

Antecedents to leisure participation among people with physical disability in Ghana

Issahaku Adam

To cite this article: Issahaku Adam (2017) Antecedents to leisure participation among people with physical disability in Ghana, *Managing Sport and Leisure*, 22:2, 127-146, DOI: [10.1080/23750472.2017.1412268](https://doi.org/10.1080/23750472.2017.1412268)

To link to this article: <https://doi.org/10.1080/23750472.2017.1412268>



Published online: 14 Dec 2017.



Submit your article to this journal [↗](#)



Article views: 85



View related articles [↗](#)



View Crossmark data [↗](#)



Antecedents to leisure participation among people with physical disability in Ghana

Issahaku Adam

Department of Hospitality and Tourism Management, University of Cape Coast, Cape Coast, Ghana

ABSTRACT

Notwithstanding the complex relationships between antecedents to leisure participation among people with disabilities, limited empirical studies have explored these relationships. This study analyses the interactional relationships between the antecedents to leisure participation among people with physical disability in the Kumasi Metropolis, Ghana, with data obtained from 322 people with physical disability. The results indicate that intellectual motivation, competence mastery and social motivation positively influenced participation while interpersonal and structural constraints negatively influenced participation. Specific dimensions of motivation influenced the conception of specific types of constraint, while specific types of constraint influenced the choice of specific negotiation strategies. Meanwhile, only cognitive negotiation strategy had a significant positive effect on participation, while participation had a positive influence on psychological, educational and social satisfaction. It is recommended that leisure and disability education should be introduced in both formal educational curriculum and public education fora so as to reduce the interpersonal and structural constraints encountered by people with physical disability.

ARTICLE HISTORY

Received 1 February 2017
Accepted 29 November 2017

KEYWORDS

Antecedents; exclusion; impairment; marginalisation; negotiation; structural equation modelling

Introduction

Leisure participation relates to the actions or behaviours associated with being engaged in a “freely chosen” leisure activity (Lee, Dattilo, & Howard, 1994; Watkins, 2000). Leisure participation is a multi-dimensional concept that involves different phases of actions in expending one’s free time. To successfully design and implement leisure programmes or encourage any leisure-related travel especially among People with Disabilities (PwDs), there is the need to gain a holistic understanding of the interactional relationships between the antecedents to participation. Knowledge of the interactional relationships between leisure antecedents is critical to understanding leisure

behaviour. The antecedents to participation determine the nature, timing and frequency of participation. The literature identifies the antecedents to leisure participation to include motivation, constraint and constraint negotiation (Crompton, Jackson, & Witt, 2005; Hubbard & Mannell, 2001; White, 2008). In the case of PwDs, the marginalisation and exclusion they face as manifested in their powerlessness have been noted to refine the interactional relationships between their antecedents to leisure participation (Sotiriadou & Wicker, 2014).

Notwithstanding, leisure researchers (e.g. Bull, 2009; Buttimer & Tierney, 2005; Devine, 2004; Sotiriadou & Wicker, 2014; Stebbins, 2000; Walsh-Allen, 2010) have focused their

efforts on understanding individual antecedents to leisure participation mostly among non-disabled people. Consequently, such studies have been unable to account for the interactional relationships among the various antecedents to leisure participation. Thus, understanding the interactional relationship between the antecedents offers deeper insights into leisure behaviour as opposed to individually studying the antecedents. Regarding PwDs, previous studies (e.g. Adam, Boakye, & Kumi-Kyereme, 2017; Crawford & Stodolska, 2008; Darcy, Cameron, & Pegg, 2010; Patterson & Pegg, 2009) have mostly focused on their leisure constraint as though constraint is the only antecedent to leisure participation. For instance, Adam et al. (2017) focused on the leisure constraints of people with visual and physical disabilities while Sotiriadou and Wicker (2014) modelled the effects of leisure constraints on participation among aged PwDs. While constraint remains an important antecedent to leisure participation among PwDs, the conflicting evidence on the influence of constraint on participation (Hinch, Jackson, Hudson, & Walker, 2005; Jackson & Rucks, 1995; White, 2008) implies that leisure participation needs to be modelled in relation to other antecedents. Consequently, the objectives of this study are twofold; to examine the interactional relationships between antecedents to leisure participation (motivation, constraint and negotiation) and to examine the relationships between the individual dimensions of the antecedents to leisure participation.

Disability in Ghana

In Ghana, 3% of the population are disabled with 25.4% of them being physically impaired. Physical impairment is the second highest category of impairment in Ghana (Ghana Statistical Service [GSS], 2014). People with physical impairment are noted to be the most expressive in terms of leisure and as such believed to have higher participation rates than people with

other categories of impairment (Adam, 2017a) and thus deemed ideal for this study. Meanwhile, deeply rooted socio-cultural beliefs have driven the perceptions of Ghanaians on disability (Avoke, 2002; Slikker, 2009). There is a dual view pertaining to societal perceptions of disability. The first and predominant view of disability identifies people with impairments (especially those whose conditions are congenital) as people whose parents or family members have wronged a deity/supreme being (Agbenyega, 2003; Kassah, 2008). In some cases, it is believed that even when dead relatives offend a god/deity, it can cause a living relative to give birth to a child with impairment. In this regard, people with impairment are feared by non-disabled people for the simple reason that any association with them may result in a similar punishment (Avoke, 2002; Kuyini, Alhasan, & Mahama, 2011). The other socio-cultural construction of disability cast PwDs as deserving of pity and charity. Those who subscribe to this thought perceive impairment as an opportunity for non-disabled people to do 'good' and serve god by being charitable to PwDs (Agbenyega, 2003). Subscribers of this opinion conceive disability as an aberration in God's creation and hence the path to achieving salvation lies in being sympathetic and charitable to PwDs (Kuyini et al., 2011). Even though people who hold this opinion have some form of social contact with PwDs, such contacts are usually limited to the provision of necessities (food and shelter).

In relation to their economic life, PwDs have faced and continue to face exclusion. Access to jobs is limited given the notion that PwDs are economically inactive since they lack the functional ability to work (United Nations Development Programme [UNDP], 2007). Similarly, PwDs have very limited access to education as the educational curriculum and infrastructure do not make provision for the education of PwDs. Teachers in special education who can teach PwDs are limited (UNDP, 2007). Owing to these constraints on the lives of PwDs, the

Persons with Disability Law (ACT 715) was enacted in 2006 to eliminate the disabling barriers to the lives of PwDs in Ghana. However, the law has done little to improve on the conditions of PwDs in the country. The law is largely premised on the idea that PwDs are disabled by their impairment rather than the societal conditions they find themselves and thus indirectly purports to make PwDs dependent on society for charity.

Conceptual model and hypotheses

In conceptualising the model in this study, previous studies (e.g. Adam et al., 2017; Adam, Kumi-Kyereme, & Boakye, 2016; Hubbard & Mannell, 2001; Sotiriadou & Wicker, 2014; White, 2008) on antecedents to leisure participation were reviewed. Similarly, theoretical conceptions of the relationships between the various antecedents to leisure participation were considered. This approach culminated in the theorisation of the relationships between the antecedents to leisure participation (Figure 1).

Leisure motivation is a need, reason or desire that stimulates involvement in a leisure activity (Crandall, 1980). Motivation serves as the fundamental reason for which an individual engages in leisure. Motivation may arise out of an innate desire or external influences (Iso-Ahola, 1982, 1983). Motivation is key in leisure as it influences the choice of activity and frequency of participation (Alexandris, Kouthouris, Funk,

& Chatzigianni, 2008; Crompton et al., 2005). Leisure scholars (Adam et al., 2016; Hubbard & Mannell, 2001; White, 2008) have found evidence to suggest that individuals with stronger desires for certain activities frequently participate in those activities and vice versa. Relatedly, as a psychological drive, motivation shapes an individual's conception of a constraint (Son, Mowen, & Kerstetter, 2008). Leisure constraint inhibits the ability to participate in leisure or spend more time on leisure, or achieve a desired level of satisfaction (Jackson, 2005). In their extended model of constraint-effects-mitigation, Hubbard and Mannell (2001) were of the view that the effect of motivation on constraint is not hinged on the idea that motivation culminates in the existence of constraint or otherwise, but rather, motivation impacts on the conception of whether a situation/circumstance constitutes a constraint in a leisure setting. Constraints are not fixed and thus what may be conceived as a constraint by one leisure participant may not be conceived as a constraint by another leisure participant within the same leisure setting. Nevertheless, specific dimensions of motivation are likely to influence the conception of specific dimensions of constraint. Consequently, hypotheses H_1 and H_2 are formulated.

