, Confucianism, Taoism, Jainism, Hinduism, Islam, Christianity, Judaism) in regard to land management practices.

Third, recreation practitioners need to become aware of the recreation services offered by offered by spirituality-oriented organizations in their community in order to work cooperatively with them and also to refer individuals to specific services offered by these organizations.

Fourth, research on leisure and spirituality suggests that spiritual outcomes may derive from a diverse range of recreation activities and settings, and not just religious/spiritual settings, and thus recreation practitioners should be aware of the factors that may contribute to spiritual outcomes (e.g., time and space for leisure activities with a spiritual dimensions; a balance in life; leisure settings of personal or human history; an attitude of receptivity, gratitude, and celebration; being in nature; being away to a different environment; solitude; and group experiences).

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Identify the three main categories of issues related to spiritual diversity and provision of recreation services.
2. Find resources and research about diverse spiritual traditions and their implication for recreation service provision.
3. Identify nine implications of research on leisure and spirituality for recreation practice.

Tables and Figures

Table 1: Understandings of Leisure by Spiritual Tradition

Spiritual Tradition	**View of Leisure**	**References**
Judaism	Sabbath: no work on the seventh day (Exod. 20:8-11); "the ideal manifestation of leisure…meant for all" (Davidovich, 2017, p. 105). Sabbath-rest (*menucha*): a celebration of life.	Davidovich, 2017 Heschel, 1951 Lamm, n.d.
Islam	Activity view. Mohammed: "Recreate your hearts hour after hour, for the tired hearts go blind" "Teach your children swimming, shooting, and horseback riding" (Ibrahim, 1991, p. 206). Leisure activities fulfill three desires: 1. Amusement, relaxation, and laughter 2. Rhythmic tunes and the experience of objects through the senses 3. The desire to wonder, learn, and gain knowledge. Halal leisure: "leisure activities that are consistent with Muslim's religious identity and religious demands" (Walseth & Amara, 2017, p. 31)	Ibrahim, 1991 Martin & Mason, 2004 Walseth & Amara, 2017
Confucianism	Leisure contributes to *chi* (vital force) and social harmony.	Henderson, 2014
Buddhism	Mindfulness: "Practicing present moment awareness" (Arai, 2017, p. 151). Transcendental state of enlightenment is associated with a playful attitude.	Arai, 2017 Lurker, 1991
Taoism	*Wu Wei:* effortless engagement *Wu Yu:* simple enjoyment and celebration *Jing Jie*: highest goal in life and highest pursuit of Taoist leisure. An essence characterized by happiness and joyfulness that underlies all of life. It cannot be pursued but is a benefit of participation in activities such as martial arts, creative arts, or meditation. Similar to flow and a "state of mind" psychological understanding of leisure.	Simpson & Cocks, 2017 Wang & Stringer, 2000
Hinduism	Classical understanding of leisure. *Pravritti:* the active life. *Nivritti:* the contemplative life, leisure. *Nishkam-karma-yoga*: inner leisure characterized by a relaxing peace and a mind free from turmoil. Objective of leisure: "discovery of an undifferentiated felicity which underlies all existence" (Sharma, 2017, p. 46).	Kashyap, 1991 Sharma, 2017

Spiritual Tradition	**View of Leisure**	**References**
North American Aboriginal	Holistic view of leisure. Close association with the land, cyclical holistic worldview. Leisure is not a separate segment of life but linked to all life situations: birth, death, cultural ceremonies, celebrations, festivals.	McDonald & McAvoy, 1997 Reid & Welke, 1998
New Age	Leisure experiences may be connected to spiritual or mystical feelings: "a feeling of oneness with the universe; a feeling of being connected to all else; a sense of being connected with oneself and a sense of 'waking up'…to see a glimmer of what is true" (Howe-Murphy & Murphy, 1987, p. 45).	Howe-Murphy & Murphy, 1987 Timothy & Conover, 2006
Christianity	1.Early notion of *otium sanctum*, holy leisure: "A sense of balance in life, an ability to be at peace through the activities of the day, an ability to rest and take time to enjoy beauty, an ability to pace ourselves (Foster, 1978, pp. 20-21). 2.Classical view: Augustine, Aquinas, Pieper (1963): "spiritual attitude…a condition of the soul…a receptive attitude…a contemplative attitude" (pp. 40-41) (See also Doohan, 2016). 3.Activity view: "The purpose of leisure is to re-create a person" (Ryken, 1995, p. 236). 4.Time (Neville, 2004; Sherrow, 1984). 5.Holistic: "Leisure is being able to combine work, worship, and recreation in a free and loving, holistic way which integrates these three elements as much as possible" (Dahl, 2006, p. 95) (See also Heintzman, 2015; Joblin, 2009).	Dahl, 2006 Doohan, 2016 Heintzman, 2015, 2017 Joblin, 2009 Neville, 2004 Pieper, 1963 Ryken, 1995 Sherrow, 1984

References

Beck, L., Cable, T. T., & Knudson, D. M. (2018). Interpreting cultural and natural heritage: For a better world. Sagamore.

deLisle, L. J. (2004). Respecting religious traditions in recreational programming. Parks and Recreation, 39(10), 74–76, 78–81.

Dolesh, R.J. (2019). The vexing problem of Latin crosses in public parks. Parks and Recreation, 53(12), 26-28.

Godbey, G. (2006). Leisure and leisure services in the 21st century: Toward mid century. Venture.

Heintzman, P. (1997). Putting some spirit into recreation services for people with disabilities. Journal of Leisurability, 24(2), 22–30.

Heintzman, P. (2016). Religion, spirituality, and leisure. In G. Walker, D. Scott, & M. Stodolska (Eds.), Leisure matters: The state and future of leisure studies (pp. 67–76). Venture.

Jewish Community Centers Association. (n.d.). About JCC Association. Retrieved from www.jcaa.org/about_us.html

Kaza, S. (1996). Comparative perspectives of world religions: Views of nature and implications for land management. In B. L. Driver, D. Dustin, T. Baltic, G. Elsner, & G. Peterson (Eds.), Nature and the human spirit: Toward an expanded land management ethic (pp. 41–60). Venture.

Kozlowski, J.C. (2017). State playground program disqualified religious organizations. Parks & Recreation, 51(9), 32-37.

Leitner, M. J. (2014). Recreation programs for promoting peace in Israel: An overview. In M. J. Leitner & S. F. Leitner (Eds.), Israeli life and leisure in the 21st century (pp. 169–174). Sagamore.

Maxwell, H. (2012). An exploration of social inclusion in Australian community sport: The case of Muslim women [Unpublished doctoral dissertation]. University of Technology.

Salk, R., Schneider, I. E., & McAvoy, L. H. (2010). Perspectives of sacred sites on Lake Superior: The case of the Apostle Islands. Tourism in Marine Environments, 6(2/3), 89–99

Stebbins, R. A. (2013). Consumerism as shaped by the pursuit of leisure. In T. Blackshaw (Ed.), Routledge handbook of leisure studies (pp. 402–412). Routledge.

Tafel, N. (2019, Aug. 6). Adapting to our changing communities with a global lens. Retrieved from https://www.ymca.net/ymca175-blog-nora-tafel

Timothy, D. J., & Conover, P. J. (2006). Nature religion, self-spirituality and New Age tourism. In D. H. Olsen & D. J. Timothy (Eds.), Tourism, religion, and spiritual journeys. Routledge.

Tirone, S., & Goodberry, A. (2011). Leisure, biculturalism, and second generation Canadians. Journal of Leisure Research, 43(3), 427–444.

Topley, R. (2002). Placing Sunday. The Furrow, 53(9), 459–465.

VanderSchoot, L. (2005). Navigating the divide: Muslim perspectives on Western conceptualizations of leisure [Unpublished master’s thesis]. Wageningen Univ.

YMCA Canada. (2017, Feb. 27). New YMCA centre opens in Membertou First Nation. Retrieved from https://ymca.ca/News-Events/News/New-YMCA-centre-opens-in-Membertou-First-Nation

SOCIAL MEDIA COMMUNICATION STRATEGIES IN TAX REFERENDA SUPPORTING PUBLIC PARK AGENCIES

AUTHORS

Sharon (Suiwen) Zou
University of Illinois Urbana-Champaign
szou@illinois.edu

Andrew Kerins, PhD
Eastern Illinois University

Nicholas Pitas, PhD
University of Illinois

Introduction/Rationale

Although local park and recreation agencies rely on a variety of funding sources, tax-based allocations are by far the most significant, accounting for approximately 60% of the operating budget of the average local agency (NRPA, 2020). Unfortunately, tax-based allocations to local parks and recreation are often modest relative to other local public services and may not keep pace with growing user demands and maintenance backlogs (Pitas et al., 2017). As such, local agencies often work to supplement the funding provided by tax-based allocations in a variety of ways, such as through earned revenue, philanthropic support, grants, and sponsorship payments. Simultaneously, many agencies engage in cost-cutting measures such as outsourcing and reduced staffing or services.

In addition, many local municipalities have the capacity to engage in voter referenda as a means of increasing tax-based support. A referendum is a form of direct democracy, in which voters take a direct role in determining public policy in their local area, voting to either affirm or reject specific proposals (Lupia & Matsusaka, 2004). Although referenda may address a variety of issues, they are commonly used as a mechanism to preserve open space or provide funding for specific parks and recreational purposes. Significantly, such "green referenda" are often among the most popular and historically pass at a higher rate than referenda targeting other issues (Nelson et al., 2007), with high levels of voter support (Banzhaf et al., 2010).

