



African Americans' outdoor recreation involvement, leisure satisfaction, and subjective well-being

KangJae Jerry Lee¹ · Jonathan Casper¹ · Roslynn Powell¹ · Myron F. Floyd¹

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Abstract

Although outdoor recreation significantly contributes to subjective well-being (SWB), existing studies suggest that African Americans are far less likely to participate in outdoor recreation compared to other racial and ethnic groups in the United States. This study examined African Americans' leisure involvement in outdoor recreation and its impact on leisure satisfaction and the affective components of SWB. The results showed that the Attraction and Identity Expression dimensions of leisure involvement not only positively affected leisure satisfaction but also indirectly contributed to SWB through leisure satisfaction. Moreover, Identity Affirmation had a significant direct effect on SWB. However, Centrality and Social Bonding had no significant association with leisure satisfaction and SWB. These findings revealed that pleasure and enjoyment derived from outdoor recreation, as well as opportunities to express one's identity to the self and others, were particularly important for African American outdoor recreationists' leisure satisfaction and SWB. Overall, the study findings are consistent with existing well-being and leisure literature.

Keywords Leisure involvement · African American · Outdoor recreation · Life satisfaction

Outdoor recreation is one of the most popular pastimes in the United States. In 2020, 160.7 million Americans six years old or older participated in at least one outdoor activity (Outdoor Foundation, 2021), and the outdoor recreation economy accounted for 1.8% (\$374.3 billion) of the nation's gross domestic product (Bureau of Economic Analysis, 2021). Along with its popularity and economic impact, studies have also documented that outdoor recreation significantly contributes to subjective well-being (SWB), as it facilitates contact with nature, restorative experiences, physical activities, and social interactions (Korpela et al., 2014; Lackey et al., 2021; Thomsen et al., 2018).

Leisure involvement (Havitz & Dimanche, 1999; Selin & Howard, 1988) has been one of the most popular theoretical frameworks for understand the psychology of outdoor recreation participants. Since its first theorization in the late 1980s, leisure involvement has been accepted as a multidimensional construct denoting the degree to which

people devote themselves to a leisure activity or the strength of the cognitive linkage between the self and a leisure activity (Kyle et al., 2007, 2003a). To date, the construct has garnered significant research attention and has been used in various leisure settings such as outdoor recreation (Havitz et al., 1993; Jun et al., 2012; Kyle & Chick, 2002; Matsumoto et al., 2018; McIntyre, 1989), physical activity (Havitz et al., 2013), sport events (An et al., 2021; Sato et al., 2017, 2018), and tourism (Chang & Gibson, 2011; Ito & Hikoji, 2021). Moreover, researchers have found that leisure involvement is significantly associated with overall life satisfaction and well-being (Chen et al., 2013; Matte et al., 2021; Pan et al., 2018; Sato et al., 2014).

Despite the wealth of existing involvement literature, to the best of our knowledge, no study has examined the outdoor recreation involvement of African Americans and how it affects their SWB. The lack of racial and ethnic diversity in the literature is concerning because it indicates that the current knowledge base is primarily anchored in White Americans' outdoor recreation experience, so that researchers are at risk of drawing biased and flawed conclusions. One possible explanation for the paucity of research is difficulty in sampling: Since the 1960s, researchers have documented that African Americans are less likely to participate in

✉ KangJae Jerry Lee
klee24@ncsu.edu

¹ Department of Parks, Recreation & Tourism Management, North Carolina State University, Biltmore Hall, Raleigh, NC 27695, USA

nature-based outdoor recreation compared to Whites and they account for only a small portion of outdoor recreationists in the U.S. (Resource Systems Group & Wyoming Survey and Analysis Center, 2019; U.S. Fish & Wildlife Service, 2016; USDA Forest Service, 2019; Vaske & Lyon, 2014). Yet, the small number of African American outdoor recreationists is hardly surprising given the historical Black exclusion in America's great outdoors. For example, from the very beginning of the history of outdoor recreation in the U.S., White eugenicist conservation leaders had conceptualized and managed America's great outdoors as White Space, excluding people of color (Byrne & Wolch, 2009; Deluca & Demo, 2001; Lee et al., 2022; Mowatt, 2020). Moreover, generations of African Americans have endured historical racism, violence, and labor exploitation in nature such as slavery, lynching, and raping (Johnson & Bowker, 2004; Lee & Scott, 2016; Scott & Lee, 2018).