H_1 : Motivation has positive influence on participation

H_2 : Motivation has inverse influence on constraint

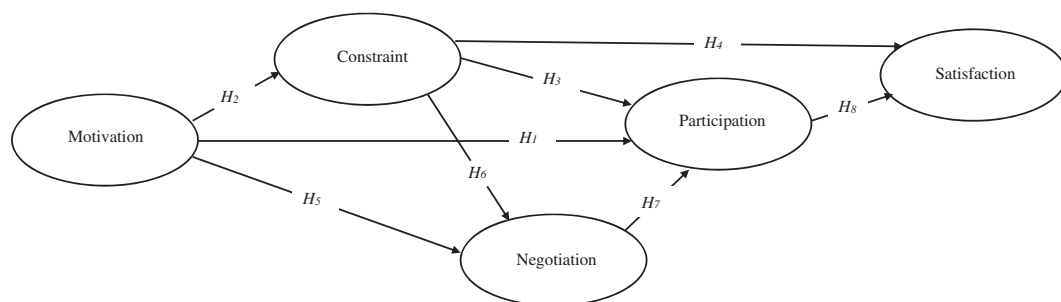


Figure 1. Hypothesised model of leisure participation.

While the debate on the relationship between constraint and participation has yielded inconclusive results, there is evidence to suggest that constraint has a negative influence on participation (Alexandris et al., 2008; Son et al., 2008). This implies that people who encounter constraints are more likely to either have difficulty in participating in leisure or attain lower levels of satisfaction (Crawford, Jackson, & Godbey, 1991; Godbey, Crawford, & Shen, 2010; Hubbard & Mannell, 2001; Jackson, 2005; Son et al., 2008; White, 2008). Further, the literature suggests that specific dimensions of constraint will have a unique influence on participation. The types of constraint encountered are underpinned by the general living conditions of leisure participants. Thus, the magnitude of constraint and its effect on participation are incumbent on the circumstances of the individual. In the case of people with physical disability, constraints that reflect their lower social class status and powerlessness are likely to negatively influence their participation levels. In this regard, some types of constraint will exert significant influence on participation than others. Ultimately, each dimension of constraint will influence participation differently. Accordingly, hypotheses H_4 and H_6 are formulated.

H_3 : Constraint has negative influence on participation

H_4 : Constraint has negative influence on satisfaction

Further on motivation, it is conceived that highly motivated individuals are likely to commit greater efforts to negotiate their leisure constraints while those with weaker desires will commit less or no efforts to negotiate their constraints (Hubbard & Mannell, 2001; Son et al., 2008; White, 2008). Constraint negotiation are those strategies used by leisure participants upon encountering/perceiving constraint(s) to either diminish or eliminate the negative consequence of constraint on participation/satisfaction (Jackson, 2005).

Admittedly, specific domains of motivations will markedly impact on specific domains of negotiation strategies. The type of motivation for which an individual undertakes leisure will make the person inclined to the use of certain negotiation strategies than others. For instance, someone motivated by social desires may be inclined to changing his/her interpersonal relations to be able to meet other people and interact with them. Alternatively, someone motivated by the need for relaxation may be able to change his/her leisure aspirations since there are alternate activities that can equally lead to relaxation. Based on the foregoing discussion, hypothesis H_5 is formulated:

H_5 : Motivation has positive influence on negotiation

Relatedly, negotiation strategies are conceived as direct products of constraint and as such are targeted at neutralising the consequences of constraint on participation (Leung, Fung, Tsai, & Wong, 2007; Tsai & Coleman, 2007). Individuals who subjectively assess their constraint(s) to be herculean will commit greater negotiation efforts towards overcoming such constraint(s) while those who conceive constraint(s) to be marginal may commit less efforts to negotiating them (Godbey et al., 2010). However, the nature of negotiation strategies employed is dependent on the type of constraint encountered (Godbey et al., 2010; Walker & Virden, 2005). Thus, since negotiation strategies are adopted as a direct response to constraint, it implies that specific strategies are adopted in response to specific types of constraint in order to enhance the efficacy of such negotiation strategies. Consequently, hypothesis H_5 is formulated.

H_6 : Constraint has positive influence on negotiation

Nevertheless, negotiation efforts are likely to enhance participation (Godbey et al., 2010). Implied in this conception is the fact that negotiation strategies help to reduce the negative

effects of constraint on participation (Godbey et al., 2010; Marquez & McAuley, 2006). Through negotiation, leisure participants resort to both cognitive and behavioural strategies to deal with the potential negative impact of constraint on participation. Literature suggests that in instances where negotiation strategies are used, participation levels (frequency) improve than when negotiation strategies are not used (Hinch et al., 2005). Yet, specific dimensions of negotiation strategies are likely to uniquely influence participation. This thought is grounded on the idea that each negotiation strategy has unique efficacy on participation depending on the kind of activity and the individual circumstances of the leisure participant. Consequently, some of the strategies may be efficacious in enhancing participation than others. In this regard, hypothesis H_7 is formulated.

H_7 : Negotiation has positive influence on participation

Meanwhile, participation in leisure is bound to result in satisfaction/dissatisfaction (Crompton et al., 2005). Leisure satisfaction is the degree of contentment or pleasure one has with the leisure experience (Beard & Ragheb, 1980). Satisfaction, which is conceptually an evaluation of the participation encounter(s), has the ability to reinforce participation or otherwise (e.g. Alexandris et al., 2008). Once participation is undertaken for the reason of satisfying one's desire, it implies that a higher frequency of participation may result in higher satisfaction (Alexandris, Kouthouris, Funk, & Tziouma, 2013; Son et al., 2008; White, 2008). Nonetheless, participation may yield varying levels of satisfaction. Like any other consumption process, the anticipated utility may be realised or otherwise depending on the consumption encounter(s). Yet, it is anticipated that since leisure is undertaken for a variety of motives, participation will yield unique types of satisfaction. The variations in activity choice as well as participation frequencies are bound

to yield different kinds of satisfaction. Consequently, the hypothesis below is posited.

H_8 : Participation has positive influence on satisfaction

Study method

Study setting

The study was situated in the Kumasi Metropolis of Ghana. The Kumasi Metropolis is the second largest city in Ghana in terms of land size and population. The Metropolis has 42,060 PwDs with 9465 of them being people with physical impairment (GSS, 2014). Other forms of impairments in the Metropolis include visual, emotional, speech, hearing, intellectual and multiple impairments. Regarding leisure facilities and opportunities, the Metropolis is endowed with numerous attractions and open spaces including the Komfo Anokye Sword site, the Zoological Garden, the Ghana Armed Forces Museum, Manhyia Palace, Prempeh II museum, Ghana National Cultural Centre, Children's Park and Rotary Park among others.

Instrument design

An interview schedule (researcher administered questionnaire) was used in gathering the data for this study. The interview schedule was designed in six main sections. The first section measured leisure participation among the respondents. Here, the respondents were asked to list the activities they undertook frequently on weekly basis. Next, they were asked to indicate the frequency of participation in each activity. In the context of this study, the frequency of participation (number of times an individual undertakes an activity) was used as a measure of participation. The use of this measure is supported in the literature (Hubbard & Mannell, 2001; Son et al., 2008; White, 2008) as being a reliable indicator of an individual's liking for an activity than time

spent on an activity. Frequency of participation represents a count of the number of times one engages in an activity and for that matter easy to recollect. Meanwhile, time spent on an activity is a continuous in nature and hence difficult to recollect. Additionally, time spent on activity can be a misleading measure of activity inclination because some activities are time sensitive than others.

