# Participation in Leisure Activities of Jewish and Arab Adults with Intellectual Disabilities Living in the Community

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# Abstract

The study examined factors affecting participation in leisure activities of Jewish and Arab adults with intellectual disabilities living in the community, via the conceptual framework of the International Classification of Functioning Disability and Health (ICF). The secondary analysis of national sample of 520 Jews and 153 Arab adults with intellectual disability incorporated the following ICF factors: body functions (health condition, physical functioning and cognitive functioning), activities, namely, Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL), participation in employment, and the environmental factor of welfare service utilization. Findings revealed different patterns among Jews and Arabs with intellectual disabilities regarding the roles of physical functioning and cognitive functioning on participation in leisure activities.

*KEYWORDS: Participation in leisure activities, Intellectual disabilities, Arabs, Jews, ICF* 

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People with intellectual disabilities engage in a narrower range of activities and at lower rates than people with other types of disabilities or without disabilities (Beart, Hawkins, Kroese, Smithson, & Tolsa, 2001; Verdonschot, de Witte, Reichrath, Buntinx, & Curfs, 2008). In the present study, we set out to examine the interplay between leisure, intellectual disability, and ethnic differences. The World Health Organization's International Classification of Functioning Disability and Health (ICF) was used as the conceptual framework, considering the factors affecting the participation in leisure activities of Jewish and Arab adults with intellectual disabilities living in the community.

The ICF is the successor of the International Classification of Impairments, Disabilities and Handicaps (ICIDH), which focused on the match between the person and the environment. The ICF is an interface model that recognizes the importance of social participation for people with disabilities (De-Kleijn-De Vrankrijker, 2003). It provides a framework for the description of health and health-related states from different perspectives: the person's body (body functions and body structures), the individual (activities) and the person within the society (participation) (De-Kleijn-De Vrankrijker, 2003). Figure 1 shows the interactions between the components of the ICF.

The need for leisure is universal, and governments, institutes and community frameworks have been called upon to recognize, develop and promote the right of all individuals to participate in leisure activities, regardless of their ability or disability (The World Leisure and Recreation Association, 2001). It appears that recent leisure research has focused more on aspects such as gender and ethnicity (Aitchison, 2009), while knowledge on the leisure activities of people with disabilities has received less attention. Thus, our study was an attempt to begin to fill this gap.

# The Perspective of a Person within a Society: Participation in Leisure Activities

Participation in leisure activities is strongly associated with well-being, as well as with integration in society. It provides opportunities to express talents, demonstrate abilities, fulfill potential and experience a variety of positive emotions, thus enhancing quality of life (Dattilo & Schleien, 1994, Patterson & Pegg, 2009). Nevertheless, people with intellectual disabilities engage in a narrower range of activities and at lower rates than people with other types of disabilities or without disabilities (Beart et al., 2001; Verdonschot et al., 2008). They have fewer opportunities to make decisions about their leisure activities (Hawkins, Peng, Hsieh, & Elkund, 1999) and the activities at their disposal are mostly solitary and passive in nature (Buttimer & Tierney, 2005; Verdonschot et al., 2008). Moreover, participation in shared activities is often with friends with similar disability or with health professionals (Hayden, Soulen, Scleien, & Tabourne, 1996). Research illustrates that people with intellectual disabilities express boredom and loneliness due to their lack of knowledge, skills and ability to regulate their leisure time activities (Duvdevany, 2008; Duvdevany & Arar, 2004).

Historically, professionals have viewed leisure services for children and adults with intellectual disabilities as low priority (Duvdevany, 2008). In many cases, these activities are provided in a segregated manner, and integrated experiences are frequently characterized by hierarchical roles, in which those without disabilities serve as helpers and those with disabilities are the recipients (Dattilo & Schleien, 1994; Duvdevany, 2002, 2008).

### **Participation in Employment**

Employment is considered a core vehicle toward social integration and wellbeing and can also provide a sense of belonging (Szymanski et al., 2003). A recent study indicated that employed people with disabilities were significantly more integrated in social and civic activities than those who were unemployed (Rimmerman & Araten-Bergman, 2009). A nationwide study in Israel, which included recipients of benefits provided to people with general disabilities indicated that 36% of people with intellectual disabilities, who were living in the community, were employed (Bar, Strosberg, Prior, & Naon, 2005). The majority of people with intellectual disabilities work in sheltered employment, which pays significantly below the minimum wage (Mandler & Naon, 1998).