Although there is evidence that this type of voter referendum is becoming increasingly prevalent and important in the United States, there is a relatively small body of research that addresses this phenomenon (Beaghen, 2013). Existing work has largely focused on demographic factors related to the likelihood a referendum is included on the ballot and factors that relate to their success or failure. This study seeks to contribute to this area of knowledge by exploring the use and effectiveness of strategic messaging by a county-level public park agency to rally the public's support for a tax referendum to increase public funds for the agency's operation. Specifically, this study utilized the official Facebook page of the referendum campaign to examine what message content and type were effective in increasing awareness and engagement among Facebook users.

Methods

Data were collected from the Facebook page of a county-level public park agency's 2020 tax referendum campaign. The Facebook page was created for the referendum campaign in the summer of 2020. Organic posts (not advertised) before the election day were included in the analysis, totaling 156 posts. Two researchers content analyzed all posts and categorized them into 16 persuasive strategies. Most posts utilized multiple strategies and were coded up to three types of strategies. As such, the final sample size in the analysis was 304. Dependent variables encompassed each post's performance metrics. Six performance metrics were included in the analysis: *Impression, Reach, Engagement, Impression among Liked Followers, Reach among Liked Followers,* and *Engagement among Liked Followers* (**Table 1**). *Lifetime Total Likes*, which was defined as the total number of unique users who have liked the page, was included as a control variable. Multiple regressions were conducted to investigate the effects of persuasive strategies and post types on post performance.

Results

The most common persuasive strategies were *Function/Value of the Preserves* (showcase the functions, activities, and natural beauty of the forest preserves) (20.7%) and *Call to Action* (Prompt a response or encourage an action) (20.4%), followed by *Story and Narrative* (share park users' personal stories related to the preserves) (9.5%), and *User Benefits* (emphasize the benefits of the preserves for park users) (8.2%). As for post types, *Photo* posts (55.7%) and *Link* posts (25.3%) were two dominating post types, followed by *Video* posts (12.7%).

Regression results (see **Table 1**) showed that messages that explained the ballot in plain language (e.g., *Simplify Ballot Language*), demonstrated support or approval from local organizations or local champions/celebrities (e.g., *Endorsement*), broke down the total amount of tax being requested (i.e., *Temporal Reframing*), and emphasized the direct benefits if the referendum were passed (i.e., *Direct Outcome*) were most effective in increasing the awareness of the referendum. Among Facebook page followers, posts that demonstrate campaign efforts/activities (i.e., *Demonstration*) and appreciate individuals' or organizations' efforts to support the campaign (i.e., *Acknowledgement*) were effective in increasing engagement. In terms of post types, photo posts and video posts generally performed better.

Application to Practice

The success or failure of tax referenda supporting public park agencies does not lie solely in the characteristics of a municipality and its residents. Clearly, activities by local individuals, activities, and organizations play a large role in influencing public opinion and voter behavior (Banzhaf et al., 2010). Among the various activities that may sway public opinion, strategic messaging through a variety of media may be one of the most important. To that end, the findings of this study draw three best practices for social media communication in referendum campaigns.

Solicit and demonstrate support from highly regarded local organizations or individuals.

These endorsements can be as simple as a text post tagging the endorsers or a 30-second low-quality video taken with a phone. The key is to identify community organizations with a good reputation or credible "celebrities."

Emphasize the direct benefits and break down the total amount of tax being requested. A major concern about a tax referendum among voters is the increase in their property tax bill and, more importantly, what they get for the "price" paid. Spreading the cost over a longer timeframe (e.g., A home valued at $100k would pay about $5.33 more per year, 45 cents per month!) and emphasizing the direct benefits of a passed referendum (e.g., improving and restoring failing infrastructure and aging facilities) will facilitate a more favorable cost-benefit analysis in voters' mind.

Use videos and images. Facebook users engaged more with short videos (less than 30 seconds) and scenic images (e.g., fall foliage pictures taken from the parks).

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Identify effective message content in obtaining voter support for green referenda
2. Identify effective post types in increasing voter engagement in social media
3. Fomulate different communication strategies tailored to socia media followers vs. non-followers

Tables and Figures

Table 1. Regression Results

	Model 1[a] *log(Impression)*	Model 2[a] *log(Reach)*	Model 3[a] *log(Engagement)*	Model 4[a] *log(Impression among Followers)*	Model 5 *Reach among Followers*	Model 6[a] *log(Engagement among Followers)*
	All Users			*Among Followers who Liked the Campaign Page*		
Persuasive Strategies[b]						
Call to action	0.05	0.05	0.078	0.026	3.016	0.057
Countdown	0.098	0.1	0.081	0.009	-0.683	0.082
Demonstration	0.077	0.071	0.228**	0.099**	29.079**	0.209***
Direct Outcome	0.198**	0.205**	0.159	0.052	10.935	0.07
Endorsement	0.575***	0.583***	0.579***	0.183***	37.899**	0.37***
Voting logistics	0.017	0.012	-0.177	-0.065	-21.242	-0.235***
Acknowledgement	-0.017	-0.006	0.096	0.045	17.06*	0.111*
Loss framing	0.171	0.189	0.004	0.021	2.865	-0.045
Past Successes	-0.019	-0.017	-0.013	-0.018	-9.338	0.017
Psychological Ownership	0.153	0.145	0.2	0.027	4.763	0.087
Simplify Ballot Language	0.789***	0.794***	0.562***	0.245***	47.521**	0.245*
Story and Narrative	0.099	0.108	0.175**	0.027	8.945	0.103*
Temporal Reframing	0.206**	0.215**	0.221**	0.095***	24.164**	0.16***
Other-referencing	0.004	0.019	0.025	0.005	2.513	0.052
User Benefits	0.089	0.09	0.075	0.01	-2.31	0.02
Post Type[c]						
Link	-0.305***	-0.313***	-0.133***	-0.081***	-23.889***	-0.081*
Shared Video	-0.554***	-0.589***	-0.555***	-0.402***	-97.747***	-0.515***
Status	-0.211**	-0.311**	-0.341**	-0.072	-17.109	-0.252**
Video	-0.137**	0.086	0.08	0.037	-19.332***	-0.015
Total likes	0.00004	0.0001	-0.0003**	0.0003***	0.109***	-0.0003***
Constant	2.412***	2.277***	1.505***	2.061***	90.704***	1.385***
Adjusted R-squared	0.264	0.254	0.187	0.36	0.333	0.239
Observations	302	302	302	302	302	302

[a] Log transformation was performed due to skewness.

[b] Reference level = Value of the Preserves.

[c] Reference level = Photo.

* p <0.1, ** p < 0.05, *** p<0.01.

References

National Recreation and Park Association. (2020). *2020 NRPA Agency Performance Review.* https://www.nrpa.org/siteassets/nrpa-agency-performance-review.pdf.

Pitas, N. A., Barrett, A. G., & Mowen, A. J. (2017). Trends in local park and recreation department finances and staffing in the early twenty-first century. *Journal of Park and Recreation Administration*, 35(3), 20–34. https://doi.org/10.18666/JPRA- 2017-V35-I3-7712.

Lupia, A., & Matsusaka, J.G. (2004). Direct democracy: New approaches to old questions. *Annual Review of Political Science*, 7, 463-482.

Nelson, E., Uwasu, M., & Polasky, S. (2007). Voting on open space: What explains the appearance and support of municipal-level open space conservation referenda in the United States? *Ecological Economics*, 62(3-4), 580-593.

Banzhaf, H. S., Oates, W. E., & Sanchirico, J. N. (2010). Success and design of local referenda for land conservation. *Journal of Policy Analysis and Management*, 29(4), 769-798.

Beaghen, Susan P., "Selection and Passage of County Land Preservation Voter Referendum: The Role of Government" (2013). *FIU Electronic Theses and Dissertations*. 887. https://digitalcommons.fiu.edu/etd/887.

SPORT OFFICIAL MOTIVATION AND RETENTION IN RURAL ATHLETIC ASSOCIATION

AUTHOR

Tricia Jordan, PhD

Western Kentucky University

dtjordan@peoplepc.com

Introduction/Rationale

The National Association of Sports Officials (NASO) released the findings of an industry wide survey giving over 17,000 sport officials an opportunity to share their thoughts (Referee, 2020). Female officials made up only 6.43% of respondents whose average age was 53.29. Those respondents officiating track & field, tennis, and swimming reported the highest average age at 58.74, 58.04, and 57.87 respectively. The lowest average age by sport was hockey where respondents average age was 48.41. Of those officials participating in the survey 57.02% believe sportsmanship is getting worse while 15.89% believe it is getting better and the remaining 27.09% do not believe it has changed. Respondents noted parents, followed by coaches, were associated with most of the sportsmanship problems (Referee, 2020).

By the fall of 2021, several states were reporting a shortage of sport officials. Keilman (2021) reported sport officials in the Chicago area reported a combination of the COVID-19 pandemic concerns, lack of appreciation, behavior officials encountered as part of their role, pay, and toll officiating takes on a body were leading officials to quit. As a result, both high school associations and youth sport programs were struggling to find qualified officials. Like its counterparts in Illinois's, the Kentucky High School Athletic Association (KHSAA) shared they faced a shortage of 100-125 football officials and 75 soccer referees that fall (Austin, 2021). Similarly, contributing factors leading to the shortage included an aging official pool who sought retirement and the abuse experienced by those officiating. The reported official shortages are not a new phenomenon (Steers, 2018; Theisen, 2017).

