

Intellectual and Developmental Disabilities

Leisure Participation Opportunities for Adults with Moderate Intellectual Disability Residing in Community Apartments --Manuscript Draft--

Manuscript Number:	IDD-D-21-00006R2
Article Type:	Research
Keywords:	leisure; recreation; intellectual disabilities; Community living
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Manuscript Region of Origin:	ISRAEL
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Leisure Participation Opportunities for Adults with Moderate Intellectual Disability

Residing in Community Apartments

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Abstract

The purpose of this study was to examine the leisure and recreation opportunities available in community apartments for adults with Intellectual Disability (ID), and their association with leisure participation. The study included 38 adults with moderate ID residing in 19 apartments. Apartment coordinators reported on apartment characteristics, as well as leisure and recreation schedule and opportunities. Findings revealed diverse leisure and recreation activities. We found correlation between the number of activities ($r_s = .392$, $p = .015$; $r_s = .433$, $p = .007$, respectively) as well as a visible daily schedule ($Z = 2.143$, $p = .035$) and leisure participation. Findings suggest that diverse leisure activities and a visible schedule may be associated with improved leisure participation.

Keywords: leisure, recreation, Intellectual Disabilities, Community living

In most Western countries, individuals with Intellectual Disability (ID) reside in community facilities (Residential Information Systems Project, 2020), e.g., living with family members, independent living or supported homes or apartments (King et al., 2017). Whereas living in the community may facilitate community inclusion and integration of individuals with ID (Ouellette-Kuntz et al., 2008), it does not necessarily improve their recreation or leisure participation (Andrews et al., 2015), which has been found to have a significant impact on community integration (Azaiza et al., 2011; Patterson & Pegg, 2009). Recreation can be defined as formally organized and structured activities such as playing basketball or taking music lessons (Solish et al., 2010). Leisure, can be defined as a time of free choice and individually selected activities that are not related to work or other obligatory activities, and performed during discretionary time (Badia et al., 2013). Individuals with ID have been found to be limited in their recreation and leisure participation (Andrews et al., 2015). This is, at least partly, due to the fact that historically, individuals with ID were seen as lacking the cognitive capacities to achieve meaningful leisure participation (Patterson & Pegg, 2009). Additionally, leisure participation was traditionally given low priority, as individuals with ID spend extraordinary amounts of time tending to their basic needs (Azaiza et al., 2011; Patterson & Pegg, 2009).

Factors influencing Leisure Participation

Research over the past decades has suggested a number of factors that may influence leisure participation. These include both contextual and personal factors. Contextual factors may include opportunities to choose the activities, the stimulation provided in the living environment, the size of the residential setting, type of school (general education or special education) or vocational setting the individuals attend, as well as societal attitudes (Azaiza et al., 2011; Badia et al., 2013). Personal factors include individuals' health, cognitive and physical functioning,

type of disability, adaptive behavior, performance of daily life, social skills, as well as age and gender (Azaiza et al., 2012; Badia et al., 2013).

Leisure Opportunities in Community Apartments

Community apartments, or dispersed housing, for individuals with ID refers to small living facilities within the community (Mansell & Beadle–Brown, 2009). Despite studies examining factors of leisure participation, little is known about the leisure habits, patterns and opportunities in community apartments for individuals with ID. Existing studies have shown a paucity of research regarding the types of leisure options available in apartments (Zijlstra & Vlaskamp, 2005). Of the few studies that did relate to this topic, Wilson et al. (2006) observed that 75% of leisure time in a community apartment was spent with no apparent activity. Another study showed that during leisure time, no recognizable leisure activity was observed for close to 65% of the individuals (Parsons et al., 1989).

Study Purpose

From the summary above, it appears that, while there is evidence of the value and need for desirable and age-appropriate in-home leisure activities, the knowledge relating to leisure practices in community apartments for adults with ID is limited. Additionally, we did not find studies that examined the relationship between the leisure and recreation activities offered in the apartments and leisure participation of the residents. To address these issues, this study had two purposes. The first, was to delineate the leisure and recreation opportunities available in community living facilities for adults with ID. The second purpose was to examine the relationship between the leisure and recreation opportunities available in the apartments and the actual leisure participation of the participants.

Methods

Study Design and Participants

This study followed two research designs. For purpose one, we used a descriptive design to collect data on the duration, frequency, location and content of leisure activities offered in community living facilities. For purpose two, we used a correlational design to analyze the relationship between leisure opportunities and practices in the apartments and participants leisure participation. Participants for this study were residents of community apartments for adults with ID. Participating apartments were all under the auspices of the Ministry of Labor, Social Affairs and Social Services. Out of 23 apartments contacted, 19 agreed to participate. Apartments were included if they allocated leisure time in their schedule at least twice a week.