# The Perspective of the Person's Body: Health Condition, Physical Functioning and Cognitive Functioning

According to the ICF, one of the perspectives to take into account when describing state of health is the body perspective (De-Kleijn-De Vrankrijker, 2003) as this may impact participation in leisure. According to the literature, individuals with intellectual disabilities have higher rates of physical, neurological and sensory disabilities compared to the general population (Jansen, Krol, Groothoff, & Post, 2004). They also have a higher incidence of mental disorders and many undiagnosed health problems, such as vision and hearing disorders, hypertension and hypothyroidism. Furthermore, Krahn, Hammond, and Turner (2006) reported that people with intellectual disabilities experienced poorer health than the general population. Poorer health is related to congenital as well as social circumstances (e.g., low income, social isolation, vulnerability to abuse), environmental factors (e.g., inaccessible environments and inadequate access to health care), behaviors stemming from inadequate knowledge about healthy lifestyles that contribute to secondary conditions (e.g., poor oral health care, nutrition), cognitively inaccessible treatment programs for high-risk behaviors (e.g., smoking, alcohol and drug use), and residential settings that support inactivity.

Intellectual functioning is the core component in defining intellectual disability and is still often represented by IQ scores, although this is a far-from-perfect measure. However, the dimension of intellectual abilities reflects not only academic skills but also a broader and deeper capacity for comprehending one's surroundings. Individuals with intellectual disabilities differ in their ability to understand complex ideas, to adapt effectively to their environment, to learn from experience, or to overcome obstacles by thinking (AAMR, 2002).

### The Perspective of the Individual: Activities

Within the ICF framework, body functions are expressed by activities that are executed by an individual (De-Kleijn-De Vrankrijker, 2003). Adaptive behavior consists of different skills that have been learned by people for the purpose of everyday functioning. These skills include Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL) (AAMR 2002). ADL refers to basic skills such as bathing and dressing, while IADL refers to more complicated skills such as cooking. Both are generally measured by self-reports (Villeponteaux, DeCoux & Berdshall, 1998).

# **Environmental Factors**

### **Service Utilization**

Service utilization by individuals with intellectual disabilities is frequently related to health services. Although individuals with intellectual disabilities are vulnerable to many health problems, they often have limited access to health-related services (Ruddick, 2005). In Israel, individuals with intellectual disability are offered an array of services provided by the Ministry of Health, the Ministry of Social Affairs and the National Insurance Institute, as well as by non-governmental organizations (NGOs) and the private sector (Naon, Morginstin, Schimmel, & Rivis, 2000). However, a national study of health utilization revealed that people with intellectual disabilities underused medical services in comparison to other disability groups (Strosberg, Naon, Bar, & Morgenstin, 2004).

Arab citizens of Israel have reported lower utilization rates of health services than Jewish citizens (Azaiza & Cohen, 2006; Cohen & Azaiza, 2005). The core reasons for underuse of health services are a lack of government-allocated funds and personnel (Azaiza, 1995). The lower utilization rate is also related to a lack of trust in public services among the Arab population, the nature of the support offered, and a higher threshold for the stage at which families feel justified in seeking help (Schwartz, Duvdevany & Azaiza, 2002). Cohen and Azaiza (2005) reported that Arab participants in their study cited the main reasons for underutilization to be the lack of available health services in their municipalities, low accessibility to clinics and the language barrier.

#### **Intellectual Disabilities among Israel's Arab Population**

The Arab population in Israel comprises approximately 21% of the country's population. Approximately 8% are Druze, 10% are Christians, and the remaining 82% are Muslims (Central Bureau of Statistics, 2009). Despite the many societal, economic, and sociocultural changes that have occurred in Arab society that have impacted the family structure and the status of women, it has remained relatively collectivistic in orientation (Azaiza, 2008; Haj-Yahia, 1994). The traditional Arab culture is different from the more western culture held by Jews in Israel in terms of values, beliefs, viewpoint and cultural codes (Al-Krenawi, 1999).

Significant cultural differences exist also between Arab and Jewish parents of children with disabilities. Jewish parents are often described as guilt-oriented, whereas Arab parents tend to be shame-oriented. In light of this, Jewish parents are more likely to rely on professional services, whereas Arab parents' tendency is to cope and support the child with disabilities within the extended family (Maza-wee-Margia, 2001).