The second section of the instrument gathered data on leisure motivation of the respondents. Under this section, the Leisure Motivation Scale (LMS) designed by Beard and Ragheb (1980) was used. The LMS comprises four dimensions of motivation namely social, relaxation (stimulus avoidance), competence mastery and intellectual motivations. Social motivation measures the desire to engage in leisure for the purpose of establishing social contacts while relaxation motivation (stimulus avoidance) relates to the desire to engage in leisure for the purpose of escaping the monotony of everyday life. Competence mastery pertains to the desire to undertake leisure to challenge oneself and consequently gain a sense of achievement/mastery. Intellectual motivation refers to the craving to undertake leisure for the sake of stimulating one's mental acumen. Unlike other motivation scales, the LMS is purposely developed in leisure context through critical analysis and evaluation of responses with the aim of clarifying appropriate leisure motives and thus, widely applied in different leisure contexts due to its content and construct validity (Mohsin & Ryan, 2007).

The third section of the interview schedule measured the leisure constraints of the respondents. The hierarchical leisure constraint (Crawford et al., 1991; Godbey et al., 2010) underpinned by the hierarchical leisure constraints theory was used to gauge the data in this section. The scale is founded on the assumption that constraints are hierarchical starting with intrapersonal to interpersonal and structural constraints. Intrapersonal

constraints are defined as individual psychological qualities that affect the development of leisure preferences (e.g. shyness) while interpersonal constraints are social factors that affect the development of leisure preferences (e.g. lack of companions). Structural constraints comprise of factors that intervene between the development of leisure preferences and participation (e.g. financial resources). Owing to its utility in measuring leisure constraints in varied leisure contexts, the hierarchical leisure constraints model was deemed ideal for this study.

The fourth section of the interview schedule measured the constraint negotiation strategies of the respondents using the constraint negotiation scale (Jackson & Rucks, 1995). The scale is underpinned by the idea that leisure participants resort to the use of both cognitive and behavioural strategies to negotiate their constraints. Behavioural strategies involve the modification of non-leisure and leisure aspects of life to accommodate one's leisure needs while cognitive strategy involves the use of psychological measures to devalue leisure activities that are unattainable. The behavioural strategies are subdivided into: time management (where leisure participants modify their time use in order to make time for desired leisure activity(ies)), skills acquisition (where leisure participants try to acquire skills to enhance their participation), changing interpersonal relations (where leisure participants set up special relationships with new or existing networks) and improvement in finances (where people make/save money for an activity). The fifth section captured the leisure satisfaction of the respondents using the Leisure Satisfaction Scale developed by Beard and Ragheb (1983). The dimensions of the scale include psychological (emotional benefits of leisure such as enjoyment, sense of freedom and involvement), educational (intellectual stimulation and learning about one's self and environment), social (rewarding relationships with other individuals), relaxation (relief from strain and stress of

everyday life), physiological (physical fitness, weight control and general well-being) and aesthetic (whether the leisure environment is pleasing, interesting, beautiful or well designed). The sixth section of the instrument captured the socio-demographic characteristics of the respondents. Except the first and last sections of the instrument, all the other sections were measured on a five-point Likert Scale ranging from strongly agree to strongly disagree.

Data collection

In reaching the sample units, a stratified random sampling technique was used. A list of people with physical disability in the Metropolis was obtained from the Ghana Society of the Physically Challenged (GSPC). This is an association that represents the interests of people with physical disability in the Metropolis and elsewhere in the country. The list was stratified using sex as a stratification variable. This was done to ensure proportional representation of both sexes in the study since leisure is socio-culturally gendered. The individual sample unit/respondent was drawn systematically from the list at a sampling interval of 18. This sampling procedure yielded a total sample size of 632. The sampled individuals were then contacted by telephone to seek their consent to be part of the study. Of the 632 individuals contacted, 489 agreed to participate in the study. The bi-monthly meetings of the GSPC (second and fourth Saturdays of every month) were used as main data collection periods. Printed copies of the interview schedule were administered to the selected respondents. Selected respondents who were not present at any of the meetings were contacted on the phone to seek their permission for the interview schedule to be administered to them in their homes. This procedure was used to complement the initial one till all willing and available respondents were reached. Eventually, 335 selected

respondents were captured over the two-month data collection period. However, 322 of the interview schedule were found to be useful for analysis based on completeness.

Given the fact that most PwDs are not literate in the English Language, the instrument was administered in the local language of Asante Twi. However, respondents who were lettered in the English Language were given copies of the interview schedule to fill on their own. To ensure internal consistency and validity of the responses, the services of professional Asante Twi Language experts from the Department of Ghanaian Languages at the University of Cape Coast were employed. The two Faculty translated the content of the instrument into Asante Twi and back from Asante Twi into English Language. Through this procedure, difficult words were clarified while ambiguous statements were re-worded.

Data analyses

Confirmatory factor analysis (CFA), structural equation modelling (SEM) and Pearson product moment correlation were used to analyse the data. The CFA was used to confirm the factorial validity (convergent and divergent) of the measurement items. In line with scientific parsimony, The Person product moment correlation was used in assessing the discriminant validity of the constructs while the SEM was used to validate the structural models and thereby testing the hypotheses. The Pearson product moment correlation was conducted with the statistical package for service solutions (SPSS) version 21 while the CFA and SEM were conducted with AMOS version 18. AMOS is a covariance-based SEM technique. The covariance-based technique is based on maximum likelihood estimation and thus tends to maximise the iterations to find a proper solution for the hypothesised model unlike the component-based SEM technique which aims at enhancing the predictive value of the model.

In the case of this study, the aim was to find a proper solution that will enable the projection of the model in the population rather than merely enhancing the predictive value of the model.

Results of the study

Profile of the respondents and leisure activities

A little over half of the respondents were males (53.9%). About one-third (25.7%) of them were within the age categories of 40–49 years (Table 1). A little less than half of them (40.7%) have never been married. About one-third of the respondents (39.5%) were without formal education. The respondents mostly lived in households with five members or less (46.7%). Economically, most of them were employed (61.7%), with over half (53.3%) of the respondents earning GH¢200 (US\$ 51.3) or less.

Table 1. Profile of respondents ($N = 322$).

Socio-demographic characteristics	<i>N</i>	Per cent
Sex		
Male	174	53.9
Female	148	46.1
Age (years)		
20–29	56	17.4
30–39	37	11.4
40–49	83	25.7
50–59	67	21.0
60+	79	24.6
Marital status		
Never married	118	36.5
Married	73	22.8
Never married	131	40.7
Educational attainment		
No formal education	127	39.5
Basic education	110	34.1
Secondary education	50	15.6
Tertiary	35	10.8
Household size (number of people)		
1–5	150	46.7
6–10	100	31.1
11–15	72	22.2
Employment status		
Employed	199	61.7
Unemployed	123	38.3
Monthly income (GH¢) ^a		
≤200	172	53.3
201+	150	46.7

^a1 US Dollar = 3.9 Ghana Cedis.

Table 2 shows the 11 leisure activities undertaken by the respondents. The most frequently undertaken activities include chatting, listening to music, watching television and listening to radio. Other studies (Adam, 2017a, 2017b; Yankholmes & Lin, 2012) have reported similar activities across different study populations in Ghana including students, people with visual impairment and people with physical impairment. While the activities patronised by Ghanaians as leisure are similar to other activities necessary for survival, the socio-cultural conception of leisure coupled with its relative freedom offers an explanation for this scenario. Leisure, conceived in this study as a freely chosen activity undertaken during one's free time has traditionally been associated with wastefulness and frivolity (Adam, 2017a; Yankholmes & Lin, 2012). The idea of being in possession of free time and having no work to do is considered by many Ghanaians as being lazy (Adam et al., 2017). To avoid being tagged as lazy, most Ghanaians adopt home-based, passive activities that have the resemblance to activities that are necessary for survival (Yankholmes & Lin, 2012). Nonetheless, the influence of globalisation has seen a change in leisure lifestyle towards more formalised leisure endeavours especially among the wealthy and elite but not PwDs who are considered "second class citizens".

Table 2. Activities and frequency of participation in a week.

Leisure activity	Number of participation	Rank
Chatting	396	1
Listening to music	352	2
Watching television	345	3
Listening to radio	279	4
Sleeping	243	5
Visiting friends and relatives	222	6
Meditation	193	7
Reading	156	8
Ludo	138	9
Oware	125	10
Draft	118	11
Overall	2567 ^a	

^aMultiple response applied.

Table 3. Confirmatory factor analysis on measurement items.