Sport officials play an integral role in the quality of programming and competition at every level in sport (Cuskelly & Hoye, 2013). As a result, when sport administrators struggle in recruitment, training, and retention of quality officials' researchers began to investigate factors that motivate individuals to officiate (Jordan et al, 2019, Fowler et al., 2019; Hancock et al., 2015), stressors (Voight, 2009; Dorsche & Paskevich, 2006, Rainey, 1994; Rainey, 1995; Rainey & Hardy, 1999), abuse of officials (Kellett & Shilbury, 2007), strategies for coping with stress (Warner et al., 2013; Voight, 2009), and retention (Jordan et al., 2019; Forbes & Livingston, 2013). To help identify potential areas high school athletic associations might emphasize as part of recruitment, training, and retention of officials the investigation sought to understand the level of satisfaction of individuals certified to officiate high school athletics.

Methods

Upon IRB approval, potential participants were recruited with the permission of the association's commissioner and assistance of assigning secretaries. An electronic survey was created using the Referee Retention Scale (RRS). The scale measures sport official satisfaction using seven factors (Administration Consideration α = .911, Intrinsic Motivation α = .855, Mentoring α = .907, Remuneration α = .734, Sense of Community α = .907, Lack of Stress α = .783, and Continuing Education α = .816) predicted to contribute to satisfaction and intention to continue using a 4-point Likert Scale (Ridnger et al., 2017). The survey also used the Michigan Organization Assessment Questionnaire Job Satisfaction Subscale (MOAQ-JJS) questions to assess job satisfaction. Questions include "All in all I am satisfied with my job", "In general, I don't like my job (r)", and "In general, I like working here" (Cammann et al., 1983; Bowling & Hammond, 2008, p. 64). This scale uses a 5-point Likert scale ranging from strongly disagree to strongly agree (Allen, 2001). For this sample the Cronbach's Coefficient alpha for the factors were all above acceptable levels (MOAQ-JJS α = .838).

The electronic survey was distributed using Qualtrics. Data collection occurred at two times during 2019. The first was conducted in May-June 2019 and the second in November-December 2019. Each time the survey was available for 6 weeks. To increase participation, reminder emails were sent at week three and the final week of the survey. Additionally, those who completed the survey were given the opportunity to opt into a drawing for a gift certificate. Descriptive statistics for quantitative items were calculated using the Statistical Package for the Social Sciences (SPSS) version 26.

Results

Only 9.8 % of those completing the survey were female officials. Fifty-one percent of participants had 11 or more years of officiating experience, 30.1% of the sample had 2-10 years of officiating experience, and 7% of participants were in their first year of officiating. The top five sports, among officials completing the survey, included girls' basketball, boys' basketball, softball, volleyball, and football. Most officials completing the survey indicated they would continue officiating (93.9%). Officials participating in the investigation reported a high level of satisfaction associated with their work. Table 1 summarizes the results of participant satisfaction within the seven areas of the referee retention scale.

Application to practice

Demographic results indicate the association should focus recruitment effort on increasing the number of female officials and new officials overall. First, only 9.8% of the officials completing the survey were female. A focus on recruiting female officials could help aid opportunities for former athletes to stay connected with their sports while helping to address the fact that only 7% of the officials participating reported being a first-year official. Increasing the overall number of first year officials is also important because 51% those officials participating in the survey have officiated 11 or more years. The potential exists for these officials to retire soon because of age or the physical demands of officiating.

To continue to attract new officials the association could target athletes entering college or recent college graduates. Recruitment efforts could emphasize an opportunity to stay connected with a sport the individuals loved while earning supplemental income. Recruitment should also involve current officials to help foster the social connections that lead to an official's sense of satisfaction. Once recruited current officials should then be involved in mentoring new officials. The mentoring aspect will aid in retention as new officials have a means to learn and refine their officiating skills. Finally, favoritism is a concern in assigning games. Clearly explaining the assignment process is important to satisfaction. This is important for all games but even more important as officials have opportunities to officiate high stake games (i.e., district or state championships) or extensive travel is required as part of the assignment.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Understand the drivers of official motivation.
2. Understand the areas of sport officials' satisfaction.
3. Understand how the factors that motivated individuals to volunteer and contribute to sport .official satisfaction could aid in sport official recruitment and retention.

Tables and Figures

Table 1 Referee Retention Scale (RRS) Question Results

Construct	Mean	SD
Administrative Consideration		
Administration in my officials' association are considerate of my needs.	3.12	0.88
Decisions related to game assignment are fair.	2.81	0.97
Game assignments are distributed based on "who you know." (r)	2.53	1.03
Officiating assignments are based on favoritism and politics. (r)	2.55	1.07
Administrators in my officials'' association show favoritism. (r)	2.59	1.05
Intrinsic Motivation		
I officiate as a way to stay involved with the sport.	3.61	0.65
I enjoy officiating because it allows me to stay connected to my sport.	3.58	0.67
I love the competitive nature of sports.	3.77	0.46
I like that officiating allows me to be part of competitive events.	3.68	0.56
I like the challenge of officiating.	3.71	0.53
Officiating allows me to give back to the sport.	3.65.	063
Mentoring		
A mentor assisted my integration into the officiating community.	2.89	1.07
Having a mentor to support me as an official was an initial attraction to the role.	2.56	1.09
A mentor helped me to feel welcome in the officiating community.	2.91	1.04
A mentor or friend encouraged me to officiate.	3.01	1.05
Remuneration		
My main motivation for officiating is financial reward.	1.90	0.87
Pay was an important factor in my decision to start officiating.	2.14	1.00
Officiating is a good source of supplementary income.	3.13	0.87
Money is not the primary reason I officiate. (r)	1.75	0.95
Sense of Community		
A strong sense of community among officials exists for me.	3.17	0.82
I feel included in the officiating community.	3.24	0.80
I belong to a strong officiating community.	3.21	0.84
Lack of Stress		
I often feel abuse while officiating. (r)	2.70	0.99
I often encounter hostile interactions with coaches and/or spectators while officiating. (r)	2.66	0.97
I often feel a lot of stress while officiating. (r)	2.92	0.87
Continuing Education		
I received adequate training each year to stay current on officiating mechanics and rules of the game.	3.33	0.80
Because of the continuing education provided by my association, I feel prepared to officiate my sport.	3.30	0.82
Training prepared me for interactions with coaches, players, and fans.	2.85	0.98

N = 394

References

Allen, T.D. (2001). Family-supportive work environments. The role of organizational perceptions. *Journal of Vocational Behavior, 58*, 414-435.

Cammann, C., Fichman, M., Jenkins, G.D., & Klesh, J (1983). Michigan Organizational Assessment Questionnaire. In S.E. Seashore, E. E. Lawler, P.H. Mirvis, & C. Cammann (Eds). Assessing organizational change: A guide to methods, measures, and practices (pp 71-138). Wiley-Interscience.

Cuskelly, G. & Hoye, R. (2013). Sport officials' intention to continue. *Sport Management Review, 16*, 451-464.

Dorsch, K.D., & Paskevich, D.M. (2006). Stressful experiences among six certification levels of ice hockey officials. *Psychology of Sport and Exercise, 8*, 585-593.

Fowler, B., Smith, J., Nordstrom, H., & Ferguson, T. (2019). Ice hockey officiating retention: A qualitative understanding of junior ice hockey officials' motivation in Canada. *Managing Sport and Leisure, 24*(1-3), 18-31.

Hancock, D.J., Dawson, D.J., & Auger, D. (2015). Why ref? Understanding sport officials' motivation to begin, continue, and quit. *Movement & Sport Sciences, 87*, 31-39.

Jordan, T., Upright, P., & Forsythe, S. (2019, Spring). Rural Kentucky sport officials' perspectives on recruitment, training, and retention. *KAHPERD Journal, 56*(2), 59-72.

Keilman, J. (2021, August, 10). Friday night slights: Referees, feeling unappreciated, underpaid and unnerved by COVID-19, are fleeing high school football and other youth sports. *Chicago Tribune*. https://www.chicagotribune.com/news/breaking/ct-high-school-sports-football-referee-shortage-20210810-3m4x2cuhdnfujiewlckqj7i7ci-story.html

Kellett, P., & Shilbury, D. (2007). Umpire participation: Is abuse really the issue? Sport *Management Review, 10*, 209-229.

Rainey, D.W. (1994) Magnitude of stress experienced by baseball and softball umpires. *Perceptual and Motor Skills, 79*, 255-258.

Rainey, D. (1995). Sources of stress among baseball and softball umpires. *Journal of Applied Sport Psychology, 7*, 1-10.

Rainey, D.W., & Hardy, L. (1999). Sources of stress, burnout and intention to terminate among rugby union referees. *Journal of Sports Sciences, 17,* 797-806.

Referee, (2020, March, 20). The largest officiating survey ever: Unprecedented data collection provides a voice to the officiating industry. *Referee*. https://www.referee.com/17487-officials-something-say/

Ridinger, L., L., Kim, K.R., Wamer, S., & Tingle, J.K., (2017). Development of the Referee Retention Scale. *Journal of Sport Management, 31*, 514-527.

Steers, J. (2018, August, 12). The disappearing high school referee. *The Messenger*, B1, B3.

Voight, M. (2009). Sources of stress and coping strategies of U.S. Soccer officials. *Stress and Health, 25*, 91-101.