Individuals with disabilities in the Arab communities struggle with various difficulties, among them prejudices and stereotypes that hinder their daily func-

tioning and their acceptance and integration within their communities. People with disabilities and their families are often faced with limited marriage prospects for other family members (due to the society's stigmatized attitude toward intellectual disability in the family), as well as isolation, scorn, humiliation, fear, suspicion and prejudice (Sandler-Loeff & Shahak, 2006). The families feel ashamed of their situation and avoid contact with professional services. In cases of intellectual disabilities, national and local welfare services ignored existing needs and were slow to develop appropriate services. Furthermore, the Arab population was generally unaware of the special needs of individuals with intellectual disabilities and the means for developing adequate interventions (Mazawee-Margia, 2001).

Azaiza (1995) stated that the problem of individuals with intellectual disabilities may be the most painful and appalling one within the Arab population, and that some individuals with intellectual disabilities are often restrained and locked up due to a lack of awareness and proper services. This situation is even more severe when one considers that the rate of children with intellectual disabilities is twice as high among the Arab population as in the Jewish population (Naon et al., 2000).

In Israel, knowledge about the health and social gaps between Jews and Arabs with intellectual disabilities in general and how it affects participation in leisure in particular is scarce. The purpose of the article is to study factors affecting their participation in leisure activities, by analyzing data from the first nationwide study on recipients of National Insurance Institute disability benefits (Bar et al., 2005; Strosberg , Naon et al., 2004).

## Method

This study was a secondary analysis based on the aforementioned nationwide study conducted by an Israeli social policy research center and the National Insurance Institute (similar to SSA in the U.S.). The original study took the form of a comprehensive questionnaire comprised of closed questions regarding disability and functioning, for people with all types of disabilities. In most cases, responses were given in face to face interviews (Bar et al., 2005; Strosberg et al., 2004). In our secondary analysis, we focused on the subset of people with intellectual disabilities; 674 adults aged 18–65 (men) or 18–60 (women) who were living in the community. The demographic characteristics of the sample are presented in Table 1.

In our sample, the proportion of young adults living in the community was relatively high. Rates of institutionalization increased with age, and this might be related to parents' aging and declining ability to continue supporting the individual at home (Strosberg et al., 2004).

The secondary analysis included variables consistent with the ICF framework, taken from the original questionnaire that included various questions on disability and functioning. Based on this framework, we incorporated the following variables: body functions (health condition, physical functioning and cognitive functioning), activities (ADL and IADL), employment and service utilization (knowledge, availability and accessibility of services) and participation in leisure activities.

# Table 1

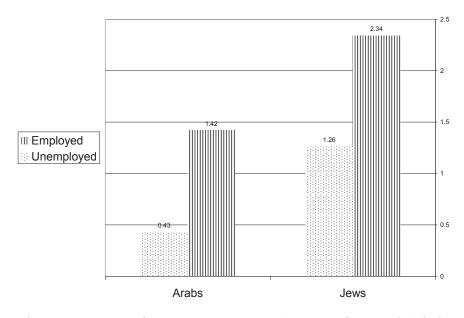
Basic Demographic Characteristics (N=674)

	Arabs	Arabs (N=153)		Jews (N=520)		<b>Total (N=674)</b>	
	n	%	n	%	n	%	
Gender							
Men	86	56.0	248	47.8	335	49.7	
Women	67	44.0	272	52.2	339	50.3	
Age	M = 29.86		M = 35.62		M = 34.28		
	SD =	SD = 8.67		SD - 11.14		SD = 10.89	
18-29	87	56.8	191	36.7	279	41.4	
30-44	59	38.3	507	39.9	266	39.5	
45-65	7	4.8	122	23.4	129	19.1	
Family status							
Married living							
with spouse	21	13.6	85	16.4	106	15.8	
Married not living							
with spouse	3	2.0	2	0.4	5	0.7	
Divorced	1	0.4	45	8.6	46	6.7	
Widower	4	2.4	8	1.6	12	1.8	
Single	124	81.6	371	71.4	495	73.7	
Living with life partner	0	0.0	8	1.6	8	1.2	

#### **Data Analysis**

A t-test was carried out to examine individuals' leisure activities and their employment status (employed/unemployed) (see Histogram 1). Findings indicated greater participation rates for employed Jews and Arabs.