Loadings	Standardised estimate	CR	AVE
Motivation			
Social interaction		0.922	0.663
To develop physical skills and abilities	0.876		
To interact with others	0.794		
To build friendship with others	0.760		
To gain the respect of others	0.750		
To gain the feeling of belonging	0.830		
To satisfy my curiosity	0.867		
Relaxation		0.902	0.697
To avoid hustle and bustle of daily life	0.879		
To rest	0.790		
To relieve stress and tension	0.795		
To be in a calm atmosphere	0.871		
Competence mastery		0.900	0.693
To challenge my abilities	0.838		
To improve my skills and abilities	0.789		
To be active	0.870		
To get a feeling of achievement	0.831		
Intellectual stimulus		0.915	0.729
To learn about myself	0.839		
To expand my knowledge base	0.851		
To explore new ideas	0.822		
To use my imagination	0.901		
$\chi^2 = 153.55$; $df = 125$; $P < .010$; $GFI = 0.916$; $CFI = 0.955$; $RMSEA = 0.037$			
Constraints			
Interpersonal		0.951	0.783
My peers prefer other things	0.891		
I do not feel welcome by others	0.901		
I have no friends to participate with	0.884		
Society thinks I should not engage in leisure	0.880		
Others do not allow me to	0.906		
Structural		0.934	0.741
Unfriendly attitude of non-disabled people	0.867		
Cost of participation	0.919		
Don't have enough time	0.836		
Physically inaccessible leisure spaces	0.801		
Lack of assistive devices	0.873		
Intrapersonal		0.949	0.788
Afraid of getting hurt	0.849		
Do not have information on leisure opportunities	0.877		
Don't have the physical ability	0.910		
Lack of participation skills	0.888		
Difficulty in movement	0.913		
$\chi^2 = 109.64$; $df = 61$; $P < .010$; $RMR = 0.066$; $GFI = 0.928$; $CFI = 0.959$; $RMSEA = 0.069$			
Negotiation			
Improvement in finances		0.913	0.779
Borrow money for leisure	0.923		
Try to get a job	0.877		
Reduce my expenditure	0.846		
Time modification		0.895	0.739
Get up early or stay up late to make time	0.832		
Sacrifice other activities for leisure	0.884		
Reduce the amount of time I work	0.863		
Interpersonal relations		0.933	0.777
Use assistive device	0.898		
Get friends or relatives to assist me	0.918		
Find fellow disabled people with similar interest to assist me	0.857		
Find people with similar interest	0.852		
Skills acquisition		0.925	0.756
Learn to perform new activities	0.898		
Learn skills on my own	0.906		

(Continued)

Table 3. Continued.

Loadings	Standardised estimate	CR	AVE
Ask friends and relatives to teach me	0.874		
Ask for expert's help	0.795		
Leisure aspirations		0.920	0.743
Engage in disabled friendly activities	0.835		
Go to places that are disable friendly	0.875		
Improvise with what I have	0.844		
Find an activity that is easier to perform	0.892		
Cognitive		0.936	0.745
Try to be positive and have fun	0.899		
Think about the benefits of the activity	0.871		
Just put up with the constraint	0.817		
Think less of the constraint	0.865		
Accept my inadequacies and do my best	0.862		
$\chi^2 = 213.0$; $df = 199$; $P < .050$; $RMR = 0.053$; $GFI = 901$; $CFI = 0.936$; $RMSEA = 0.021$			
Satisfaction			
Physiological		0.939	0.794
Leisure activities are challenging	0.961		
Leisure helps to develop my physical fitness	0.859		
Leisure helps me to stay healthy	0.889		
Leisure helps to mentally restore me	0.850		
Social		0.910	0.772
Leisure helps to develop relationships	0.885		
Leisure helps to develop strong sense of belonging	0.838		
I have social interaction with others through leisure activities	0.912		
Relaxation		0.926	0.807
Leisure helps me to relax	0.882		
Leisure contributes to my emotional well-being	0.907		
I simply enjoy leisure	0.906		
Educational		0.917	0.734
Leisure gives me broader experience	0.866		
Leisure allows me to learn new things	0.856		
Leisure helps me learn about myself	0.879		
Leisure helps me learn about other people	0.826		
Psychological		0.920	0.742
Leisure is interesting to me	0.867		
Leisure gives me self-confidence	0.885		
Leisure gives me sense of accomplishment	0.852		
Leisure allows me to use my abilities and skills	0.840		
Aesthetic		0.929	0.814
The places I undertake my leisure activities are clean	0.891		
The places I undertake my leisure activities are interesting	0.896		
The places I undertake in my leisure activities are beautiful	0.919		
$\chi^2 = 114.0$; $df = 110$; $P < .050$; $RMR = 0.024$; $GFI = 0.928$; $CFI = 0.940$; $RMSEA = 0.015$			

Measurement model

The skewness and kurtosis of the indicator variables were checked and found to be within the acceptable range of 3 and 8, respectively, thereby suggesting that the data were normally distributed (Kline, 2015). Further, the reliability, convergent and discriminant validity of the latent variables (Table 3) were assessed. The standardised estimates and the fit indices indicated good fit results for each of the measurement scales (Table 3). Other global fit indices

such as the goodness-of-fit index (GFI) and incremental fit measures (CFI and NFI) for each of the measurement models were all above the 0.90 cut-off threshold (Byrne, 2010; Kline, 2015). Further evidence of the appropriateness of the measurement models was supported by the inferential statistical test of the root mean square error values which were less than the 0.050 threshold. Meanwhile, the composite reliability coefficients of each of the latent variables exceeded 0.70 suggesting that they

Table 4. Inter-construct correlation and square root of AVE.

	SI	R	CM	IS	IPC	SC	IC	IF	TM	IR	SA	LA	CO	PS	SS	RS	ES	PYS	AS	
SI	(0.814)																			
R	0.192	(0.835)																		
CM	0.378	0.149	(0.832)																	
IS	0.158	0.344	0.256	(0.854)																
IPC	0.251	0.076	0.083	0.044	(0.885)															
SC	0.294	0.090	0.072	0.093	0.388	(0.861)														
IC	0.251	0.036	0.058	0.087	0.193	0.204	(0.888)													
IF	0.294	0.254	0.051	0.434	0.045	0.049	0.281	(0.883)												
TM	0.215	0.051	0.129	0.109	0.013	0.111	0.311	0.211	(0.860)											
IR	0.143	0.129	0.101	0.127	0.054	0.082	0.019	0.018	0.117	(0.881)										
SA	0.048	0.217	0.015	0.086	0.013	0.018	0.097	0.015	0.106	0.363	(0.869)									
LA	0.105	0.165	0.211	0.173	0.255	0.101	0.021	0.055	0.084	0.106	0.091	(0.862)								
CO	0.198	0.170	0.269	0.176	0.040	0.133	0.391	0.186	0.005	0.087	0.130	0.091	(0.863)							
PS	0.028	0.102	0.335	0.250	0.060	0.011	0.301	0.142	0.344	0.076	0.059	0.071	0.027	(0.891)						
SS	0.009	0.238	0.256	0.174	0.100	0.045	0.491	0.161	0.289	0.023	0.091	0.086	0.160	0.002	(0.879)					
RS	0.205	0.256	0.205	0.251	0.122	0.014	0.311	0.052	0.065	0.060	0.004	0.026	0.151	0.029	0.026	(0.898)				
ES	0.091	0.205	0.123	0.211	0.082	0.007	0.271	0.156	0.116	0.028	0.038	0.146	0.039	0.039	0.260	0.102	(0.857)			
PYS	0.113	0.122	0.105	0.112	0.063	0.057	0.153	0.028	0.101	0.110	0.210	0.109	0.182	0.077	0.118	0.103	0.211	(0.861)		
AS	0.121	0.106	0.131	0.089	0.112	0.090	0.221	0.132	0.011	0.109	0.154	0.211	0.092	0.045	0.122	0.121	0.118	0.012	(0.902)	

Notes: Value in parenthesis is the square root of the AVE of the construct. SI: social interaction; R: relaxation; CM: competence mastery; IS: intellectual stimulus; IPC: interpersonal constraint; SC: structural constraint; IC: intrapersonal constraint; IF: improvement in finances; TM: time modification; IR: interpersonal relations; SA: skills acquisition; LA: leisure aspirations; CO: cognitive; PS: physiological satisfaction; SS: social satisfaction; RS: relaxation satisfaction; ES: educational satisfaction; PYS: psychological satisfaction; AS: aesthetic satisfaction.