However, it is noteworthy that Black Americans have also found nature an escape from White racism, developing their own resorts and outdoor recreation facilities, and cultivating a culture of resistance and self-determination (Finney, 2014; Hart, 1960; Sene-Harper et al., 2021; Theriault & Mowatt, 2020). More recently, there has been an emerging social movement within African American communities to reclaim their access to nature and defy the common racial stereotype that Blacks do not enjoy outdoor recreation (Chávez, 2020; Meraji, 2015; Root, 2017). Thus, an investigation on African Americans' outdoor recreation involvement and its effect on their well-being is expected to fill the apparent research gap in the literature, contribute to more theoretical development, and provide valuable empirical bases for outdoor recreation management.

The purpose of this study was to investigate African Americans' outdoor recreation involvement and its impact on their leisure satisfaction and SWB. Based on the bottom-up theory of SWB (Heller et al., 2004; Diener et al., 1999) and the DRAMMA model (Newman et al.,

2014), the present study tested a structural equation model examining the relationship between leisure involvement, leisure satisfaction, and the affective components of SWB. As illustrated in Fig. 1, different dimensions of outdoor recreation involvement and their impact on leisure satisfaction and SWB, as well as the mediating effect of leisure satisfaction, were investigated.

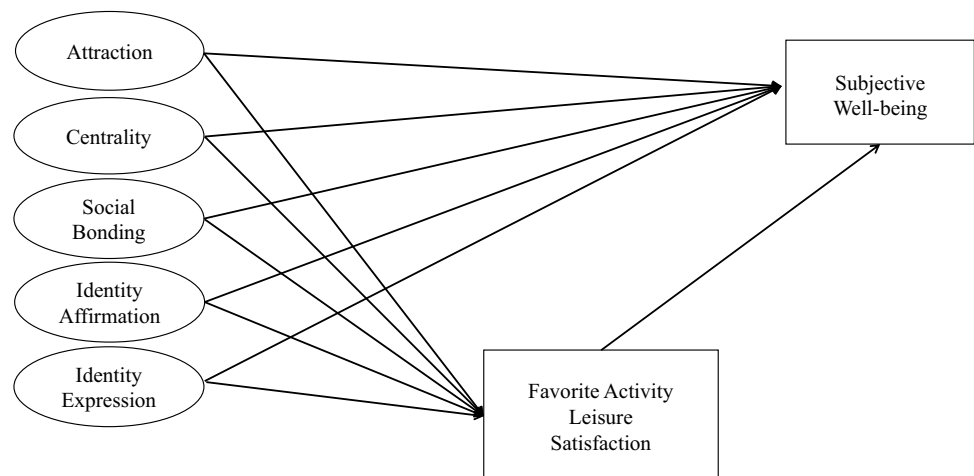
Literature review

This section reviews previous studies on leisure involvement, SWB, and outdoor recreation of Black Americans. It is important to note that previous studies focused on similar yet slightly different concepts such as "life satisfaction," "happiness," and "SWB." These are overlapping concepts, and their conceptual distinction has been a subject of ongoing scholarly debate (see Cummins, 2013; Veenhoven, 2012). To provide an accurate and effective summary, this section maintained the original concepts and wordings while reiterating that the primary interest of the present study is the affective components of SWB, the positive and negative feelings that individuals experienced (Pavot & Diener, 2013).

Leisure involvement and SWB

The concept of leisure involvement originates from consumer-behavior literature (Havitz & Dimanche, 1999; Selin & Howard, 1988). Since its inception, researchers have introduced multiple conceptualizations and measurements of leisure involvement (Havitz et al., 1993; Jun et al., 2012; Kyle & Chick, 2002; McIntyre, 1989), yet the general consensus is that it is a multidimensional construct denoting the degree to which people devote themselves to a leisure activity or the strength of the cognitive linkage between the self and a leisure activity (Havitz & Dimanche, 1997, 1999).

Fig. 1 Hypothesized model



For example, by synthesizing previous research on leisure involvement, Kyle et al. (2007) introduced the Modified Involvement Scale, distinguishing five dimensions of leisure involvement: *Attraction* (importance of the activity and pleasure derived through participation), *Centrality* (locus of the activity within the context of the individual's lifestyle), *Social Bonding* (social ties that bind recreationists to specific activities), *Identity Affirmation* (degree to which leisure provides opportunities to affirm the self to the self), and *Identity Expression* (degree to which leisure provides opportunities to express the self to others).