Next, we tested the association between activities, health condition, physical and cognitive functioning, service utilization and participation in leisure activities. Among Jews, there was a significant moderate correlation between health condition and physical functioning and participation in leisure activities (r=0.32, p<0.01; r=0.35, p<0.01 respectively), and significant but weaker correlations associations between participation in leisure activities and ADL/IADL (r=0.18, p<0.01), knowledge (r=0.19, p<0.01) and accessibility of services (r=0.17, p<0.01).



*Histogram 1.* Means of Participation in Leisure Activities of Jews and Arabs by Employment Status (Employed vs. Unemployed)

Among Arabs, a strong association was identified between cognitive functioning and participation in leisure activities (r=0.51, p<0.01). Significant moderate correlations were found between activities (r=0.42, p<0.01), health condition (r=0.30, p<0.01), knowledge (r=0.28, p<0.01), and accessibility of services (r=0.34, p<0.01) and participation in leisure activities. Finally, a weaker but significant correlation association was found between physical functioning and participation in leisure activities (r=0.20, p<0.05).

A regression analysis was completed to assess the role of the significant variables identified in the correlations above as predicting participation in leisure activities among Jews and Arabs. Findings are presented in Table 2.

The regression analysis was significant in both populations:  $R^2$  of 0.20 ( $F_{(8,269)}$ =9.71, p<0.001) for Jewish participants and  $R^2$  of 0.54 ( $F_{(8,77)}$ =13.46, p<0.001) for Arabs). Among the former being employed was the most significant predictor of participation in leisure activities ( $\beta$ =0.31), followed by health condition ( $\beta$ =0.16) and physical functioning ( $\beta$ =0.15). Among Arabs, cognitive functioning was the strongest predictor of participation in leisure activities (sym=0.42), followed by knowledge ( $\beta$ =0.36), then health condition and the accessibility of welfare services ( $\beta$ =0.20).

Finally, a t-test for independent samples was used to examine differences in participation in leisure activities between Jews and Arabs. Results indicate that Jews (M=1.74, SD=1.53) had significantly higher levels of participation in leisure activities ( $t_{(355)}$ =10.86, p<0.01) compared to Arabs (M=0.52, SD=0.93).

### Table 2

Variable	Jews			Arabs			
	В	SEB	β	В	SEB	β	
Participation in employment	0.96	0.18	0.31**	0.11-	0.31	0.03-	
Health condition	0.13	0.06	0.16*	0.16	0.07	0.20*	
Cognitive functioning	0.07 -	0.09	0.05-	0.47	0.11	0.42**	
Physical functioning	0.12	0.06	0.15*	0.04-	0.07	0.06-	
Activities	0.03	0.03	0.07	0.00	0.04	0.00	
(ADL and IADL)							
Service utilization	0.03	0.13	0.01	0.82	0.20	0.36**	
Knowledge							
Service utilization	0.14	0.12	0.08	0.24	0.12	0.20*	
Accessibility							
Service utilization	0.06-	0.06	0.06-	0.11-	0.07	0.14-	
Availability							

*Regression Analysis for Variables Predicting Participation in Leisure Activities of Jewish and Arab Adults with Intellectual Disabilities Living in the Community* 

\* p<0.05

\*\* p<0.01

# Discussion

This study was based on a secondary analysis of data from a nationwide survey, in Israel, of recipients of disability benefits of the National Insurance Institute (Bar et al., 2005). The primary goal was to use the framework of the ICF to examine variables associated with participation in leisure activities among Arab and Jewish adults with intellectual disabilities living in the community. This conceptual framework made it possible to examine the interplay between disability and leisure in two ethnic groups.

Although considerable criticism on ethnicity and race as variables in leisure studies exists (Arai & Kivel, 2009; Li, Chick, Zinn, Absner & Graefe, 2007), these critiques are mostly about the validity of the boundaries between the groups. Israel

has the unique situation of two ethnic groups with very clear boundaries and no assimilation, living in the same country and under the same law (the Equal Rights Law of 1999). This law obligates Israeli society to guarantee the rights of people with disabilities, based on the principles of equality, basic human worth, dignity and freedom. In addition, this study was based on a nationwide sample in Israel, and thus addressed the concerns regarding the problematic generalization of results to an ethnic group (Li et al., 2007). Moreover, in our study, the same model was examined separately among Jews and Arabs, making it possible to identify different paths that link ethnicity to leisure and to plan interventions accordingly.