Warner, S., Tingle, J.K., & Kellett, P. (2013). Officiating attrition: The experiences of former referees via a sport redevelopment lens. *Journal of Sport Management, 27*, 316-326.

SUBPAR PARK EXPERIENCES: A SOCIAL MEDIA ANALYSIS

AUTHOR

Anna Medlin
Old Dominion University
amedl003@odu.edu

Introduction/Rationale

According to the U.S. Census Bureau (2020), over 86% of U.S. residents live in metropolitan areas. A decades-long demographic shift to urban settings (c.f., Louv, 2007), coupled with recent public health crises (i.e., COVID-19), makes urban parks critical infrastructure for urban and urban-proximate residents (Volenec et al., 2021). To meet the leisure and recreation needs of residents utilizing these spaces, efforts are required to learn the important amenities, infrastructure, and experiences desired, and service quality to inform future planning and management.

In both urban and wildland settings, decades of survey research (c.f., Manning, 2011) demonstrates park users' feedback is vital in understanding the visitor experience. In the 21st century, visitor feedback is readily available on various social media platforms (i.e., Instagram, Facebook, Google Reviews, etc.) (e.g., Miller et al., 2019). These social media reviews provide near-limitless opportunities for visitors to comment on their park experiences, consciously or unconsciously shaping the online brand, or 'destination image,' of specific park units.

Destination image theory (e.g., Tasci & Gartner, 2007) posits that park visitors' attitudes about, feelings toward, and intentions to visit a destination can be influenced both through social media content *organically* created by park visitors (c.f., Hausmann et al., 2017), but also content *projected* by park agencies and stakeholder groups (i.e., friends' groups). Since the organic image created through visitors' posts on social media is independent of park control (i.e., park users may post negative reviews; Venniro; 2019), it can provide valuable insight not always captured through survey-based methods.

In this study, we analyzed the organic image of Wolf Trap National Park for the Performing Arts (hereafter, 'Wolf Trap'), located in the Washington-Arlington-Alexandra DC-VA-MD-WV metropolitan statistical area, using visitors' Google Reviews. This urban park is co-managed by the National Park Service and the nonprofit Wolf Trap Foundation for the Performing Arts as the only national park in the United States with a performing arts mandate. In 2021, park managers at Wolf Trap sought a better understanding of the online image of the destination, and specifically how negative or so-called "subpar" park experiences (Share, 2021) could further inform efforts related to their ongoing master planning process. Using social media reviews as data allowed for the park to understand the feelings of hard-to-reach visitors on a platform many can access. Accordingly, the objectives of this social media analysis were two-fold: 1) to understand the content of the park users' online review; 2) to examine park users' sentiment towards various aspects of the park.

Methods

Google Reviews (which is in Google Maps) was used as the main source of social media data in this study. As of October 31, 2021, there were 3,289 reviews specific to Wolf Trap on this platform. Google Reviews come in two formats: reviews with star ratings only and reviews with both star rating (1 – 5) and text.

In Fall 2021, we scraped all 3,289 reviews and conducted several Natural Language Processing (NLP) analyses (c.f., Bird, et al. 2009) over multiple phases to mine these raw review data for interpretation. Using NLP techniques helped classify the online reviews into thematic categories and demonstrate the importance users ascribed to each review category. For example, using bigrams, we were able to differentiate the experiences between park users who reported good experiences (giving 4- and 5-star ratings) and 'subpar' experiences (giving 1, 2, and 3 star ratings). In additional phases of analyses, we relied on an open-source database, SentiWords (Gatti et al., 2016), that list words and phrases with positive and negative connotations to perform a sentiment analysis based on park users' reviews. Finally, we inductively grouped themes from topic modeling to guide park manager interpretation of results.

Results

At the completion of scraping all the Google Reviews, 81.33% were positive five-star reviews. Among the 3,289 online reviews, 1,601 provided a text review. Bi- gram analyses were then conducted both on the full 1,601 reviews, as well as in a segmentation analysis using star ratings (Figure 1). Moreover, sentiment analyses revealed the majority of negative ratings were associated with the word "traffic" (Figure 2). Next, four main categories/aspects of importance for park users were inductively identified: *performance, outdoor, traffic, and service*. When organizing the reviews and the four thematic categories, 'traffic' yielded the worst ratings, while 'performance' had the best ratings. The analysis indicated that the park could achieve higher user satisfaction and improve is destination image if park managers focus on improving traffic, parking, and other 'subpar' aspects of the park brought up by the users.

Application to Practice

The findings of this study assist Wolf Trap managers to understand what park users value, as well as what detracts from the visitor experience. Outside of Wolf Trap, these results can be used to justify using social media to understand visitors' perceptions of their experiences in other settings, specifically those 'subpar' experiences that visitors mention in posts and reviews. Online reviews are left for many urban, national, state, and municipal parks throughout the United States, many of which have limited budgets to address a wealth of visitor needs and desires. Systematically analyzing social media data allows park managers to assess their unit's destination image, inclusive of service quality, visitor experience, and perceptions of subpar attributes. This knowledge can then guide targeted investment and intervention.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Discuss potential positive and negative roles social media can play in influencing park brand and image.
2. Appraise the feasibility of applying social media analysis to existing social media data across diverse park and recreation settings.
3. Assess the usefulness of social media research to inform park planning and management in transferable settings.

Tables and Figures

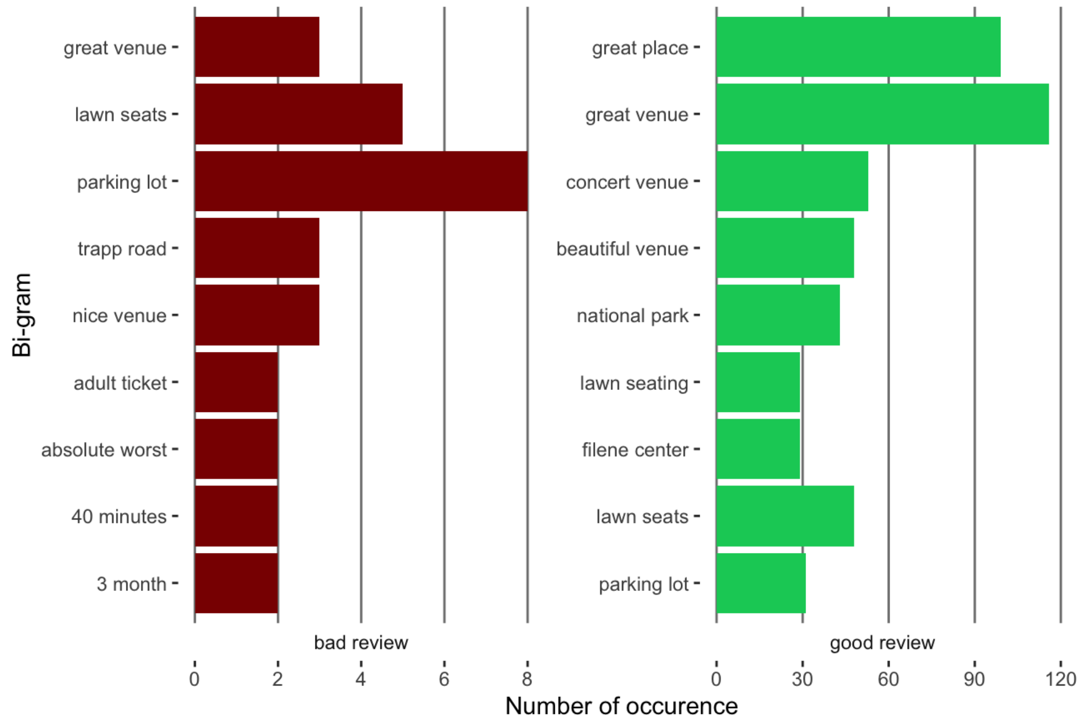


Figure 1. Most frequent bi-grams in good (4-5 star) and bad (1-3) reviews of Wolf Trap on Google Reviews.

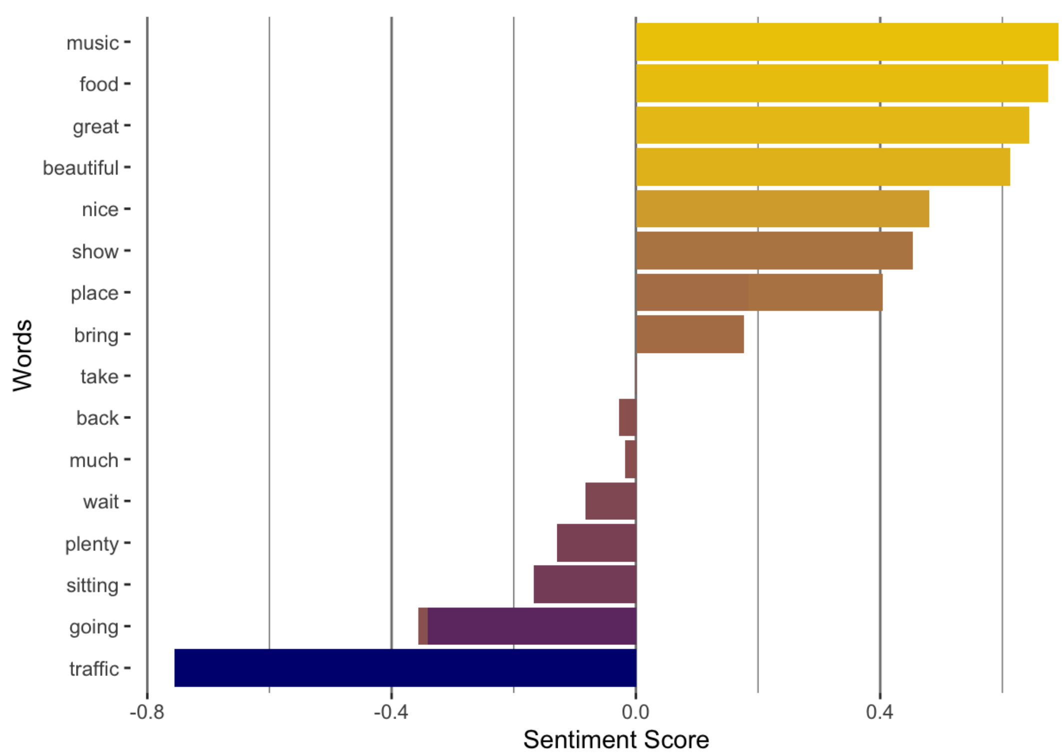


Figure 2. Most frequent positive and negative words displayed by sentiment score.