To date, researchers have found that leisure involvement is positively associated with leisure satisfaction and well-being (Chen et al., 2013; Matte et al., 2021; Pan et al., 2018; Sato et al., 2014). However, they have also found that the involvement dimensions have rarely acted uniformly on different dependent variables (Kyle et al., 2007, 2003b). A review of previous findings indicates that, among the different involvement dimensions, Attraction has been the most consistent predictor of leisure satisfaction and SWB. For example, Kyle et al., (2003a) examined the effect of leisure involvement and place attachment on the leisure satisfaction of Appalachian Trail hikers, finding that Attraction was a significant predictor of activity satisfaction, while the Centrality and Self-expression dimensions were not. Matsumoto et al.'s (2018) study on American scuba divers identified that Attraction had a significant positive association with subjective happiness through leisure satisfaction, yet Centrality had a significant negative relationship with subjective happiness.

Recent involvement studies on sport contexts have reported similar findings and highlighted the importance of the Attraction dimension (An et al., 2021; Ito & Hikoji, 2021; Sato et al., 2017, 2018). An et al. (2021) investigated amateur triathletes in Japan and found that Attraction was positively associated with life satisfaction, while Centrality had a negative association. Sato et al. (2018) examined the relationship between the big five personality traits, running involvement, and life satisfaction. They found that a conscientiousness personality had positive, indirect effects on life satisfaction through Attraction, Centrality, and Self-expression, while an open-to-experience personality also had positive, indirect effects on life satisfaction through Attraction and Self-expression. Sato et al. (2017) examined the involvement and life satisfaction of walking and running events participants. Their results showed that Attraction positively affected six different life domains, namely, family, leisure, overall health, personal achievement, social, and work, while Centrality and Self-expression had no significant relationship with any of the life domains. Finally, Ito and Hikoji (2021) investigated domestic and international sport tourists in Japan and found that Attraction was positively associated with the interdependent happiness of

the two groups, yet Social Bonding was positively associated with the interdependent happiness of the domestic tourists only. Although these previous studies have shown some complex relationships between leisure involvement, leisure satisfaction, and life satisfaction, to our knowledge, no study has focused on African Americans' outdoor recreation involvement.

Outdoor recreation, SWB, and racial and ethnic diversity

Many researchers have documented that outdoor recreation significantly contributes to SWB (Buchecker & Degenhardt, 2015; Buckley, 2020; Korpela et al., 2014). According to Thomsen et al.'s (2018) systematic review of wildland recreation studies, outdoor recreation enhances life satisfaction and happiness because it takes place in natural settings fostering respite and restoration, encourages physical activities, and creates opportunities for social interaction and social capital development. Another systematic review from Lackey et al. (2021) also revealed that 46 out of 51 selected studies reported at least one positive association between nature-based recreation and mental health, including improvements in affect, cognition, restoration, and a sense of well-being. Thus, consistent with the studies on the relationship between leisure and well-being (Iwasaki, 2007; Kleiber et al., 2002; Kuykendall et al., 2015; Lee et al., 2020; Loveday et al., 2018; Newman et al., 2014), existing leisure literature reports that outdoor recreation activities significantly contribute to SWB because they tend to satisfy participants' psychological and physiological needs by facilitating contact with nature, restorative experiences, physical activities, and social interaction.

However, it is important to note that the benefits of outdoor recreation have not been equitably shared with multiple generations of African Americans. Studies from the 1950s and 1960s have documented that African Americans were far less likely to engage in outdoor recreation compared to their White counterparts and they constituted a small number of outdoor recreationists in the U.S. (Audience Research Inc., 1955; Mueller & Gurin, 1962). Moreover, recent studies showed that there have been little changes in this racial and ethnic disparity in outdoor recreation (Resource Systems Group & Wyoming Survey and Analysis Center, 2019; USDA Forest Service, 2019). Although several theoretical explanations for the paucity of Black outdoor recreationists have been put forth (Floyd & Stodolska, 2014; Scott & Lee, 2018), Floyd (1998) critiqued that the earlier explanations such as marginality hypothesis (e.g., limited economic resource) and ethnicity or subcultural hypothesis (e.g., cultural norms and value systems) were undergirded by erroneous assumptions that African Americans will exhibit the same

behavioral patterns of Whites if they gain more disposable income or become more assimilated into White culture.

Today, researchers recognize that centuries of institutional and systemic racism offer more effective and holistic explanations for the small number of African American recreationists (Johnson & Bowker, 2004; Lee & Scott, 2016). For example, after Africans were forcibly relocated to the North American continent by slave ships, they had to endure slavery, lynching, and raping in wildlands for centuries, which negatively impacted their relationship with nature (Blum, 2010). Moreover, early conservation leaders during the nineteenth century held to a strong eugenics ideology, and they conceptualized and managed America's great outdoors as an environment for White Americans (Byrne & Wolch, 2009; Deluca & Demo, 2001; Lee et al., 2022; Mowatt, 2020). Indeed, there were only a handful of national and state parks available for African Americans during the Jim Crow Era (O'Brien, 2015; Young, 2009). More troubling is that hate crimes and criminalization against African Americans are still prevalent in outdoor contexts (Cleary, 2018; Floyd & Gramann, 1995; Hackett & Schwarzenbach, 2020; Lee & Scott, 2017; Philipp, 1998; Powell, 2021; West, 1989). This historical Black exclusion from outdoor recreation offers compelling explanations as to why many African Americans are not interested in or afraid of engaging in outdoor recreation activities (Johnson & Bowker, 2004; Lee & Scott, 2016; Scott & Lee, 2018; Virden & Walker, 1999).