Findings showed that both Jews and Arabs with intellectual disabilities rarely participate in leisure activities, which reflects their lack of integration in society, even if they live in the community (e.g. Williams & Dattilo, 1997), and despite their needs and wishes (Kampert & Goreczny, 2007). This emphasizes the fact that living in the community does not guarantee that individuals with intellectual disability will have a real opportunity to be a part of the community (Duvdevany, 2008). One reason for low participation in leisure activities may have been that most of the activities examined were for performance outdoors. Earlier studies indicated that solitary and passive activities are more prevalent in this population, and are usually carried out indoors rather than in open spaces (Buttimer & Tierney, 2005; Verdonschot et al., 2008).

Another important finding was that Arab adults with intellectual disabilities had lower participation rates than their Jewish peers. Several possible explanations for this can be suggested. First, compared to Jews, Arabs underutilized services, and therefore had a lower participation rate in leisure activities. Previous studies have shown that most of these leisure activities were guided by staff (Hayden et al., 1996; Verdonschot et al., 2008). If Arabs had less contact with professionals and friends, they were likely to have less access to leisure programs and activities in the community. This finding is supported by the findings of Schwartz, Duvdevany and Azaiza (2002), who reported poor access to formal services among Arab parents of children with intellectual disabilities, and is also in congruency with previous studies that demonstrated reservations about seeking professional services among Arab citizens of Israel (Al-Krenawi, 1999; Sandler-Loeff & Shahak, 2006).

Another notable finding was the association between employment status and participation in leisure activities among both Jews and Arabs. This link is not surprising, as employment programs tend to offer training and better opportunities for personal and social contacts for people with intellectual disability (Mandler & Naon, 1998). A recent national study (Rimmerman & Araten-Bergman, 2009) demonstrated that being employed is a key predictor of social and civic participation among Israelis with disabilities. Furthermore, being employed enhances community participation, involvement in leisure activities and social integration (Rimmerman & Araten-Bergman, 2009). Pattersen and Pegg (2009) suggested that for people with intellectual disabilities, serious leisure (i.e. a hobby, craft, or central life interests) might provide a substitute for paid work in terms of benefits and opportunities. Through these activities, they could gain the necessary confidence to communicate with a range of people, develop new skills, and attain a sense of accomplishment, dignity and self-esteem. This, in turn, could facilitate their social inclusion in community settings.

Health condition, physical functioning and activities (ADL and IADL) had a positive association with participation in leisure activities among Jews and Arabs. This finding is consistent with earlier evidence that poor health was a core barrier to participation in leisure activities (Beart et al., 2001).

Another interesting finding was that Jews and Arabs differed in the association between cognitive functioning and physical functioning and participation in leisure activities. Among Jewish participants, there was no correlation between cognitive functioning and participation in leisure activities, as opposed to the strong correlation among Arabs. The analysis also revealed a moderate correlation between physical functioning and participation in leisure among Jews and a weaker correlation among Arabs. It is possible that cultural differences played a role in these differences. Among Jewish adults with intellectual disabilities, the lack of physical functioning problems increased the chance of participating in leisure activities. Arabs recognized cognitive functioning as a valuable key to participation in leisure activities. Those with low cognitive functioning were likely to remain secluded due to feelings of shame sensed by themselves or by their families.

The gap in participation in leisure activities between Jews and Arabs might also be due to economic reasons. In general, the Arab population in Israel is poorer than the Jewish population (Central Bureau of Statistics, 2005; Endweld, Fruman, Berkly, & Gotliv, 2009). Outdoor leisure activities can involve costs such as transportation and participation fees, and financial limitations have been identified as a barrier to participation in leisure for individuals with intellectual disabilities (Beart et al., 2001; Buttimer & Tierney, 2005). Agencies providing services also suffer from financial limitations, and these act as barriers to integrative practices (Schleien, Germ & McAvoy, 1996).

This study demonstrated that when it comes to leisure, there is a notable discrepancy between living in the community and actual participation. The findings are in accordance with the suggestion that leisure participation can be used as a context to determine social acceptance for people with disabilities (Devine, 2004). The ICF views social participation as a key concept in people's health and well-being. The current study provides support for the importance of using the ICF conceptualization in examining one type of social participation, leisure activities, in better understanding the interplay between the latter and ethnicity.

### References

- Aitchison, C. (2009). Exclusive discourses: Leisure studies and disability. *Leisure Studies*, 28(4), 375-386.
- Al-Krenawi, A. (1999). Culturally sensitive mental health therapy with Arabs. In C. Rabin (Ed.), *Being different in Israel: Ethnicity, gender and therapy*. Tel Aviv: Ramot (Hebrew).
- American Association on Mental Retardation (2002). *Mental retardation. Definition, classification, and systems of support.* 10<sup>th</sup> Edition, AAMR.