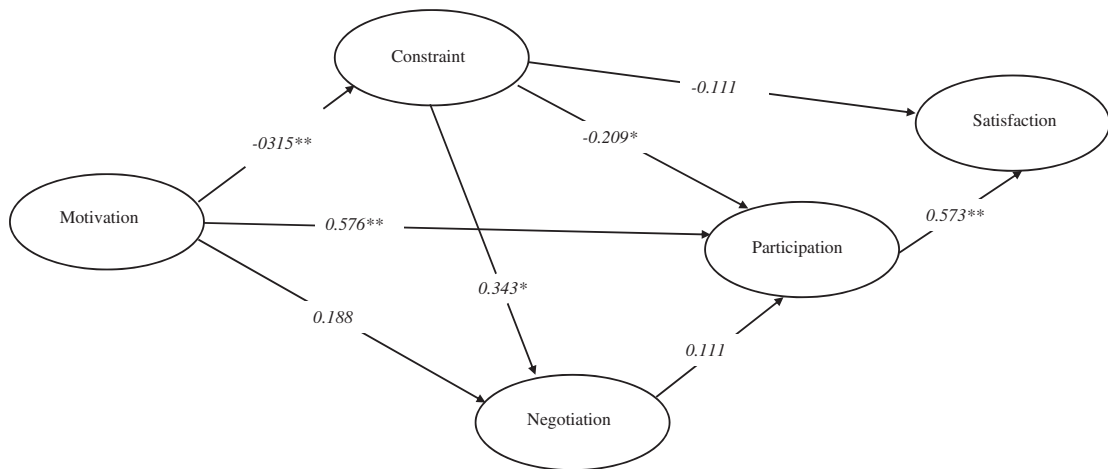


Figure 2. Results of the structural model on leisure participation and satisfaction. **significant at $P < .010$; *significant at $P < .050$.

reliably measured what they were supposed to measure (Fornell & Larcker, 1981).

The magnitude and significance of the standardised estimates together with the AVE were examined to ensure convergent validity for each of the measurement scales. As shown in Table 3, all the standardised estimates are higher than 0.50 and statistically significant ($\rho < 0.010$). Equally, the AVE of each of the construct exceeded 0.50 suggesting that convergent validity of the scales was achieved (Fornell & Larcker, 1981). Discriminant validity was assessed by comparing the square root of the AVE of each latent variable to its correlation coefficients with other latent variables. To achieve acceptable discriminant validity, the square root of the AVE of each latent variable should be greater than its correlation with other latent variables (Fornell & Larcker, 1981) as shown in Table 4.

Structural model

In assessing the structural model, two main issues were considered, namely, the goodness of fit of the structural results and the path coefficients including their directions as well as the

alpha levels (Figure 2). The results of the structural model indicate that a good fit was achieved ($\chi^2 = 512.6$; $df = 179$; $\rho < 0.010$). Other incremental fit measures including the Tucker–Lewis index (TLI = 0.989), incremental fit index (IFI = 0.990) and comparative fit index (CFI = 0.995) were all above the recommended threshold of 0.90 (Byrne, 2010) and thus further confirmed the acceptability of the model. Further, the inferential statistical test indicated that the structural model was suitable with a tolerable RMSEA value (0.041) below the recommended threshold of 0.08 (Byrne, 2010).

The results of the model as depicted in Figure 2 indicate that five of the eight hypothesised paths were significant. The results established a positive causal relationship between motivation and participation ($\beta = 0.576$; $\rho < 0.010$) implying that stronger levels of motivation result in higher frequency of participation. Interestingly, motivation is negatively related to constraint ($\beta = 0.315$; $\rho < 0.010$) suggesting that highly motivated individuals perceive less constraint(s) to be associated with their leisure. However, the effect of motivation on constraint negotiation was weak and

Table 5. Path analyses of construct dimensions.

Path	β	Z statistic	α level
Intrapersonal constraint \leftarrow intellectual motivation	-0.101	-1.203	0.229
Interpersonal constraint \leftarrow intellectual motivation	-0.234	-2.623	0.009**
Structural constraint \leftarrow intellectual motivation	-0.141	-1.718	0.086
Intrapersonal constraint \leftarrow competence mastery	-0.104	-1.048	0.087
Interpersonal constraint \leftarrow competence mastery	-0.141	-1.601	0.109
Structural constraint \leftarrow competence mastery	-0.200	-2.436	0.015*
Intrapersonal constraint \leftarrow relaxation	-0.085	-0.986	0.324
Interpersonal constraint \leftarrow relaxation	-0.143	-1.707	0.088
Structural constraints \leftarrow relaxation	-0.057	-0.681	0.496
Intrapersonal constraint \leftarrow social motivation	-0.136	-1.548	0.122
Interpersonal constraint \leftarrow social motivation	-0.273	-3.147	0.004**
Structural constraints \leftarrow social motivation	-0.239	-2.730	0.008**
Cognitive strategy \leftarrow intrapersonal constraint	0.016	0.182	0.855
Time modification strategy \leftarrow intrapersonal constraint	0.086	0.995	0.319
Skills acquisition strategy \leftarrow intrapersonal constraint	0.046	0.530	0.596
Changing interpersonal relations \leftarrow intrapersonal constraints	0.058	0.664	0.507
Financial improvement \leftarrow intrapersonal constraint	0.064	0.742	0.458
Changing leisure aspirations \leftarrow intrapersonal constraint	0.208	2.409	0.016*
Cognitive strategy \leftarrow interpersonal constraint	0.084	0.869	0.385
Time modification strategy \leftarrow interpersonal constraint	0.087	0.897	0.370
Skills acquisition strategy \leftarrow interpersonal constraint	0.112	1.156	0.248
Changing interpersonal relations \leftarrow interpersonal constraint	0.269	2.811	0.005**
Financial improvement \leftarrow interpersonal constraint	0.225	2.343	0.019
Changing leisure aspirations \leftarrow interpersonal constraint	0.161	1.683	0.092
Cognitive strategy \leftarrow structural constraints	0.367	3.736	0.002**
Time modification strategy \leftarrow structural constraint	0.109	1.226	0.220
Skills acquisition strategy \leftarrow structural constraint	0.001	0.011	0.991
Changing interpersonal relations \leftarrow structural constraint	0.028	0.307	0.759
Financial improvement \leftarrow structural constraint	0.050	0.553	0.580
Changing leisure aspirations \leftarrow structural constraint	0.079	0.885	0.376
Cognitive strategy \leftarrow intellectual motivation	0.033	0.386	0.700
Time modification \leftarrow intellectual motivation	0.043	0.342	0.088
Skills acquisition \leftarrow intellectual motivation	0.139	1.717	0.086
Changing interpersonal relations \leftarrow intellectual motivation	0.084	0.209	0.227
Financial improvement \leftarrow intellectual motivation	0.094	0.658	0.182
Changing leisure aspirations \leftarrow intellectual motivation	0.078	0.940	0.347
Cognitive strategy \leftarrow competence mastery	0.080	0.886	0.376
Time modification \leftarrow competence mastery	0.075	0.892	0.372
Skills acquisition \leftarrow competence mastery	0.041	0.478	0.633
Changing interpersonal relations \leftarrow competence mastery	0.053	0.064	0.079
Financial improvement \leftarrow competence mastery	0.006	0.067	0.946
Changing leisure aspirations \leftarrow competence mastery	0.041	0.468	0.640
Cognitive strategy \leftarrow relaxation	0.081	0.938	0.348
Time modification \leftarrow relaxation	0.040	0.504	0.614
Skills acquisition \leftarrow relaxation	0.080	0.412	0.082
Changing interpersonal relations \leftarrow relaxation	0.131	1.555	0.120
Financial improvement \leftarrow relaxation	0.071	0.871	0.384
Changing leisure aspirations \leftarrow relaxation	0.078	0.929	0.353
Cognitive strategy \leftarrow social motivation	0.025	0.278	0.781
Time modification \leftarrow social motivation	0.040	0.487	0.626
Skills acquisition \leftarrow social motivation	0.029	0.330	0.741
Changing interpersonal relations \leftarrow social motivation	0.246	2.706	0.008**
Financial improvement \leftarrow social motivation	0.019	0.221	0.825
Changing leisure aspirations \leftarrow social motivation	0.006	0.070	0.944
Participation \leftarrow intellectual motivation	0.343	3.043	0.002**
Participation \leftarrow competence mastery	0.208	2.636	0.007**
Participation \leftarrow relaxation	0.040	0.490	0.624
Participation \leftarrow social motivation	0.241	2.890	0.005**
Participation \leftarrow intrapersonal constraints	-0.105	-1.246	0.213
Participation \leftarrow interpersonal constraints	-0.255	-2.653	0.008**
Participation \leftarrow structural constraints	-0.233	-2.698	0.007**

(Continued)

Table 5. Continued.