All individual participants were included in this study if they: (a) were diagnosed with moderate ID, as recorded in their medical chart (determined by a multi-disciplinary team based on the DSM-5 criteria; APA, 2013); (b) were between the ages of 25-45, (c) had lived in their current apartment for over a year, and (d) understood basic 1-2 step instructions. Individuals were excluded if they had: (a) an upper extremity physical impairment; (b) psychiatric diagnosis such as bi-polar, depression, schizophrenia, anxiety or psychotic disorders; (c) Autism Spectrum Disorder; and / or (d) legally blind and/or deaf.

Procedure

This study was approved by the Ethics Committees of the Ministry of Labor, Social Affairs and Social Services and the university (concealed). A list of community living facilities for the ID population was then provided by the National Recreation Coordinator of the Ministry. The first author then contacted the apartment coordinators and arranged a meeting. Those who

agreed to participate were asked to fill out the Apartment Screening Questionnaire (ASQ; Authors concealed, 2014), either in person or by email. Coordinators were then asked to contact the legal guardians of the apartment residents for informed consent. The ABAS – Leisure section was filled out by the coordinators for each resident who received consent. All information for this study was collated through the apartment coordinators.

Instruments

Information about the apartment leisure practices was collected through the *Apartment Screening Questionnaire* (ASQ; Authors concealed, 2014). The purpose of the ASQ is to obtain information regarding the physical structure (e.g., how many rooms, type of furniture), staffing (e.g., staff size, type of professional support) and number of residents in the apartment. The ASQ also obtains information concerning the daily and weekly schedule of the apartment (e.g., wake and sleep times, meal schedule) and the general routine. Emphasis is placed on detailing the leisure (non-obligatory activities individually and freely chosen) and recreational (organized activities) opportunities and activities provided in the apartments (e.g., hobbies, private lessons, group activities). This questionnaire has been shown to have face validity.

Adaptive Behavior Assessment System (ABAS) II – Adult form (Harrison & Oakland, 2003; Hebrew Version - Ben Hamu et al., 2013). The ABAS assesses adaptive behavior consistent with the models advocated by the American Association on Intellectual and Developmental Disabilities (Ditterline et al., 2008). In this study we only used the leisure section that consists of 23 items related to leisure and recreation participation, such as “plays games with others”, “listens to music for enjoyment”, and “obeys the rules during a game or leisure activity”. Each item is scored on a 4-point scale: (0) unable, (1) never when needed, (2) sometimes when

needed, (3) always when needed. A total score is then provided at the end of the section. Internal consistency, using Fisher Z transformation, was between .97 - .99. Test-retest and interrater reliability coefficients were also found to be high, $r \geq .90$ and $r = .83 - .93$, respectively. For this study, only the leisure section of the ABAS was utilized.

Statistical Analysis

Data analysis were performed using IBM SPSS Statistics (Version 25; IBM Corp., Armonk, NY). Descriptive statistics were analyzed including mean, percentage, and frequencies. Non-parametric statistics were employed due to a small sample size and because some of the variables were ordinal. Correlation between apartment variables (ASQ) and individual leisure participation (leisure ABAS) was examined using Spearman's correlations. The Mann-Whitney U test was used to compare apartment variables (ASQ) with the individual leisure participation (leisure ABAS).

Results

Description of apartments

The number of residents in each of the participating apartments ranged from 3-16 with an average of 6 in each apartment. Of the 19 apartments, 6 (31.6%) were for male residents, 8 (42.1%) were for female residents and 5 (26.3%) were mixed gender. The rooms designated for common use of the residents ranged from 1 (the living room) to 7 with an average of 2.5 rooms. The living room was the designated area for leisure activities, but residents were permitted to be in their own rooms as well during leisure time. Overall results showed that all 19 apartments had a similar weekday schedule, with wakeup between 6-7 am and lights out at around 21.

Apartment members left between 7:30-8 to their daytime activity and returned around 15:00. On average, there were 0-1 staff members during the morning shift and 1-2 staff in the afternoon and night shifts.