References

Bird, S., Klein, E., & Loper, E. (2009). Natural language processing with Python: analyzing text with the natural language toolkit. O'Reilly Media, Inc.

Gatti, L., Marco G., & Marco T. (2016). SentiWords: Deriving a high precision and high coverage lexicon for sentiment analysis. IEEE Transactions on Affective Computing, 7, 409-421.

Hausmann, A., Toivonen, T., Slotow, R., Tenkanen, H., Moilanen, A., Heikinheimo, V. & Di Minin, E. (2018). Social media data can be used to understand tourists' preferences for nature-based experiences in protected areas. Conservation Letters, 00(0), 1-11.

Louv, R. (2007). Last child in the woods: Saving our children from nature deficit disorder. Chapel Hill: Algonquin.

Manning, R. E. (2011). Studies in outdoor recreation: Search and research for satisfaction. Oregon State University Press.

Miller, Z., Taff, B., Newman, P., & Lawhon, B. (2019). A Proposed Research Agenda on Social Media's Role in Visitor Use and Experience in Parks and Protected Areas. Journal of Park and Recreation Administration, 37(3), 134.

Share, A. (2021). Subpar parks: Americas most extraordinary national parks and their least impressed visitors. Penguin Random House.

Tasci, A.D.A., Gartner, W.C. (2007). Destination image and its functional relationships. Journal of Travel Research, 45(4), 413- 425.

Venniro, T. (2019). How a bad social media experience can be good. Parks & Recreation, 54(9), 22-25.

Volenec, Z.M., Abraham, J.O., Becker, A.D., Dobson, A.P. (2021). Public parks and the pandemic: How park usage has been affected by COVID-19 policies. PLoS ONE 16(5): e0251799.

THE IMPACT OF LAND MANAGEMENT PRACTICES: AN EXAMINATION OF THE PACIFIC CREST TRAIL

AUTHORS

Marni Goldenberg, PhD
California Polytechnic State University, San Luis Obispo
mgoldenb@calpoly.edu

Keri Schwab, PhD
California Polytechnic State University, San Luis Obispo

Introduction/Rationale

The Pacific Crest Trail (PCT), a National Scenic Trail, is 2,650 miles long and goes from the Mexican border to Canada. Trail popularity grew rapidly in 2012 and this is credited to the "Wild Effect" based off the book and movie *Wild* by Cheryl Strayed (Williams, 2015). Thru-hikers are the heaviest users of the trail, but it is also used by a variety of groups including day hikers, weekend adventurers, and equestrian riders. Thru-hikers, who spend 4 to 6 months on the trail, are individuals who complete the trail in one hiking season. Trail degradation and overcrowding have affected the hiker experience, as well as overused campsites, eroded trails, and improper human waste disposal (Brook, 2016; Schwab, Dustin, & Goldenberg, 2019). These negative impacts damage the environment. Therefore, this study examined PCT hikers, thru-hikers, and land managers' experiences with land management practices associated with public lands.

Methods

A mixed-methods approach was used to investigate PCT's hikers' experiences regarding land management policies. Qualitative data were collected in 2019 and quantitative data were collected in 2021 based on the qualitative data. Qualitative interviews were conducted with California land managers and PCT thru-hikers who completed the trail in the last five years. Thru-hikers were recruited via social media and snowball sampling. Land managers were recruited based on job position. The questions focused on conservation issues such as trash on the trail, enforcement of rules, and the permitting and education processes. Interviews were recorded and transcribed. Constant comparison was used to analyze the data for emergent themes. Three independent researchers coded the data to reach an intercoder reliability of 90%. In axial coding, themes were compared by the researchers to find emerging relationships.

Drawing from the qualitative results, two quantitative surveys were developed. One survey was PCT thru-hikers and the other was for day PCT day hikers/weekend users. Day hikers/weekend users were included in the second phase as their environmental impact was referenced several times by thru-hikers in the qualitative results. Land managers were not included in the quantitative phase of the study but provided insights through the qualitative responses. Both surveys sought to understand how hikers educated themselves prior to hiking either a section or all the PCT. Questions also asked how effective hikers thought various educational methods were, how technology impacted their experience on the trail, and how effective various methods to enforce rules were. A link to the surveys were posted on several Facebook groups related to hiking on the PCT. Statistical analysis of mean scores, frequencies and percentages were calculated.

Results

For the qualitative data, a total of 40 interviews were conducted, 25 with thru-hikers and 15 with land managers. Participants included 30 males (18 hikers and 12 land managers), 9 females (6 hikers and 3 land managers), and 1 hiker self-identified as gender flexible. The average age of interviewees was 41.8 and age ranged from 20 to 63 years old. Emerging themes from this study included the negative impacts of technology on thru-hiker self-reliance, the variety of trash on trail depending on location and popularity of the section of trail, the positive and negative impacts of trail angel actions, the lack of enforcement on trail, and improvements to education during the permitting process.

Based on these themes, two quantitative surveys were developed and a total of 210 hikers completed the survey (61 thru-hikers and 149 day hikers/weekend hikers). Of the responses, 51% (n = 108) identified as female, and 47.6% (n = 100) as male, and two (.9%) people identified otherwise. Hikers age ranged from 18-70+, with the majority of day/weekend users being 40-69 years old (70.46%, n=105), and many thru-hikers being 18-39 years old (67.21%, n=41). When asked how effective various methods were for self-education before hiking, the majority (85%, n = 126) said they read articles on the PCTA website. Hikers rated personal contacts as being most effective at educating themselves prior to an outing, with a mean of 3.84. Educational Zoom meetings were rated least effective with an average of 2.21. When asked about technology use on the trail, only 18.5% (n = 28) reported not using any technology on trail. When asked about enforcement of rules, respondents felt the ranger presence on the trail was inadequate, with a mean score of 2.28. Enforcing rules on the trail can take a variety of forms. Respondents thought having additional rangers in the backcountry would be most effective with an average score of 3.64. The least effective approach to enforcement of rules was thought to be self-enforcement, with an average of 2.42.

Application to Practice

Both sets of data indicated that technology is being used by hikers and can be utilized for educational purposes. The data also supported the use of in-person education to create conservation and sustainable use of the land. Various types of education can make a difference for trail conservation. Thru-hikers commented on the advantages of in-person education to solidify their understanding of LNT principles. Land managers should prioritize funding and resources for in-person education on public lands and especially at trailheads, trail crossings, or changes in jurisdictions. A recommendation was a trail stewardship program that included LNT ambassadors at trailheads who could educate the public on LNT principles before they hike.

Hikers also talked about a sense of ownership and stewardship of the trail, which mitigated the need for rule enforcement. Day hikers were referenced as being the largest contributors to trash on the trail. Land managers could increase stewardship of their trails by increasing signage that reminds the public of the shared responsibility for the land. Thru-hikers can be empowered to educate day hikers about reducing their impact. Creating a sense of attachment to the land can increase the desire for conservation of public lands.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Apply various forms of education, specifically in-person, to reach a variety of hikers using the land.
2. Utilize technology for education and to communicate important information.
3. Pros and cons of various approaches to rule enforcement, including ranger, self, or social enforcement.

References

Brook, P. (2016, June 7). What are all these hikers doing to the PCT? *Outside Magazine*. https://www.outsideonline.com/2087776/what-are-all-these-hikers-doing-pct

Schwab, K., Dustin, D., & Goldenberg, M. (2019). Angels along the Pacific Crest Trail. *Journal of Outdoor Recreation, Education, and Leadership, 11*(2). doi: 10.18666/jorel-2019-v11-i2-8400

Williams, A. (2015, February 4). The 'Wild' effect: How Cheryl Strayed's memoir inspires hikers. *Condé Nast Traveler*. Retrieved January 28, 2021 from https://www.cntraveler.com/stories/2015-02-04/the-wild-effect-how-cheryl-strayeds-memoir-inspires-hikers

THE INFLUENCE OF LEADERSHIP AND STAFF ON PROGRAM DIVERSITY, EQUITY, INCLUSION, AND RACIAL JUSTICE EFFORTS

AUTHOR

Meagan Ricks

University of Utah

meagan.ricks@utah.edu

Introduction/Rationale

Ensuring equitable access to the benefits of parks and recreation to every member of every community is an increasingly important goal for parks and recreation services. Often one of the challenges to providing equitable access and programming for marginalized populations is effective leadership and staff to support diversity, equity, inclusion, and racial justice (DEIRJ) efforts (Allison & Hibbler, 2004). Leadership and participant facing staff are often at the forefront of DEIRJ efforts, as leaders are tasked with creating equitable policy, and staff must respond to program participants' needs, challenges, and experiences on the ground. The purpose of this study is to examine how national, regional, and local leadership as well as local staff influence DEIRJ efforts at nationally affiliated youth-serving summer programs and camps.