Path	β	Z statistic	α level
Participation \leftarrow cognitive strategy	0.149	2.008	0.045*
Participation \leftarrow time modification strategy	0.121	1.435	0.151
Participation \leftarrow skills acquisition strategy	0.064	0.834	0.404
Participation \leftarrow changing interpersonal relations	0.148	1.903	0.570
Participation \leftarrow financial improvement	0.071	0.863	0.388
Participation \leftarrow changing leisure aspirations	0.021	0.273	0.785
Psychological satisfaction \leftarrow participation	0.253	2.662	0.007**
Educational satisfaction \leftarrow participation	0.286	2.775	0.008**
Social satisfaction \leftarrow participation	0.314	3.169	0.002**
Relaxation satisfaction \leftarrow participation	0.103	1.290	0.197
Physiological satisfaction \leftarrow participation	0.016	0.205	0.838
Aesthetic satisfaction \leftarrow participation	0.013	0.163	0.871
Psychological satisfaction \leftarrow intrapersonal constraint	-0.024	-0.272	0.786
Educational satisfaction \leftarrow intrapersonal constraint	-0.050	-0.572	0.567
Relaxation satisfaction \leftarrow intrapersonal constraint	-0.017	-0.197	0.844
Social satisfaction \leftarrow intrapersonal constraint	-0.124	-1.409	0.159
Physiological satisfaction \leftarrow intrapersonal constraint	-0.004	-0.050	0.960
Aesthetic satisfaction \leftarrow intrapersonal constraint	-0.026	-0.297	0.766
Psychological satisfaction \leftarrow interpersonal constraint	-0.010	-0.098	0.922
Educational satisfaction \leftarrow interpersonal constraint	-0.010	-1.017	0.309
Social satisfaction \leftarrow interpersonal constraint	-0.101	-1.391	0.164
Relaxation satisfaction \leftarrow interpersonal constraint	-0.138	-1.034	0.301
Physiological satisfaction \leftarrow interpersonal constraint	-0.103	-0.313	0.754
Aesthetic satisfaction \leftarrow interpersonal constraint	-0.031	-0.264	0.792
Psychological satisfaction \leftarrow structural constraint	-0.025	-0.256	0.798
Educational satisfaction \leftarrow structural constraint	-0.024	-0.524	0.600
Social satisfaction \leftarrow structural constraint	-0.048	-1.215	0.225
Relaxation satisfaction \leftarrow structural constraint	-0.112	-0.705	0.481
Physiological satisfaction \leftarrow structural constraint	-0.065	-0.718	0.473
Aesthetic satisfaction \leftarrow structural constraint	-0.067	-0.612	0.481

$\chi^2 = 154.41$; $df = 78$; $P < .050$; $RMR = 0.031$; $GFI = 0.922$; $CFI = 0.988$; $RMSEA = 0.021$; *significant at $p < 0.050$; **significant at $p < 0.010$

non-significant even though it was positive ($\beta = 0.188$, $\rho > 0.050$). Conversely, constraint's effect on constraint negotiation was positive and significant ($\beta = 0.343$, $\rho < 0.050$) suggesting that if more constraints are encountered, greater efforts are committed to negotiating them. Similarly, constraint negatively influenced participation ($\beta = -0.159$, $\rho < 0.050$). It is important to observe that the nature of the relationship is inverse implying that constraint results in reduced participation frequency among people with physical disability. Notwithstanding, constraint has a non-significant inverse relationship with satisfaction ($\beta = -0.111$, $\rho > 0.050$). Meanwhile, negotiation did not significantly influence participation ($\beta = 0.111$; $\rho > 0.050$) though the nature of the influence is positive. On the other hand, participation positively influenced satisfaction ($\beta = 0.573$; $\rho < 0.010$).

Path analyses of dimensions of antecedents to participation

Further analyses of the dimensions of antecedents to participation were conducted (Table 5). The results indicate that there is an inverse relationship between intellectual motivation and interpersonal constraint ($\beta = -0.234$; $\rho < 0.010$) as well as competence mastery and structural constraint ($\beta = -0.200$; $\rho < 0.050$). Similarly, social motivation inversely influenced interpersonal ($\beta = -0.273$; $\rho < 0.010$) and structural ($\beta = -0.239$; $\rho < 0.010$) constraints.

Meanwhile, intrapersonal constraint positively influenced the use of changing interpersonal relations as a negotiation strategy ($\beta = 0.208$; $\rho > 0.010$) in the same vein as interpersonal constraint influenced the use of time modification ($\beta = 0.269$; $\rho < 0.010$) and cognitive ($\beta = 0.367$; $\rho < 0.010$) strategies. Further, social motivation positively influenced on the use of

changing interpersonal relations as a negotiation strategy ($\beta = 0.246$; $\rho < 0.010$). However, intellectual motivation ($\beta = 0.343$; $\rho < 0.010$), competence mastery ($\beta = 0.208$; $\rho < 0.010$) and social motivation ($\beta = 0.241$; $\rho < 0.010$) positively influenced participation while interpersonal ($\beta = 0.255$; $\rho < 0.010$) and structural ($\beta = 0.233$; $\rho < 0.010$) constraints negatively influenced participation. Nevertheless, cognitive negotiation strategy positively influenced ($\beta = 0.149$; $\rho < 0.050$) participation even though as a construct, negotiation did not influence participation. Yet, participation positively influenced psychological ($\beta = 0.253$; $\rho < 0.010$), educational ($\beta = 0.286$; $\rho < 0.010$) and social ($\beta = 0.314$; $\rho < 0.010$) satisfaction.

Discussion

Previous studies on antecedents to leisure participation have focused on modelling the relationship between individual antecedents and participation. In the case of PwDs, leisure constraint has been the most modelled antecedent (e.g. Adam et al., 2016; Crawford & Stodolska, 2008; Sotiriadou & Wicker, 2014) as though constraint is the only antecedent to participation. Accordingly, this study makes a germane contribution to the leisure literature by holistically modelling the antecedents to leisure participation among people with physical disability. This study demonstrates that leisure participation among people with physical disability is underpinned by complex interactions of antecedents including motivation, constraints and negotiation. While motivation informs the desire for leisure, constraint shapes the desire and trigger the negotiation process which ultimately impacts on participation and satisfaction (Huang & Hsu, 2010; Huang, Lin, & Wen, 2010; Kumar et al., 2010; Yang, 2016). Nonetheless, specific dimensions of motivation uniquely interact with specific dimensions of constraint, and negotiation to influence participation and satisfaction. In relation to this study, the types of motivation

(social, competence mastery and intellectual motivation) that influenced participation could be attributed to the exclusion experienced by disabled citizens in Ghana. The negative stereotypes of PwDs as people who are morally decadent and their impairments as being infectious leads to their social exclusion (Adam, 2017a, 2017b). Relatedly, such social exclusion has the potential to deprive them of social contact and the ability to engage in stimulating activities beyond those confined to their homes and consequently may entertain the desire to fulfil such needs through leisure.

Even though the causal relationship between motivation and constraint has been theoretically implied in constraints theory (Godbey et al., 2010; Jackson & Rucks, 1995), leisure researchers have not considered it in the modelling of antecedents to leisure participation. In this regard, this paper empirically validates this relationship by suggesting that there is a relationship between motivation and constraint. The circumstance/phenomenon that represents a constraint exists regardless of the motivation of a leisure participant; however, motivation influences the participant's perception of whether that circumstance constitutes a constraint or otherwise (Son et al., 2008). As shown in this study, those energised by intellectual motivation conceived intrapersonal constraints while those motivated by competence mastery encountered structural constraints. Similarly, those motivated by social desires encountered structural and interpersonal constraints. In relation to the latter, the desire for socialisation implies that the individual with physical disability will strive to make social contacts with other people which could result in encountering the negative stereotypes on disability and PwDs. In relation to structural constraints, the desire for socialisation equally implies that individuals with physical impairment may have to leave home and establish contact with other people in their neighbourhoods. To achieve this, they need some amount of financial resources to finance their

transportation which they lack due to their poor socio-economic status. Further, the inaccessible nature of the physical environment serves as a structural constraint in their quest to socialise since it impedes their movement. Similarly, the low level of formal education among PwDs implies that people with physical disability lack significant skills (Naami, Hayashi, & Liese, 2012) and may result in a scenario where those motivated by intellectual desires will encounter intrapersonal constraint.