Recreation and Leisure

In just over half of the apartments (57.9%) there was a designated leisure program but less than half (42.1%) had a visible leisure schedule that residents could follow. In almost all of the apartments (89.5%) the residents were asked their preference of leisure activities, and, in all but one apartment, the leisure activities were accessible to the residents. Furthermore, in all the surveyed apartments, leisure time was offered 4-7 days a week, where the majority of the apartments (73.7%) offered it 7 days a week. Time allotted for each leisure session ranged between 30 minutes to 2 hours, with the majority of leisure sessions averaging 1.14 hours. Overall, weekly leisure time ranged between 3.5 to 42 hours ($M = 11.86$ $SD = 9.17$).

The majority of apartments offered 2-4 organized group recreation activities per week. Activities were offered in the afternoons, after residents returned from their day programs. Furthermore, the majority of recreation activities offered were similar between apartments (Table 1), with the most frequent were physical activities and cooking lessons. Some apartments offered less common recreation options, such as computer lessons (15.8%). While these activities were voluntary, they were held in the common room of the apartment and the most residents participated. Apart from organized recreational activities and apartment tasks, all apartments offered a number of leisure activities during unstructured leisure time. The majority of apartments offered between 5-7 different activities which varied little between apartments (see Table 1). The most frequent leisure activities were watching TV or videos and board games. The least common activity was computers (26.3%) that were primarily used for listening to music

and watching video clips. Only 2 out of the 19 apartments had tablets in the apartments, and none were in active use by the residents. As these leisure activities were unstructured, there was always an average of 4-5 other activities co-occurring in the apartments, such as, meal preparation, private lessons, and visits of guests.

Correlation between leisure opportunities and leisure participation

To address the second study objective, we examined the correlation between the leisure and recreation opportunities and actual leisure participation, for technical reasons data is only available from 13 of the 19 (68%). Information gathered about the apartments (see ASQ above) was correlated with the scores on the Leisure ABAS of the individuals in those apartments. Significant positive correlations were found between the number of leisure and recreation activities offered in the apartments and the ABAS Leisure score. The more leisure and recreation activities offered, the higher the ABAS Leisure score ($r_s = .392, p = .015$; $r_s = .433, p = .007$, respectively). No correlations were found between the ABAS leisure score and the other variables (see Table 2).

When using the Mann-Whitney test to compare between apartment variables and ABAS leisure scores, a significant difference in the ABAS Leisure score was found between apartments with and without a daily visible schedule $Z = 2.143, p = .035$. Individuals in apartments with a daily visible schedule had significantly higher Leisure scores than those without a visible schedule. No significant difference was found between the ABAS leisure score and the other variables (see Table 3).

Discussion

The importance of community living for individuals with ID has been gaining recognition over the past few decades. Worldwide, individuals with ID have moved out of institutions and

into community living facilities (King et al., 2017). While participation in leisure and recreation activities has been found to enhance community integration (Azaiza et al., 2011; Patterson & Pegg, 2009), little is known about the leisure opportunities available in community apartments. This study focused on leisure opportunities within the apartments, and their relationship to leisure participation.

Our results showed diverse leisure and recreation opportunities within the apartments surveyed, but that the majority of apartments offered similar options. Overall, apartments combined between 5-7 unstructured leisure options with 2-4 organized recreational activities. While unstructured leisure options were offered throughout the week during all designated leisure times, recreation activities were offered once a week at a pre-designated time. Using the classification system of Zijlstra and Vlaskamp (2005) we can see that the majority of the leisure activities offered were in the categories of play and games (board games, ball playing and puzzles), audio-visual activities (listening to music, watching TV/video) and artistic activities (arts and crafts). The recreation activities were primarily in the area of physical oriented activities (physical activity and dancing), artistic activities (music and arts) and task-oriented activities (cooking). These results are similar to the few previous studies that found that leisure activities included TV/movies, listening to music, arts and crafts and puzzles (Buttimere & Tierney, 2005; Solish, 2010), while recreation activities included areas such as music and arts and games (Abells et al., 2008; Solish et al., 2010). We also found that less than half of the apartments offered computer use during leisure (15.8%) or recreation time (26.3%). This supports existing literature which shows that, while access to technology can be a positive influence in quality of life (Nepo et al., 2020; Palmer et al., 2012), access for individuals with ID remains limited (Boot et al., 2017; Tanis et al., 2012; Wehmeyer et al., 2004).

The second purpose of this study was to examine the relationship between the leisure and recreation opportunities available in the apartments and the actual leisure participation of the participants. We examined a number of apartment factors and their relationship to individual leisure performance. Our study did not find a significant relationship between access and availability of leisure activities and leisure participation as other studies have found (Badia et al., 2011; Buttimer & Tierney, 2005), nor did we find a significant correlation between the amount of leisure time offered and leisure participation (Wilson et al., 2006).