However, despite the historical and contemporary racism that has curtailed Black Americans' access to the outdoors, researchers also stressed that many Black people have found natural environments to be safe spaces where they could escape from White racism and develop their own environmental practice and stewardship (Finney, 2014; Sene-Harper et al., 2021; Theriault & Mowatt, 2020). Further, during the Jim Crow Era, African Americans developed their own hotels and resorts to freely enjoy outdoor recreation (Algeo, 2013; Hart, 1960). Recently, there have been collective efforts within African American communities to reclaim their profound connection with nature and challenge the common racial stereotype that Blacks do not enjoy outdoor recreation. For example, African American entrepreneurs and conservation leaders have created Black outdoor recreation organizations that promote African Americans' outdoor adventures (Root, 2017). Through their community-building approaches, these affinity groups have provided various supports for many African American youths and adults to enjoy natural environments and learn about different outdoor recreation activities and equipment (Chávez, 2020; Meraji, 2015). Thus, given these emerging trends, investigating African Americans' involvement in outdoor recreation and its

impact on their leisure satisfaction and well-being is timely and expected to provide new insights into outdoor recreation scholarship and management.

The bottom-up theory of well-being and DRAMMA model

The bottom-up theory has been one of the most popular explanations of SWB. It posits that one's overall well-being is determined by the summation of satisfaction in different life domains such as health, occupation, and marriage (Heller et al., 2004; Diener et al., 2010; Diener, 1984). Significantly, many empirical and theoretical studies have reported leisure is one of those critical life domains in life satisfaction (Brown & Frankel, 1993; Brown et al., 1991; Kuykendall et al., 2015; Lee et al., 2020; Lu & Hu, 2005; Newman et al., 2014; Ragheb & Griffith, 1982). Newman et al. (2014) synthesized previous studies on leisure and well-being and proposed a theoretical framework named the DRAMMA model; it delineates that leisure experience satisfying five psychological mechanisms (detachment-recovery, autonomy, mastery, meaning, and affiliation) increases leisure satisfaction, which in turn, positively contributes to overall SWB. Informed by these previous studies on leisure involvement, outdoor recreation, the bottom-up theory, and the DRAMMA model, the present study investigates African Americans' outdoor recreation involvement and its direct effect on happiness and its indirect effect on leisure satisfaction (Fig. 1).

Methods

Participants and procedure

The study protocol was approved through the human subjects review board at the authors' institution. Data were collected using an online survey hosted by Qualtrics™ and distributed in September 2019. Potential respondents were identified from online-survey takers paid by the company. The sampling criteria were African Americans who participated in outdoor recreation activities in the past 12 months. Two screening questions, "Choose one or more races that you consider yourself to be" and "Have you participated in any outdoor recreation activities in the past 12 months?" were asked. The online survey was soft-lunched first to check data quality and then distributed for principal data collection for two weeks. This sampling strategy was particularly effective for identifying and collecting a sufficient number of responses from African American outdoor recreationists. A total of 458 usable responses were obtained by conducting quality checks and removing incomplete and unreliable

entries and missing data from 1546 responses. The survey process involving human subjects was approved by the North Carolina State University Institutional Review Board (Protocol 19201).

Instrumentation

The survey consisted of questions about respondents' repertoire and involvement in outdoor recreation activities, overall leisure satisfaction, affective aspects of SWB, and demographic information. From a list of 22 outdoor recreation activities (Tarrant & Green, 1999), respondents were asked to select all of those that they participated in over the past 12 months and one favorite activity among them. The *leisure satisfaction* for each selected activity was measured by a 10-point Likert scale: "On a scale from 1 to 10, with 1 being "very unsatisfied" and 10 being "very satisfied," how satisfied are you with the following activities?" The leisure satisfaction score of the favorite activity was used in the analysis. Using the Modified Involvement Scale (Kyle et al., 2007), the respondents' five dimensions of involvement (*Attraction, Centrality, Social Bonding, Identity Affirmation, and Identity Expression*) in their favorite outdoor recreation were measured. SWB was measured by the Scale of Positive and Negative Experience (Diener et al., 2010) because the scale explicitly focuses on the affective component of SWB. Based on the scale instruction, an affective-balance score that ranges from very negative (−24) to very positive (24) was calculated.