Methods

Twenty local leaders and staff representing 19 nationally affiliated youth serving summer programs and camps volunteered to participate in focus groups discussing topics of DEIRJ at their program or camp. A total of eight focus groups were conducted. Eighty percent of participants were White and fifty-five percent self-identified as part of LBGTQ+ community. Several also reported being neurodivergent (i.e. having autism or ADHD). Key themes were identified through open coding.

Results

Overarching themes drawn from focus group conversations are organized into the following sections: 1) the role of local staff as drivers of change, 2) what that change looks like on the ground, and 3) the influences of regional leadership.

Drivers of Change. Study participants expressed that their local program staff at all levels are the primary drivers of DEIRJ. In particular, local program staff have a major hand in shaping the program environment. They can make the program an inclusive space even in the absence of guidance from regional and national leadership. Staff identities (gender, sexual orientation, neurodivergence, and race) seem to be a major contributor to program inclusivity and commitment to DEIRJ. Staff who have themselves experienced marginalization in the world often have a clear sense of what policies and practices would have supported them as youth and may thus support others with shared identities. In contrast, staff who come from positions of relative privilege sometimes struggle to prioritize inclusion and equity.

DEIRJ on the Ground. Study participants report that programs and camps are ahead of the curve compared to regional leadership when it comes to DEIRJ work, though the progress towards inclusivity was sometimes reactive rather than proactive. For example, staff must determine, in the absence of a formal policy, how to best serve participants who arrive at camp and self-identify as transgender. Nearly all participants discussed program-level informal policies and practices designed to support youth such as gender-neutral language and accommodating non-binary or trans youth.

Influence of Regional Leadership – The variation in how programs and camps are doing in relation to DEIRJ was attributed not only to regional differences but how regional leadership and local leadership address and prioritize DEIRJ efforts. Most staff reported a disconnect between regional leadership and program staff in relation to DEIRJ. One staff member noted that although both program and regional leadership are independently committed to DEIRJ, their efforts lack coordination which makes them less effective overall. Most often, staff reported that regional leadership does not provide them much DEIRJ-related guidance. Many were unsure whether their regional leaders would support them in decisions they were making on the ground to be inclusive of diverse participants, particularly in relation to gender diversity. A few local program leaders felt certain that they would not be supported by their regional leaders. In several cases, regional leadership handed down directives (i.e., informal policies) that made the program *less* inclusive and supportive of participants – particularly LGBTQ+ youth. These kinds of directives frustrated and demoralized staff, especially if their own identities were being marginalized. Most staff tried to work around these directives to ensure that participants still felt supported.

Application to Practice

Leadership and staff are essential players in DEIRJ progress for youth-serving summer programs and camps. Leadership creates policies and practices that help shape equitable programs while staff implement practices that lead to inclusive environments. Leaders may hesitate to formalize DEIRJ policies due to potential community pushback; a concern staff may not share equally. Many organizations and leaders look to hire more diverse staff members as a way to improve a program's overall diversity and inclusion. However, findings suggest that while having a diverse staff is important, their ability to shape policies and practices will be limited in the absence of a supportive leadership team that works in coordination with local efforts. In other words, the institutional context in which programs and camps operate impacts how inclusive programs and camps can become. Without formal policies, the inclusivity of the program relies on individual staff which may not always be consistent. For instance, many participants described their programs and camps as having largely LGBTQ+ staff (in some cases, upwards of 50%). Despite this, most still do not have formal policies about inclusion and openness regarding sexual orientation or gender identity. Although having

LGBTQ+ staff seems to help create a safe space for LGBTQ+ youth, programs and camps may struggle to be fully inclusive without institutional support. Policies that support DEIRJ are a fundamental step in creating more equitable and inclusive programs and camps.

Staff empowerment can be a large driving force for program and camp DEIRJ progress and improvement. The study highlights how program staff, even seasonal staff, can be pivotal in making programs and camps more inclusive and equitable. When staff are supported in being themselves, program participants feel more comfortable being themselves.

The study suggests that staff are enthusiastic about the possibility of national, regional, and local programs sharing a common commitment to DEIRJ. Nearly all participants stated that they would like to see their national and regional leadership take a stronger stance on issues of inclusion, equity, and justice. Study participants recommend national, regional, and local leadership facilitate communication between different programs and camps and help program and camp staff access DEIRJ resources and supports.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Understand the importance and complexity of staff and leadership working together to create more equitable and inclusive programs.
2. Determine how to best support staff in creating more equitable and inclusive programs.
3. Understand the importance of implementing formal DEIRJ policies.

References

Allison, M. T., & Hibbler, D. K. (2004). Organizational barriers to inclusion: Perspectives from the recreation professional. *Leisure Sciences, 26,* 261-280.

THE YOUTH-OUTDOOR CONNECTION: COLLABORATIVE RESEARCH TO UNDERSTAND AND INTEGRATE YOUTH PERSPECTIVES

AUTHORS

Darcie Vandegrift, PhD
Metropolitan Council Twin Cities
darcie.vandegrift@metc.state.mn.us

Gunnar Carlson, MPA
MN Off Road Cyclists

Sarah Gong
Metropolitan Council

Ellie Hohulin
Walker Art Center

Lucia Marquez Reagan
Fifth Avenue Committee

Introduction/Rationale

Teens experience unique developmental needs, obstacles, and circumstances related to park access. Their voices are often less considered in park system planning, programming, and operations. This study analyzes the barriers and opportunities to connect youth ages 14 – 20 to nature-based outdoor experiences. Three reasons to enhance the youth-outdoor connection are to promote public health, to create an equitable park and trail system, and to ensure future support for public lands. Efforts to enhance young people's access to outdoor spaces are a public health investment. As a public health intervention, adolescents during and after park visitation report feelings that create well-being including mindfulness, positive emotions, life satisfaction, and lower perceived stress. As young people are more racially and socioeconomically diverse than park visitors overall, teen access to the outdoors is an important priority to achieve an equitable park and trail system. Finally, youth connection to the outdoors increases the likelihood that they will support future public investment in parks. Park planners and educational professionals can counter the "extinction of experience" phenomena by helping teens get outdoors and including young people in long-range planning and programming design.

Methods

Using a participant action qualitative research model, researchers, park professionals, youth, and their supportive adults co-created this project. A total of 97 youth and 28 adults participated in the project, recruited through partnerships with five youth-serving organizations (YSOs). During in-park experiences, young people learned about qualitative social science research methods to conduct research, participated in structured activities with a naturalist, ate lunch, enjoyed free time, and generated data used in the study. Staff researchers generated additional data through ethnographic and photographic methods. Data from each park experience included an adult focus group, a youth-led focus group, a field research challenge to analyze the park space, and field notes. After initial staff research analysis, they returned to each YSO in late 2019 to hold a validity conversation, a program of activities and discussion to verify the accuracy of the research findings. One YSO group also analyzed visual data.

Results

Obstacles. The study identified eight obstacles to youth park access, including safety, lack of awareness, lack of opportunity for skills learning, in-park racism and unwelcoming culture, priorities and time constraints, transportation access, and financial concerns. Strategies for overcoming these obstacles include institutional partnerships, the presence of high-quality staff, innovations in programming, better articulation of visitation benefits.

Elements of a desirable park experience. The study analyzed desired amenities and why youth like these amenities (Table 1), youth perspectives on fun park activities, culturally inclusive programming, photography on mobile phones, and programs about history, community, and environmental awareness. Youth researchers identified new activities to try, including youth-planned events and camping training initiatives.

Communication strategies. Adults and youth described the need for flexible, dynamic, and multipronged communication efforts. These include working with schools, peer-to-peer engagement, live streaming, and authentic, appropriate social media use. They identified key messaging strategies (focused on stress relief, wildlife, environment, family time, and adventure).

New models to understand how teens use prior experience in approaching nature-based park visitation. The researchers recommend shifting away from continuum models that label users as inexperienced or experienced. All visitors draw from prior experience when visiting parks. These experiences include school and family trips, community understandings, and prior park encounters. Youth with more previous outdoor recreation experience did not always want to enhance their skills; they sometimes just wanted a space to relax and do nothing. Taking time to understand how particular youth experiences shape desired current park visitation helps connect young people to the outdoors.

The importance of staff and programming. Youth cannot access parks and trails on their own as easily as adults. Furthermore, programming intended for younger children is not appropriate for an older age group because teens seek activities that are more challenging, independent, and peer focused. Knowledgeable staff can provide the developmentally appropriate access to information, thereby nurturing connections between youth and the outdoors. Outdoor educators provided enhancements to youth experience approximately every 3 minutes, including skill teaching, building relationships, safety reassurance, questions answered, and information provision.

Application to Practice

Youth inclusion practices belong in all areas of staff activity. The study provides unique, in-depth qualitative data that include recommendations and a model for implementation. Outreach, planning, natural resource management, and communications staff all have a role in building the youth-outdoors connection.

Use materials from the research, accessed via open-source tool kit. All research pieces (focus group script, field research challenge, MOU with YSOs) are available for use at no charge. Ideas to implement include seeking strategic partnerships with affinity groups, enhancing consideration of user experiences, investment in programming and staff, incorporating youth into long-range ("master") planning efforts, inclusive historical information, and convening important conversations. Professionals can draw from the research to engage discussions with their Parks and Open Spaces Commissions.