By contrast, we found that the two most significant factors related to leisure participation were the number of leisure and recreation opportunities available in the apartment and the availability of a visible daily schedule, including leisure. Perhaps the relationship between leisure participation and the number of recreation and leisure activities offered, could be related to the element of choice. It is possible that increased leisure opportunities provided greater opportunity for choice, allowing for the expression of personal preference and the engagement in leisure activities that interest the individual. This is important as leisure activities are more likely to be maintained if they are of personal interest (Whately et al., 2009). Although we found that the majority of apartments (89.5%) asked the residents regarding their preference in leisure activities, it appears that it may also be important to offer residents with ID a variety of activities to enhance their participation.

We did not find previous studies that examined the relationship of a daily schedule on leisure participation. However, this result could be explained by other studies that have shown that enhanced structure can have a positive effect on leisure participation. Visual activity schedules, for example, a form of support strategy to help individuals follow a sequence, have been found to be effective in helping individuals with ID improve their leisure performance and

become more independent (Chan et al., 2014; Nepo et al., 2020; Whatley et al., 2009). These findings could indicate that when supports are provided in the environment it can encourage leisure participation.

Study Implications and limitations

The results of this study showed that the community apartments offer a number of leisure and recreation activities. In addition, the findings indicated that there were two main factors within the community apartments that were related to the leisure participation of the residents; increased opportunities for recreation and leisure offered in the apartments and a visible daily schedule. These findings are encouraging because they are not difficult to implement and do not require a high budget. The increased recreation and leisure opportunities and visible daily schedule could provide benefits of choice while also providing the structure necessary to encourage participation and independence. Given the results of this study, it is suggested that future research should focus on environmental elements, both within and outside of the apartment, that could potentially affect leisure participation. Additionally, it would be interesting to compare environmental factors of individuals with moderate ID who live in community apartments versus those who live in home settings.

The main limitations of this study were that it was the relatively small geographical area and sample size. Additionally, this study focused only on one type of living facility. A larger sample size would provide a more complete picture of the leisure landscape. Finally, this study employed a correlation design. Hence, to determine if increased leisure activities offer and a visible schedule enhance leisure participation, an intervention study is required.

Conclusion

This study contributes to the little existing knowledge regarding the leisure and recreation opportunities available in community apartments. We found that each participating apartment offered a number of leisure and recreation activities. While there was some diversity between apartments, we found that the majority of activities offered were similar in all the apartments. Additionally, we found that there were characteristics of the apartments, such as a visible daily schedule, that had a positive relationship with individual leisure participation. This could show that the environment can affect the individual leisure participation of adults with ID and indicates a need for a closer examination of the environment in which they function.

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Table 1

Most frequent recreation and leisure activities offered in the community apartments

Variables	<i>n</i> (apartments)	Frequency (%)
Recreation (lessons)		
Physical activity	13	68.4
Cooking	11	57.9
Music	9	47.4
Dance	7	36.8
Art	4	21.1
Computer	3	15.8
Leisure		
Watching TV/video	16	84.2
Board games	16	84.2
Listening to music	15	78.9
Puzzles	14	73.7
Arts and crafts	12	63.2
Ball games	8	42.1
Computer	5	26.3

Table 2

Spearman's correlations between the ASQ¹ and the ABAS² Leisure (N = 38).

Variables	M	SD	r_s
ABAS ¹ Leisure	31.24	13.01	_____
ASQ ²			
Number of residents in the apartment	7.03	3.23	-.238
Number of unstructured leisure activities offered during leisure time	5.21	1.21	.392*
Number of structured group recreation activities offered	3.29	1.01	.433**
Number of hours per day leisure is offered	1.38	0.66	.020
Number of times a week leisure is offered	6.00	1.27	-.069

1. ASQ – Apartment Screening Questionnaire

2. ABAS – Adaptive Behavior Assessment System

Table 3

Mann Whitney comparisons between the ASQ¹ and the ABAS² Leisure (N = 13)

ASQ ¹	Apts with			Apts without			Z
	N	M	SD	N	M	SD	
Is there an established system for leisure time	8	31.50	12.62	5	30.01	10.69	-.878
Is leisure time voluntary	7	28.25	9.44	6	34.21	13.26	-.286
Visible daily schedule	7	35.75	7.98	6	25.46	13.06	-2.143*

1. ASQ – Apartment Screening Questionnaire
2. ABAS – Adaptive Behavior Assessment System