Data analysis

Data were analyzed with IBM SPSS Statistics 27 and AMOS 27. The first step was a descriptive analysis and an examination of the data for normality (i.e., skewness and kurtosis), applying critical values of less than $+/- 2.0$ for skewness and less than $+/- 3.0$ for kurtosis (George & Mallery, 2010). A confirmatory factor analysis (CFA) was conducted to assess constructs based on the multi-item five dimensions of involvement scales (*Attraction, Centrality, Social Bonding, Identity Affirmation, and Identity Expression*). The CFA assessed the reliability and validity of the constructs based on factor structure, composite reliability (CR), and average variance extracted (AVE). The analysis of the hypothesized model used structural equation modelling (SEM) to examine the predictive relationships between the five involvement dimensions, leisure satisfaction in a favorite outdoor recreation activity, and SWB. The following fit indices were used: comparative fit index (CFI), Tucker–Lewis fit index (TLI), and root mean square error of approximation (RMSEA). According to Hu and Bentler (1999), CFI and TLI fit index values above 0.90 and RMSEA values below

0.05 are considered acceptable. Lastly, the mediating effects of leisure satisfaction on the relationship between the five involvement dimensions and SWB were further assessed via a path analysis with a bias-corrected bootstrap (Matsumoto et al., 2018).

Results

Table 1 summarizes the sociodemographic characteristics of the respondents. Overall, the respondents had a fairly broad distribution of ages (18–34 years: 39.3%; 35–54 years: 31.9%; 55+ years: 28.8%) and fairly equal gender representation (male: 57.4%; female: 42.1%). The majority of respondents had a post high school education (80.1%), and nearly half of them earned a household income of more than \$50,000 (46.5%).

The univariate normality of all items was examined with skewness and kurtosis values. All values were within an appropriate range, revealing a mesokurtic distribution of the data and, therefore, a normal distribution. Multivariate normality was assessed based on relative multivariate kurtosis. All values had a normal multivariate

Table 1 Sample characteristics

| | N | % |
|----------------------------------|---------------|--------|
| Total | 458 | 100.0% |
| Age | | |
| Mean (SD) | 42.45 (16.37) | |
| 18–34 years | 180 | 39.3% |
| 35–54 years | 146 | 31.9% |
| 55+ years | 132 | 28.8% |
| Gender | | |
| Male | 263 | 57.4% |
| Female | 193 | 42.1% |
| Prefer not to answer | 2 | 0.4% |
| Education | | |
| No college education | 91 | 19.9% |
| Some college or associate degree | 179 | 39.1% |
| Bachelor's degree | 122 | 26.6% |
| Advanced and graduate degree | 66 | 14.4% |
| Household Income | | |
| \$35,000 or less | 157 | 34.3% |
| \$35,001 ~ \$50,000 | 87 | 19% |
| \$50,001 ~ \$100,000 | 124 | 27.1% |
| \$100,001 or more | 89 | 19.4% |
| Missing | 1 | 0.2% |
| Leisure Satisfaction | | |
| Mean (SD) | 8.18 (1.80) | |
| Subjective Well-being | | |
| Mean (SD) | 10.68 (8.03) | |

Table 2 Items and constructs of involvement dimensions

| Construct Item | Mean | SD | Std. Factor Loading | CR | AVE |
|---|------|------|---------------------|------|------|
| Attraction | 4.30 | 0.80 | | .853 | .659 |
| ... is one of the most satisfying thing I do | 4.23 | 0.96 | 0.82 | | |
| ...is very important to me | 4.29 | 0.92 | 0.81 | | |
| ... is one of the most enjoyable things I do | 4.37 | 0.87 | 0.80 | | |
| Centrality | 3.40 | 1.09 | | .881 | .589 |
| To change my preference from... to another recreation activity would require major thinking | 3.34 | 1.26 | 0.66 | | |
| I find a lot of my life is organized around... | 3.47 | 1.25 | 0.79 | | |
| Social Bonding | 3.60 | 0.99 | | .688 | .428 |
| Participating in ... provides me with an opportunity to be with friends | 3.60 | 1.21 | 0.71 | | |
| Most of my friends are in some way connected with... | 3.40 | 1.26 | 0.75 | | |
| I enjoy discussing with my friends | 3.80 | 1.13 | 0.70 | | |
| Identity Affirmation | 4.03 | 0.77 | | .763 | .518 |
| When I'm ... I don't have to be concerned with the way I look | 4.09 | 1.00 | 0.54 | | |
| I identify with the people and image associated with ... | 3.74 | 1.06 | 0.69 | | |
| When I participate in..., I can really be myself | 4.25 | 0.91 | 0.72 | | |
| Identity Expression | 3.60 | 0.95 | | .688 | .526 |
| When I participate in ... others see me the way I want them to see me | 3.64 | 1.06 | 0.79 | | |
| Participating in ... says a lot about who I am | 3.66 | 1.11 | 0.79 | | |
| You can tell a lot about a person by seeing them ... | 3.52 | 1.18 | 0.72 | | |