Further, this study demonstrates that the nature of constraint encountered determines the type of negotiation strategy(ies) used. Nonetheless, the nature of the specific constraint encountered and negotiation strategies used epitomise the socio-cultural and economic conditions of PwDs in Ghana. PwDs are considered as “second class citizens” and thus tend to face discrimination and marginalisation in all endeavours of life (Adam, 2017b; Kassah, 2008). Therefore, this results in feelings of hopelessness and helplessness given their lack of structural power to significantly change their living conditions. Consequently, while they encounter leisure constraints that are socio-culturally engineered (interpersonal and structural) due to their lower social class status, they are unable to adopt behavioural strategies that are effective in dealing with such constraints due to the same reason. For instance, the findings suggest that those who encountered structural constraints used cognitive strategy but not any of the behavioural strategies. This situation culminated in the non-effectiveness of negotiation strategies on participation. Thus, based on the marginalised socio-cultural and economic conditions of people with physical disability, they lack the power of agency to counter their structural constraints through effective behavioural strategies and for that matter may have been left with the choice of using only cognitive strategy. Meanwhile, cognitive strategy has been noted to be less efficacious compared to behavioural strategies (Hubbard & Mannell, 2001; Son et al., 2008; White, 2008).

In lieu of the ineffectiveness of negotiation on participation, constraint, specifically interpersonal and structural constraints negatively influenced participation. Apart from the results suggesting that individual constraints have unique effects on participation, it further demonstrates that the influence of constraint on participation is context specific. While the literature to support the idea that constraint has a non-significant influence on participation due to the efficacy of negotiation, this study has shown that such findings may be based on social power dynamics in the construction of leisure. In the case of this study, the marginalised nature of the study population (people with physical disability) as reflected in their limited access to socio-economic and cultural resources implies that they are unable to meaningfully negotiate their constraints. The nature of the two dimensions of constraint (interpersonal and structural) that negatively impacted on their participation suggests that their disability is a defining feature in their ability to frequently participate in leisure.

Once participation is recorded, some level of satisfaction/dissatisfaction is bound to be achieved. As demonstrated in this study, higher participation frequency yield higher levels of satisfaction. An individual’s participation in a leisure activity is underpinned by expectations of attaining some satisfaction; consequently, if participation does not yield the expected satisfaction, he/she may describe the experience as unsatisfying and for that matter redraw from the activity or reduce the frequency of participation. Nevertheless, other attributes such as the leisure environment as well as the availability of co-participants and leisure alternatives are remote factors that can influence leisure satisfaction. Relatedly, the findings indicate that participation yielded different kinds of satisfaction. Consistent with the motives for undertaking leisure, psychological, educational and social satisfaction were markedly enhanced through participation. These three dimensions of satisfaction

reflect the marginalised lives of PwDs in Ghana. Owing to the internalised feelings of hopelessness harboured by people with physical disability as well as their limited exposure to education and social interaction (Adam, 2017a), leisure participation gives them unique opportunities to experience these dimensions of life.

Conclusion and implications

The study sought to model the interactional relationships between antecedents (motivation, constraints, constraints negotiation) to leisure participation and undertake a path analysis of the dimensions of antecedents to leisure participation. Based on the findings of the study, the following conclusions are drawn. First, specific dimensions of motivation have a direct influence on specific dimensions of constraint and participation. Nonetheless, the dimensions of motivation that impacted on participation, constraint and negotiation are borne out of the deprivation faced by people with physical disability in their daily lives. The desires for social contact, competence mastery and intellectual exercise are tied to the exclusion, feeling of hopelessness and lack of structural power among people with physical disability. Additionally, the study concludes that the negotiation strategies employed by the respondents were ineffective in dealing with the constraints encountered though the negotiation strategies were specifically chosen to suit specific types of constraint encountered. The negative stereotypes faced by PwDs lead to their exclusion and powerlessness which ultimately affects their ability to adopt effective negotiation strategies. Contrary to previous studies, this study concludes that constraints of people with physical disability negatively influence their ability to participate in leisure. The use of negotiation strategies does not guarantee improved participation frequency/satisfaction among people with physical disability. Lastly, it is concluded that

participation results in different kinds of satisfaction.

The findings of this paper have implications for improving and managing leisure among people with physical disability. First, the idea of the community centres can be revisited and specifically designed to meet the needs of PwDs. Through this concept, disable-friendly leisure spaces can be developed and fitted with activities that relates to the three types of motivation (socialisation, competence mastery and intellectual motivations) that significantly influenced participation, constraint and the use of negotiation strategies. The community centres can be equipped with televisions sets, local board games, such as oware, ludo, draft among others. Such activities will afford them the opportunity to challenge themselves intellectually and at the same socialise with their peers. Further, there is the need for the Ministry of Education through the Ghana Education Service as well as tertiary institutions to inculcate leisure education into their educational curriculum. Such educational curriculum can emphasis leisure as a human right for all manner of persons including PwDs as contained in Article 30 of the Convention of Rights of Persons with Disabilities. Such an approach may help people with physical disability to overcome some interpersonal and structural constraints as revealed in this study. Similarly, issues on social inclusion can be introduced in Ghanaian educational curriculum to counter the negative stereotypes on disability and therefore help reduce the interpersonal and structural constraints PwDs encounter in leisure. Further, the Ministry of Gender and Social Protection as well as other organisations interested in fostering the inclusion of PwDs can embark on public education programmes on disability and inclusion. Such intervention may help reduce the negative stereotypes on disability and thereby curtail the interpersonal and structural constraints encountered by PwDs in their leisure endeavours. In the same regard, these agencies should ensure the strict

implementation of the Disability Law (ACT 715) to help improve PwDs' access to education and thereby enhance their employability which will help equip them with better behavioural negotiation strategies. Through such initiatives, the financial position of PwDs as well as their socio-cultural status will be improved and ultimately help them gain the much-needed power of agency to adopt behavioural negotiation strategies.

Limitations

Like any other study, this study is not without some notable limitations. First, while participation has been conceptualised either by the frequency of participation or time committed to an activity, this study adopted the former. Nevertheless, the frequency of participation may not necessarily be a good measure of activity participation. Some activities by their nature require more time than others, and hence such activities cannot be frequently undertaken by the participant. In this regard, future studies can conceptualise participation as a combination of both frequency of participation and time committed to participation to enhance the validity of its measurement. Another limitation of this study pertains to the target population. This study focused on just a segment of the disability population (people with physical disability) and thus the findings and conclusions may vary in relation to other segments of disability. There are unique types of disability with associated levels of needs which may uniquely impact on antecedents to leisure participation. Even among people of the same type of impairment, there are variations in terms of their level of impairment and associated needs which have implications for their antecedents to participation. However, this study did not segment the study population based on levels of physical impairment and rather treated them as a homogenous group when they are indeed heterogeneous.

Disclosure statement

No potential conflict of interest was reported by the author.