Learn youth perspectives on access to nature-based parks. Research offers first-hand reports from new park visitor and frequent visitor youth and their parents to understand preferred activities, staffing strategies, access barriers, and policy interventions. Over 80% of participants were Black, Indigenous, or People of Color.

Generate productive discussion. Park staff can review research and combine with group discussion as a tool to catalogue current efforts and generate action plans. This has already been done with park departments, DNR staff, and open space commissions.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Better understand youth perspectives on access to nature-based parks.
2. Access and implement original materials from the research to engage youth and the organizations that serve them. Materials available via open source tool kit.
3. Integrate youth inclusion practices into all areas of staff activity, including outreach, planning, natural resource management, and communications.

Tables and Figures

A. Table 1: Park amenities desired by youth

Amenity	Why Youth Liked This Amenity
Bridges and docks that enable observation of the water	Could interact with and observe water, be meditative. Railings provide safe, close observation of water for non-swimmers.
Built environments that can double as "play areas," such as a dock or a stone fishing pier	Enjoyed the challenge of balancing up on a wooden pole, walking on the wobbly dock.
Charging outlets	Could have phone to feel safe and stay connected.
Exploring taxidermic animals inside a visitor center	Opportunity to see animal fur and feathers close up and have naturalist answer questions.
Fire pit with benches	Enjoyed bonfire, s'mores, connecting with own community, telling important and fun stories, multigeneration connection.
First aid kits, emergency signal buttons	Safety, security.
Fishing dock/canoe launches	Fun to get close to water, space for play, like to fish with family.
Information boards	Learn more about nature, history, activities without having to ask for help or follow a schedule. Satisfy curiosity, feel more in control with more information.
Natural surface trails	Physical challenge, feeling of being in nature, sense of adventure.
Natural trails detouring from paved trails that go closer to water or into the woods	Could see the water close, look at animal tracks on the water, explore natural setting while having an easy return to lower-risk pavement.
Open fields with mobile equipment to borrow for soccer	Play ball sports, impromptu play, chasing games, hang around with friends during free time. "In our community, soccer is life," said one adult.
Pavilion with picnic tables, gazebo	Easy to find so individual youth can rejoin the group after exploration, safe place to leave things with one person in charge, place for group to convene for rituals, place to sit protected by elements.
Places to hang out with friends away from other age groups (identified in master planning conversations with Pine Point Regional Park staff)	Ability to socialize, "Just be yourself." (Note: Gives youth an opportunity to learn autonomy and manage risk. Can't learn to gauge risk unless offered a chance to do so.)

References

Bluth, K., & Blanton, P. W. (2014). Mindfulness and Self-Compassion: Exploring Pathways to Adolescent Emotional Well-Being. Journal of Child and Family Studies, 23(7), 1298–1309. https://doi.org/10.1007/s10826-013-9830-2

Connolly, J. (2014). Drowning: The First Time Problem. International Journal of Aquatic Research and Education, 8(1). https://doi.org/10.25035/ijare.08.01.07

Diouf, A. (2020). Challenging the White Narrative of Conservation. Retrieved October 13, 2020, from MBC website: https://www.melaninbasecamp.com/trip-reports/2020/7/1/challenging-the-white-narrative

Gilzow, J., & Rojas, M. (2020). Addressing Social Equity Through Teen Programming. Retrieved November 7, 2020, from Parks & Recreation Magazine website: https://www.nrpa.org/parks-recreation-magazine/2020/february/addressing-social-equity-through-teen-programming/

Owens, P. E. (2002). No Teens Allowed: The Exclusion of Adolescents from Public Spaces. Landscape Journal, 21(1), 156–163. https://doi.org/10.3368/lj.21.1.156

Owens, P. E., & McKinnon, I. (2009). In Pursuit of Nature: The Role of Nature in Adolescents' Lives. The Journal of Developmental Processes, 4(1), 43–58.

Roberts, N. S. (2012). Youth Outdoors and Nature: A Review of the Literature.

Soga, M., & Gaston, K. (2016). Extinction of experience: the loss of human-nature interactions. Frontiers in Ecology and the Environment, 14(2), 94–101.

White, M. P., Alcock, I., Grellier, J., Wheeler, B. W., Hartig, T., Warber, S. L., … Fleming, L. E. (2019). Spending at least 120 minutes a week in nature is associated with good health and wellbeing. Scientific Reports, 9(1), 7730. https://doi.org/10.1038/s41598-019-44097-3

Weiler, B., Martin, V. Y., Canosa, A., & Cutter-Mackenzie, A. (2018). Generation Y and protected areas: A scoping study of research, theory, and future directions. Journal of Leisure Research, 49(3–5), 277–297. https://doi.org/10.1080/00222216.2018.1542285

TRAVEL MOBILITY, CREATIVITY, AND WELL-BEING OF OLDER ADULTS

AUTHORS

Jinmoo Heo
Yonsei University
heoj@yonsei.ac.kr

May Kim
Korea University
kimmay@korea.ac.kr

Sanghee (Rokbit) Lee
Korea University Center for Curriculum and Instruction Studies
sh28232@naver.com

Youngshin Lim
Korea University
enakore@korea.ac.kr

Introduction/Rationale

Due to the rapid global increase in the older adult population, pressures on providing and ensuring a better quality of life for older adults have been increasing. Research has suggested that subjective well-being (SWB) and perceived age are important indicators of quality of life. The concept of SWB involves evaluating hedonic pleasure in individuals' experiences. Positive affect is one of the key components of SWB which refers to emotional reactions to daily life events. On the other hand, perceived age is captured by exploring how old a person feels, and research has shown that there is growing gap between perceived and chronological age (real age). In other words, older adults generally feel younger than their chronological age.

Research has identified experiential factors that are associated with SWB and perceived age (e.g., travel mobility). Travel mobility is instrumental in active aging, and it takes into account independence, frequency, distance of movements. It is an essential ability for participating in meaningful activities among older adults. Research has demonstrated relationships between older adults' mobility and well-being (Torpy et al., 2006). Literature has shown that creative orientation and tendency to feel optimistic are important determinants of quality of older adults. Travel mobility and feeling creative are likely to fluctuate in older adults' daily life whereas optimism is a personality disposition that are rather stable over a long period of time. In the present study, we attempted to explore daily variability of SWB and perceived age, and how experiential factors are related to SWB and perceived age.

Method

The study sample consisted of seven females and three males, whose age ranged from 63 to 76 years (mean age = 70). We employed Experience Sampling Method (ESM) which is used to capture participants' feelings and activities in naturally occurring situations. Unlike traditional paper and pencil survey, ESM allows study participants report momentary experiences and subjective feelings multiple times. The participants carried an ESM booklet which contained sets of questions for a week. On a random basis, the participants received signals (text messages) seven times a day during the duration of the study. Upon receiving as message, the participants were instructed to complete the questionnaire in the booklet. During the study period, the participants were on a two-day travel which enabled the researchers to obtain data about experience during traveling (2 days) as well as during daily life circumstances (5 days). The ESM procedure resulted in a maximum of 49 completed questionnaire for each participant (7 days x 7 signals per day), and 490 questionnaires overall (49 questionnaires per person x 10 participants). During the period of experience sampling sessions, a total of 481 valid events were created by the study participants.

Instruments

Subjective well-being. Subjective well-being was measured using the Positive Affect Negative Affect Schedule (PANAS) developed by Watson et al. (1988). This instrument has been utilized in a number of studies of older adults due to the acceptable validity and reliability (e.g., Heo et al., 2010). We used four items that measured extent to which a person feels happy, cheerful, friendly, and sociable. The higher value of this scale represents positive emotional well-being of the participants.

Perceived age. In accordance with previous studies, we asked the participants how old they felt (e.g., Stephan et al., 2014). The participants reported their response by filling in their subjective perceptions of age at the moment.

Independent variables. For travel mobility, we used the question "where were you?" to identify where the participants were at the time they received the signal. We adopted Peel et al.'s (2005) Life-Space mobility model to identify travel mobility of the study participants. The responses were coded into four categories: (1) home, (2) neighborhood, (3) outside the neighborhood but within town, and (4) places outside town. Creativity was measured using a bipolar semantic differential item: creative – inspired. The score of this item ranged from one to seven, and a higher value on this item correspond to a higher level of creativity. For optimism, ten items were adapted from Scheier and Carver's (1987) Life Orientation Test. The questions inquire about the respondents' expectations of positive and negative outcomes. Pessimism items were reverse-coded. The questions were measured using a 5-point Likert-type scale.

Data analysis. Because our data include multiple responses (Level 1: N = 481) nested within individuals (Level 2: N = 10), a multilevel modeling was an appropriate method for analysis. We used hierarchical linear modeling (HLM) to explore the association between the predictor variables (i.e., travel mobility, creativity) and the outcome variables (i.e., SWB, perceived age). In our study, we used HLM 7.0 for Windows program. Separate models were evaluated for each of the two outcome variables.

For each research question, a two-level HLM was conducted on the outcomes. In the first step of analysis, an unconditional model was applied. In this model, no Level 1 or Level 2 predictors were specified.