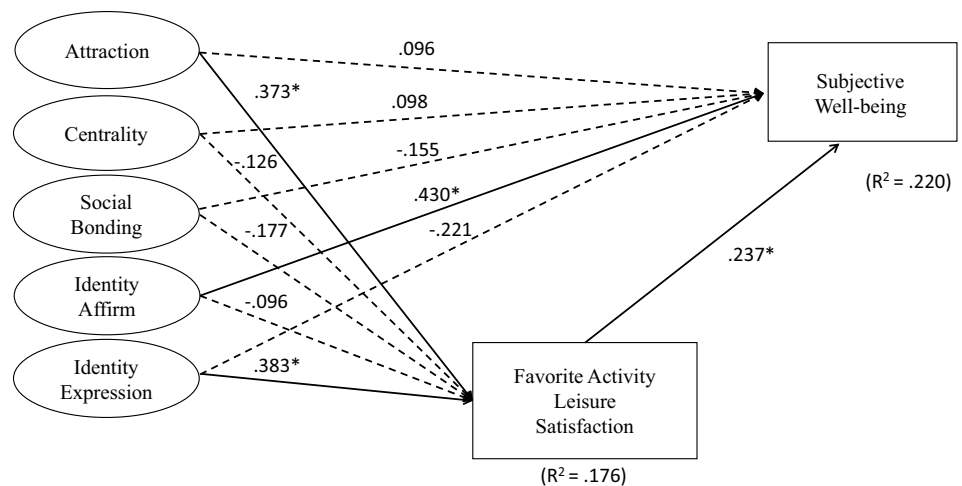
distribution ($< \pm 2.0$; Tabachnick & Fidell, 2018). The CFA found acceptable factor loading values for all items (> 0.50). The CR values of discriminate validity were acceptable (all above 0.69), as were the AVE values of convergent validity (> 0.50), with the exception of Identity Affirmation (Table 2).

The SEM (see Fig. 2) of the hypothesized model found that it adequately fit the data. The Attraction and Identity-Expression dimensions were significantly positively

associated with leisure satisfaction. Further, Identity Affirmation and leisure satisfaction had a significant positive association with SWB. Leisure satisfaction had a significant positive association with SWB. The model explained 17.6% of the variance in leisure satisfaction and 22% of the variance in SWB.

To examine mediating roles of leisure satisfaction, the significance of the indirect effects was examined by employing the bootstrap method using a bias-corrected

Fig. 2 Structural equation modeling results of hypothesized model. Note: * $p < .05$; dotted paths represent non-significant relationships at the $p < .05$ level



$\chi^2 = 253.264$, $df = 87$, $RMSEA = .065$, $CFI = .943$, $NFI = .916$

Table 3 Indirect effects and bias-corrected confidence intervals

| Path | | | Standardized Indirect Effect | Bias-corrected 95% CI |
|----------------------|-----|------|------------------------------|-----------------------|
| Attraction | →LS | →SWB | .101* | .061, .145 |
| Centrality | →LS | →SWB | -.006 | -.034, .030 |
| Social Bonding | →LS | →SWB | -.018 | -.049, .015 |
| Identity Affirmation | →LS | →SWB | -.010 | -.056, .014 |
| Identity Expression | →LS | →SWB | .057* | .019, .102 |

LS = Favorite Activity Leisure Satisfaction; SWB = Subjective Well-being

*Significant indirect effect ($p < .05$)

approach generating 1000 bootstrap samples. As summarized in Table 3, the bias-corrected confidence intervals of Attraction and Identity Expression were significant. These results indicated that the relationships between (a) Attraction and SWB and (b) Identity Expression and SWB were mediated by leisure satisfaction.