References

- Adam, I. (2017a). Leisure aspirations of people with visual impairment in the Kumasi Metropolis, Ghana. *Annals of Leisure Research*. doi:10.1080/11745398.2017.1387798
- Adam, I. (2017b). People with visual impairment 'watching' television? Leisure pursuits of people with visual impairment in Ghana. *Disability & Society*. doi:10.1080/09687599.2017.1381585
- Adam, I., Boakye, K. A., & Kumi-Kyereme, A. (2017). Are we our own enemies? Leisure constraints of physically and visually disabled people in Ghana. *World Leisure Journal*. doi:10.1080/16078055.2016.1245213
- Adam, I., Kumi-Kyereme, A., & Boakye, K. A. (2016). Leisure motivation of people with visual and physical disabilities in Ghana. *Leisure Studies*, 36(3), 315–328.
- Agbenyega, J. (2003). *The power of labelling discourse in the construction of disability in Ghana*. A paper presented at the Australian Association for Research in Education Conference, Newcastle, Association of Active Educational Researchers (AARE).
- Alexandris, K., Kouthouris, C., Funk, D., & Chatzigianni, E. (2008). Examining the relationships between leisure constraints, involvement and attitudinal loyalty among Greek recreational skiers. *European Sport Management Quarterly*, 8(3), 247–264.
- Alexandris, K., Kouthouris, C., Funk, D., & Tziouma, O. (2013). The use of negotiation strategies among recreational participants with different involvement levels: The case of recreational swimmers. *Leisure Studies*, 32(3), 299–317.
- Avoke, M. (2002). Models of disability in the labelling and attitudinal discourse in Ghana. *Disability & Society*, 17(7), 769–777.
- Beard, J. G., & Ragheb, M. G. (1980). Measuring leisure satisfaction. *Journal of Leisure Research*, 12, 20–33.
- Beard, J. G., & Ragheb, M. G. (1983). Measuring leisure motivation. *Journal of Leisure Research*, 15, 219–228.
- Bull, C. N. (2009). One measure for defining a leisure activity. *Journal of Leisure Research*, 41(3), 369–375.
- Buttimer, J., & Tierney, E. (2005). Patterns of leisure and participation among adolescents with a mild intellectual disability. *Journal of Intellectual Disabilities*, 9(1), 1–18.

- Byrne, B. M. (2010). *Structural equation modelling: Basic concepts, applications and programming* (2nd ed.). London: Routledge.
- Crandall, R. (1980). Social interaction, affect and leisure. *Journal of Leisure Research*, 11, 165–181.
- Crawford, D. W., Jackson, E. L., & Godbey, G. (1991). A hierarchical model of leisure constraints. *Leisure Sciences*, 13, 309–320.
- Crawford, J. L., & Stodolska, M. (2008). Constraints experienced by elite athletes with disabilities in Kenya, with implications for the development of a new hierarchical model of constraints at the societal level. *Journal of Leisure Research*, 40(1), 128.
- Crompton, J. L., Jackson, E. L., & Witt, P. (2005). Integrating benefits to leisure with constraints to leisure. In E. L. Jackson (Ed.), *Constraints to leisure* (pp. 245–259). State College, PA: Venture.
- Darcy, S., Cameron, B., & Pegg, S. (2010). Accessible tourism and sustainability: A discussion and case study. *Journal of Sustainable Tourism*, 18(4), 515–537.
- Devine, M. A. (2004). Being a 'Doer' instead of a 'Viewer': The role of inclusive leisure contexts in determining social acceptance for people with disabilities. *Journal of Leisure Research*, 36(2), 137–159.
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 18(3), 382–388.
- Ghana Statistical Service. (2014). *2010 population and housing census report: Disability in Ghana*. Author.
- Godbey, G., Crawford, D. W., & Shen, X. S. (2010). Assessing hierarchical leisure constraints theory after two decades. *Journal of Leisure Research*, 42(1), 111.
- Hinch, T., Jackson, E. L., Hudson, S., & Walker, G. (2005). Leisure constraint theory and sport tourism. *Sport in Society*, 8(2), 142–163.
- Huang, J., & Hsu, C. H. (2010). The impact of customer-to-customer interaction on cruise experience and vacation satisfaction. *Journal of Travel Research*, 49(1), 79–92.
- Huang, W.-H., Lin, Y. C., & Wen, Y. C. (2010). Attributions and outcomes of customer misbehavior. *Journal of Business and Psychology*, 25(1), 151–161.
- Hubbard, J., & Mannell, R. C. (2001). Testing competing models of the leisure constraint negotiation process in a corporate employee recreation setting. *Leisure Sciences*, 23(3), 145–163.
- Iso-Ahola, S. E. (1982). Toward a social psychological theory of tourism motivation: A rejoinder. *Annals of Tourism Research*, 12, 256–262.
- Iso-Ahola, S. E. (1983). Towards a social psychology of recreational travel. *Leisure Studies*, 2(1), 45–56.
- Jackson, E. L. (2005). Leisure constraints research: Overview of a developing theme in leisure studies. In E. L. Jackson (Ed.), *Constraints to leisure* (pp. 3–19). State college, PA: Venture.
- Jackson, E. L., & Rucks, V. C. (1995). Negotiation of constraints by junior-high and high-school students: An exploratory study. *Journal of Leisure Research*, 27, 85–105.
- Kassah, A. K. (2008). Begging as work: A study of people with mobility difficulties in Accra, Ghana. *Disability & Society*, 23(2), 163–170.
- Kline, R. B. (2015). *Principles and practice of structural equation modeling*. New York: Guilford.
- Kumar, V., Aksoy, L., Donkers, B., Venkatesan, R., Wiesel, T., & Tillmanns, S. (2010). Undervalued or overvalued customers: Capturing total customer engagement value. *Journal of Service Research*, 13(3), 297–310.
- Kuyini, A. B., Alhassan, A. R. K., & Mahama, F. K. (2011). The Ghana community-based rehabilitation program for people with disabilities: What happened at the end of donor support? *Journal of Social Work in Disability & Rehabilitation*, 10(4), 247–267.
- Lee, Y., Dattilo, J., & Howard, D. (1994). The complex and dynamic nature of leisure experience. *Journal of Leisure Research*, 26(3), 195–211.
- Leung, M. L., Fung, L., Tsai, E., & Wong, O. (2007). *How active is the Hong Kong public?* Hong Kong: Sports Federation and Olympic Committee of Hong Kong.
- Marquez, D. X., & McAuley, E. (2006). Social cognitive correlates of leisure time physical activity among latinos. *Journal of Behavioral Medicine*, 29(3), 281–289.
- Mohsin, A., & Ryan, C. (2007). Exploring attitudes of Indian students toward holidaying in New Zealand using the leisure motivation scale. *Asia Pacific Journal of Tourism Research*, 12(1), 1–18.
- Naami, A., Hayashi, R., & Liese, H. (2012). The unemployment of women with physical disabilities in Ghana: Issues and recommendations. *Disability & Society*, 27(2), 191–204.
- Patterson, I., & Pegg, S. (2009). Serious leisure and people with intellectual disabilities: Benefits and opportunities. *Journal of Leisure Studies*, 28(4), 387–402.
- Slikker, J. (2009). *Attitude towards persons with disability in Ghana*. Accra: Voluntary Service Overseas (VSO) Ghana.
- Son, J. S., Mowen, A. J., & Kerstetter, D. L. (2008). Testing alternative leisure constraint negotiation

- models: An extension of Hubbard and Mannell's study. *Leisure Sciences*, 30(3), 198–216.
- Sotiriadou, P., & Wicker, P. (2014). Examining the participation patterns of an ageing population with disabilities in Australia. *Sport Management Review*, 17(1), 35–48.
- Stebbins, R. A. (2000). Obligation as an aspect of leisure experience. *Journal of Leisure Research*, 32(1), 152–155.
- Tsai, E. H. L., & Coleman, D. J. (2007). Preferences for active recreation and perceived constraints to regular active recreation participation: A cross-cultural study of Hong Kong and Australian university students. *Leisure/Loisir*, 31(1), 155–189.
- United Nations Development Programme. (2007). *Ghana human development report 2007: Towards a more inclusive society*. Accra: Author.
- Walker, G. J., & Virden, R. J. (2005). Constraints on outdoor recreation. *Constraints to Leisure*, 201–219.
- Walsh-Allen, M. (2010). Integration or segregation? The same or different recreation and leisure facilities for people with learning disability. *Critical Social Thinking: Policy and Practice*, 2, 93–108.
- Watkins, M. (2000). Ways of learning about leisure meanings. *Leisure Sciences*, 22, 93–107.
- White, D. D. (2008). A structural model of leisure constraints negotiation in outdoor recreation. *Leisure Sciences*, 30(4), 342–359.
- Yang, F. X. (2016). Tourist co-created destination image. *Journal of Travel & Tourism Marketing*, 33(4), 425–439.
- Yankholmes, A. K., & Lin, S. (2012). Leisure and education in Ghana: An exploratory study of university students' leisure lifestyles. *World Leisure Journal*, 54(1), 58–68.