Results

We calculated the intra-class correlation (ICC) for each outcome variable. The ICC represents the proportion of variance in outcome variable due to the differences in individuals. The ICC showed that 37.3% of the variance in SWB was between-person. In another model, 10.6% of the variance in perceived age was accounted for by individual differences. The results from the HLM showed that travel mobility was positively associated with subjective well-being (γ = .09, p < .05). In addition, creativity was positively related to subjective well-being (γ = .10, p < .01). There was a tendency for participants to feel a higher level of subjective well-being when their travel mobility was higher and feeling creative. On the other hand, travel mobility (γ = -.06, p < .01), creativity (γ = -.03, p < .01), and optimism (γ = -.10, p < .01) had negative associations with perceived age. The participants were likely to feel younger when their travel mobility was higher, creative feelings were higher, and feeling more optimistically.

Application to Practice

1. Traveling outside home as well as traveling out of town contributes to younger perceived age and subjective well-being of older adults.
2. Activities that promote creativity are likely to make older adults feel younger and enhance subjective well-being.
3. Older adults' subjective well-being was significantly higher when they were traveling than before/after travel.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Understand experiential factors that are associated with subjective well-being and perceived age of older adults.
2. Understand experience sampling method.
3. Understand importance of travel mobility among older adults.

References

Bellingtier, J. A., Neupert, S. D., & Kotter-Grühn, D. (2017). The combined effects of daily stressors and major life events on daily subjective ages. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *72*(4), 613-621.

Caudroit, J., Stephan, Y., Chalabaev, A., & Le Scanff, C. (2012). Subjective age and social-cognitive determinants of physical activity in active older adults. *Journal of Aging and Physical Activity*, 20, 484–496.

Choi, E. Y., Kim, Y. S., Lee, H. Y., Shin, H. R., Park, S., & Cho, S. E. (2019). The moderating effect of subjective age on the association between depressive symptoms and cognitive functioning in Korean older adults. *Aging & Mental Health*, *23*(1), 38-45.

Heo, J., Lee, Y., McCormick, B. P., & Pedersen, P. M. (2010). Daily experience of serious leisure, flow and subjective well-being of older adults. *Leisure Studies*, *29*(2), 207-225.

Keyes, C. L., & Westerhof, G. J. (2012). Chronological and subjective age differences in flourishing mental health and major depressive episode. *Aging & Mental Health*, *16*(1), 67-74.

Mirucka, B., Bielecka, U., & Kisielewska, M. (2016). Positive orientation, self-esteem, and satisfaction with life in the context of subjective age in older adults. *Personality and Individual Differences*, *99*, 206-210.

Nordbakke, S., & Schwanen, T. (2014). Well-being and mobility: A theoretical framework and literature review focusing on older people. *Mobilities*, *9*(1), 104-129.

Scheier, M. F., & Carver, C. S. (1987). Dispositional optimism and physical well-being: The influence of generalized outcome expectancies on health. Journal of Personality, 55, 169–210.

Stephan, Y., Caudroit, J., & Chalabaev, A. (2011). Subjective health and memory self-efficacy as mediators in the relation between subjective age and life satisfaction among older adults. *Aging & Mental Health, 15,* 428–436. doi:10.1080/13607863.2010.536138

Stephan, Y., Chalabaev, A., Kotter-Grühn, D., & Jaconelli, A. (2012). "Feeling younger, being stronger": An experimental study of subjective age and physical functioning among older adults. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 68*(1), 1–7. doi:10.1093/geronb/gbs037

Stephan, Y., Caudroit, J., Jaconelli, A., & Terracciano, A. (2014). Subjective age and cognitive functioning: A 10-year prospective study. *The American Journal of Geriatric Psychiatry, 22*(11), 1180–1187. doi:10.1016/j.jagp.2013.03.007

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of Personality and Social Psychology*, *54*(6), 1063-1070.

Westerhof, G. J., Miche, M., Brothers, A. F., Barrett, A. E., Diehl, M., Montepare, J. M., Wahl, H., & Wurm, S. (2014). The influence of subjective aging on health and longevity: A meta-analysis of longitudinal data. *Psychology and Aging*, 29, 793–802.

YOUTH-ADULT PARTNERSHIPS AND COMMUNITY STRENGTH AND NEEDS ASSESSMENTS: A TEXAS CASE STUDY

AUTHOR

Corliss Outley, PhD

Clemson University

coutley@clemson.edu

Introduction/Rationale

Historically, perceptions of youth are not generally positive where youth serve to better their world, but instead, they are portrayed negatively as rebellious problems that cause community challenges and must be controlled and excluded from involvement. These perceptions arise from generation segregation and the prevalence of minimal intergenerational partnerships (Camino & Zeldin, 2002). However, young people today are more active and involved and representation exists at local, state, regional, national, and international levels among governments, NGOs, schools, and other entities through youth-adult partnerships. A youth-adult partnership is a joint effort where youth and adults work together to achieve common goals. This is an intentional relationship where adults offer knowledge, experience, and access to resources, while young people share fresh ideas, new perspectives, energy, enthusiasm, and talents (Norman, 2001). In these interactions youth and adults work collectively on one or more components of a project. An example of a youth adult partnership is the development of the State of Texas Youth Advisory Committees (YAC) as a part of their Community Youth Development (CYD). The program is managed by the Prevention and Early Intervention (PEI) Division of the Texas Department of Family and Protective Services (DFPS) and contracts with local organizations to develop juvenile-delinquency-prevention programs in 19 zip codes that have a high incidence of juvenile crimes. Funded organizations are required to form YACs for youth to give meaningful input into decision-making processes by providing "input, give feedback and help shape the local CYD program" regarding service design, implementation, policy, and practice. An additional requirement is to conduct an annual community strength and needs assessment (CSNA) to develop a prioritized list of service needs identified by the community as effective strategies to prevent juvenile delinquency and support positive youth development. CYD YAC involvement requires youth to assist in the development, data collection and analysis of the CSNA.

Methods

An evaluation of the statewide YAC sought to determine 1) what level of youth engagement exists in current Texas YAC programs, 2) what CYD outcomes existed, especially regarding CSNA involvement, and 3) what improvements are needed to best support youth as partners and decision-makers? A site coordinator telephone survey was conducted in 2019 over a six-week period. During a 30-minute call each of the 19 sites provided responses to open-ended questions concerning overall YAC composition, programming activities, CSNA adult/youth involvement in CSNA and training/evaluation needs. Descriptive techniques and qualitative thematic coding were utilized for data analysis.

Results

YAC involvement in CSNA. Out of the 17 responses regarding the required CSNA, 14 sites reported they were aware that youth were charged with participating in the CSNA, while three sites were not. Interestingly, the study revealed six of the 17 sites had no prior knowledge about the required CSNA before the phone survey communication. **Program Activities.** Over 40% of the YAC sites participated in leadership development activities that comprised volunteering, followed by participating in community development activities (28%). Community based activities included but not limited to fishing event (for special needs youth), park/community clean up and feeding the homeless. Academic activities included: college tours, attending domestic violence conference, and learning how to manage a budget. Career exploration was the

only activity reported in the Working domain. **YAC Concerns.** YAC coordinators were asked to describe the issues facing their YAC. Issues fell into three categories: program assistance, CSNA training assistance, and overall process concerns. Suggestions to improve engagement of their YACs in CSNA were also provided. These included: 1) clear expectations of each site; 2) training on conducting CSNAs, data collection protocols, data analysis, etc., 3) provide individual site visits from evaluation experts to ascertain, best practices for survey recruitment and administration (so that target numbers are met), and suggested survey format. **Suggested Improvements.** Create opportunities for YAC programs to interact more often to share best practices and learn from one another via a learning community, professional development/training for coordinators and volunteers, provide evidence-based curricula for youth leadership development were suggested by YAC coordinators.

Application to Practice

YAC staff are invested in its goals and to offset the systemic tendency to underestimate youth and their abilities. The initial idea behind having the youth involved in the CSNA was innovative and notable. Yet, a lack of clear understanding about the youth’s role in the CSNA has led to discomfort among the youth, the YAC Coordinators, and other staff leads. Conducting research is challenging for even highly trained adults. Though some YACs provided youth with training in methodological techniques, it is unrealistic to believe they have mastered all the knowledge and skills needed to be full-time researchers and it’s important to prepare them so that they can contribute fully to the CSNA. Given this, CSNAs should be planned to be completed in short time periods but be powerful enough to engage and influence community change around youth developmental outcomes. Key recommendations include: 1) strategic planning around youth programming quality by providing clear goals and a vision for YACs, 2) narrowing programmatic focus of activities, 3) conceptualization of YAC leadership, 4) provide platform to network and share ideas, activities, and tools that can assist in improving YAC programming, 5) training on the CSNA process, 6) development of a YAC manual, and 7) extending the impact of YAC through meaningful venues to share their research. Texas YAC's are positioned to advance youth engagement to prevent juvenile delinquency in significant ways, as well as generate best practices for the state of Texas and beyond.

OBJECTIVES: FOLLOWING THIS POSTER SESSION, ATTENDEES SHOULD BE ABLE TO

1. Define youth-adult partnership and its key principles
2. Articulate benefits and challenges to conducting needs assessments through youth-adult partnerships
3. Identify best practices for youth involvement in community strength and needs assessments

References

Camino, L., & Zeldin, S. (2002). From periphery to center: Pathways for youth civic engagement in the day-to-day life of communities. Applied Developmental Science, 6(4), 213–220. https://doi.org/10.1207/S1532480XADS0604_8

Norman, J. (2001). Building effective youth-adult partnerships. IAPAC MONTHLY, 7(12), 323-326.