Discussion

Few studies have examined the psychology of African Americans' leisure participation (e.g., Henderson & Ainsworth, 2001; Philipp, 1998, 1999; West, 1989). To the best of our knowledge, the present study is the first to investigate African Americans' outdoor recreation involvement and its impact on their leisure satisfaction and SWB. Overall, we found that outdoor recreation involvement and leisure satisfaction were critical determinants of affective SWB, and our model accounted for more than 20% of its variance. These findings align with the bottom-up theory of well-being (Heller et al., 2004; Diener et al., 2010; Diener, 1984) and highlight that leisure is one of the most important life domains of African Americans' SWB. Moreover, the findings support previous studies on leisure involvement and serious leisure documenting that in-depth leisure participation positively affects SWB (An et al., 2021; Ito & Hikoji, 2021; Lee & Hwang, 2018; Liu & Yu, 2015; Pan et al., 2018; Yang et al., 2019).

Regarding each involvement dimension, we found that Attraction, pleasure and enjoyment derived from an activity, was a critical determinant of the leisure satisfaction and SWB of African American outdoor recreationists. Although Attraction did not directly affect SWB, it not only positively affected leisure satisfaction but also indirectly contributed to SWB through leisure satisfaction. These findings are consistent with Matsumoto et al.'s (2018) study on American scuba divers, which concluded that Attraction indirectly promoted subjective happiness through leisure satisfaction. The findings are also similar to Kyle et al. and's (2003a) study on Appalachian Trail hikers in the U.S., which reported that Attraction directly contributed to

their leisure satisfaction. The significance of the Attraction dimension cutting across the current and past studies, which differ in research participants' leisure activity, as well as their racial and ethnic background, renders strong support for its distinctive contribution to leisure satisfaction and affective SWB.

Similar to Attraction, Identity Expression was positively associated with SWB through leisure satisfaction. Moreover, we found that Identity Affirmation had a significant direct effect on SWB; its standardized coefficient ($\beta = 0.43$) indicated that the dimension had the largest effect on SWB compared to other dimensions of involvement experience. The significance of the two identity-related dimensions is a unique finding because only few studies made a clear distinction between Identity Expression and Identity Affirmation, the expressive and symbolic components of involvement experience, respectively (e.g., Jun et al., 2012; Kyle et al., 2007). However, the meanings of these findings are difficult to interpret in light of the existing involvement studies because the literature varies considerably in the operationalization of constructs, leisure activities, sampling groups, and model specifications. As such, previous findings on identity dimensions exhibit no clear pattern. For instance, Kyle et al. (2007) found that Identity Expression was a significant predictor of a sample group's overall satisfaction with their camping experience at Sumter National Forest in South Carolina, yet Ito and Hikoji (2021) reported that the same dimension did not contribute to sport-event participants' independent happiness. Similarly, Sato et al. (2018) reported that self-expression was positively associated with the life satisfaction of running-event participants, while Kyle et al., (2003a) and Sato et al. (2017) found that it had no significant relationship with leisure satisfaction.

Despite these variations, it is worth noting that the present study exclusively focuses on African Americans' outdoor recreation. Thus, the bottom line is that the degrees to which outdoor recreation activities provide opportunities to (1) express the self to others and (2) affirm the self to the self were especially important for African Americans' leisure satisfaction and affective well-being. On the one hand, our findings mirror leisure identity studies documenting that

Identity Expression and Affirmation were major drivers of leisure participation (Harmon & Kyle, 2021; Jun & Kyle, 2012; Lee et al., 2021). On the other hand, the relative importance of the two identity-related dimensions for the current sample begs further explanation as to why these dimensions of involvement carry more weight than others. One plausible explanation may lie in the sociohistorical circumstances of African Americans' outdoor recreation participation. For example, research has documented that the great outdoors has been socially constructed as a White domain (Carter, 2008; Martin, 2004), and the fear of racism has been a major barrier to enjoying outdoor recreation for generations of African Americans (Floyd & Gramann, 1995; Lee & Scott, 2017; Philipp, 1998; West, 1989). Accordingly, African Americans constitute a small portion of outdoor recreationists in public parks and forests managed by federal agencies (Resource Systems Group & Wyoming Survey and Analysis Center, 2019; U.S. Fish & Wildlife Service, 2016; USDA Forest Service, 2019; Vaske & Lyon, 2014). Given this background, outdoor recreation might offer unique contexts for African Americans to express themselves, or to be perceived by others, as novel and courageous, so that Identity Expression and Identity Affirmation during their outdoor activities are particularly conducive to their leisure satisfaction and affective SWB.

Suffice it to say, the importance of two identity dimensions among African American outdoor recreationists is a distinctive finding that has not been captured by previous studies. Researchers have stressed the prevalence of Whiteness in academic communities, which normalizes the analytic perspectives and research techniques that produce empirical data supporting White supremacy and racial stratification (Zuberi & Bonilla-Silva, 2008). Consistently, existing outdoor recreation studies have been dominated by White Americans' experience, constructing it as a normative standard when evaluating the leisure experiences of other racial and ethnic groups (Floyd, 1998; McDonald, 2009; Mowatt, 2009). By explicitly focusing on African Americans' outdoor involvement and moving away from the comparative analysis between White and non-White, the present study offers novel data and findings yet to appear in the involvement literature.

Additionally, our findings on the two identity dimensions encourage outdoor recreation agencies to critically examine whether or not their site design and program offering are conducive to African Americans' identity expression and affirmation. Researchers have underscored that the management philosophy of U.S. public land and recreation agencies is rooted in Eurocentrism and White supremacy which prioritizes solitude, escapism, and tranquility (Byrne & Wolch, 2009; Merchant, 2003; Mowatt, 2020). This White dominance in outdoor recreation effectively suppresses different environmental views and relationships, silencing Black Americans' historical use

of nature as a site for autonomy, self-determination, and social changes (Finney, 2014; Sene-Harper et al., 2021; Theriault & Mowatt, 2020). Thus, our findings and previous studies collectively suggest that outdoor recreation agencies must reevaluate their philosophical underpinnings if they are truly interested in and committed to promoting racial and ethnic diversity and inclusion. Although Attraction, Identity Expression, and Identity Affirmation were significantly associated with leisure satisfaction and/or SWB, we found that Centrality and Social Bonding had no significant association with either leisure satisfaction or SWB. These findings are consistent with what has been previously reported in the literature. For example, Ito and Hikoji (2021) found that Centrality did not affect interdependent happiness. Sato et al. (2017) also reported that the dimension had no significant association with satisfaction with leisure life. Similarly, even though Kyle et al. (2007) emphasized that Social Bonding should be treated as a unique dimension of leisure involvement, they found that it did not significantly influence their two sample groups' overall satisfaction with camping or angling. Taken together, compared to the rest of the involvement dimensions, Centrality and Social Bonding seem to exert less influence on leisure satisfaction and affective SWB.

Although this study is among the first to investigate African Americans' outdoor recreation involvement, one of its limitations is that it did not consider the sample group's perception on or relationship with their recreation sites. African Americans have historically established complicated relationships with nature, meaning that outdoor spaces have been the sites of racial oppression and violence, yet it has also served as a place of empowerment and liberation (Finney, 2014; Sene-Harper et al., 2021; Theriault & Mowatt, 2020). Accounting for such complexity in future research is expected to unearth further details of African Americans' outdoor recreation experience. For example, researchers could incorporate the concepts of place attachment (Altman & Low, 1992; Kyle et al., 2003b) or environmental attitude (Kaiser et al., 1999) and examine how they influence African Americans' preferences and behaviors in outdoor recreation. Another limitation of the present study is that it did not analyze how travel distance affects African Americans' outdoor recreation. Research has documented that long-distance traveling is a major constraint for people of color to engage in outdoor recreation (Weber & Sultana, 2012), and their fear of racism escalates when traveling to remote and unfamiliar places (Lee & Scott, 2017). Therefore, even though many park and recreation agencies are working hard to promote more racial and ethnic diversity and inclusion among their clients (Lee et al., 2019; Schultz et al., 2019), further investigation on how African American outdoor recreationists negotiate this type of constraint and still partake in outdoor activities might provide useful information for the agencies to foster a more satisfying experience for African Americans and other people of color.

Conclusions

This study examined the relationships between leisure involvement, leisure satisfaction, and the affective components of SWB of African American outdoor recreationists. Our findings confirmed the importance of leisure participation to SWB that many other leisure and well-being studies have documented (Kuykendall et al., 2015; Lee et al., 2020; Loveday et al., 2018; Newman et al., 2014). Among the five involvement dimensions, Attraction, Identity Expression, and Identity Affirmation were positively associated with leisure satisfaction and affective SWB, while Centrality and Social Bonding were not. These findings are generally consistent with previous involvement studies. Nevertheless, since this study is among the first to investigate African Americans' leisure involvement, more research is warranted. For example, further investigation on (1) how African Americans' place attachment or environmental attitude affects their outdoor recreation behaviors and preference and (2) how African Americans negotiate fear of racism inflicted by traveling to remote and unfamiliar places are particularly promising. These two research lines will collect more empirical evidence that can offer deeper insights into African Americans' outdoor recreation experience.

Data availability The data that support the findings of this study are available from the corresponding author, [KJL], upon reasonable request.

Declarations

Ethics approval All procedures performed in this study involving human participants were in accordance with the standards of the Institutional Review Board at North Carolina State University.

Informed consent Informed consent was obtained from all subjects involved in the study.

Conflict of interest All authors declare that they have no conflicts of interest.

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