Arai, S., & Kivel, B. D. (2009). Critical race theory and social justice perspectives on whiteness, difference(s) and (anti)racism: A fourth wave of race research in leisure studies. *Journal of Leisure Research*, 41(4), 459-470.

- Azaiza, F. (1995). Welfare services in the Arab sector in Israel [In Hebrew]. *The New East, 37*, 207-212.
- Azaiza, F. (2008). The perception and utilisation of social support in times of cultural change: The case of Arabs in Israel. *International Journal of Social Welfare*, 17, 198-203.
- Azaiza, F., & Cohen, M. (2006). Health beliefs and attendance for early breast cancer detection among Arab women. *Journal of Women's Health*, 15(5), 520-530.
- Bar, S., Strosberg, N., Prior, R., & Naon, D. (2005). Recipients of disability pensions from the National Insurance Institute: Employment characteristics of recipients of general disability pension and recipients of work disability pension. [In Hebrew]. Jerusalem: Myers-JDC-Brookdale Institute and National Insurance Institute.
- Beart, S., Hawkins, D., Kroese, B.S., Smithson, P., & Tolosa, I. (2001). Barriers to accessing leisure opportunities for people with learning disabilities. *British Journal of Learning Disabilities*, 29, 133-138.
- Buttimer, J., & Tierney, E. (2005). Patterns of leisure participation among adolescents with a mild intellectual disability. *Journal of Intellectual Disabilities*, *9*(1), 25-42.
- Central Bureau of Statistics (2005) *Light Statistics No. 48: The Arab population in Israel 2003* [in Hebrew]. Jerusalem.
- Central Bureau of Statistics (2009) *Statistical abstract of Israel No.60*. [In Hebrew] Jerusalem.
- Cohen, M., & Azaiza, F. (2005). Early breast cancer detection practices, health beliefs and cancer worries in Jewish and Arab women. *Preventive Medicine*, *41*, 852-858.
- Dattilo, J., & Schleien, S. J. (1994). Understanding leisure services for individuals with mental retardation. *Mental Retardation*, *32*(1): 53-59.
- De Kleijn-De Vrankrijker, M. W. (2003). The long way from International Classification of Impairments, Disability and Handicaps (ICIDH) to the International Classification of Functioning, Disability and Health (ICF). *Disability and Rehabilitation, 25*(11-12): 561-564.
- 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.
- Duvdevany, I. (2002). Self concept and adaptive behavior of people with intellectual disability in integrated and segregated recreation activities. *Journal of Intellectual Disability Research*, 46(5), 419-429.
- Duvdevany, I. (2008). Do persons with intellectual disability have a social life? The Israeli reality. *Salud Publica Mex*, *50*(2), 222-229.
- Duvdevany, I., & Abboud, S. (2003). Stress, social support and well being of Arab mothers of children with intellectual disability who are served by welfare services in northern Israel. *Journal of Intellectual Disability Research*, 47(4/5), 264-272.
- Duvdevany, I., & Arar, E. (2004). Leisure activities, friendships and quality of life of persons with intellectual disability: Foster homes vs. community residential settings. *International Journal of Rehabilitation Research*, *27*(4), 289-296.

- Endweld, M., Fruman, A., Berkly, N., & Gotliv, D. (2009). *Poverty indices and income gaps 2008- Main findings* [In Hebrew]. Jerusalem: NII, Research and planning administration.
- Haj-Yahia, M. (1994). The Arab family in Israel: Cultural values and their linkage to social work. *Society and Welfare*, 14(3-4), 249-264 (Hebrew).
- Hawkins, B. A., Peng, J., Hsieh, C. M., & Eklund, S. J. (1999). Leisure constraints: A replication and extension of construct development. *Leisure Sciences*, *21*, 179-192.
- Hayden, M. F., Soulen, T., Schleien, S.J., & Tabourne, C. E. S. (1996). A matched, comparative study of the recreation integration of adults with mental retardation who moved into the community and those who remained at the institution. *Therapeutic Recreation Journal*, 30(1), 41-63.
- Jansen, D. E. M. C., Krol, B., Groothoff, J. W., & Post, D. (2004). People with intellectual disability and their health problems: A review of comparative studies. *Journal of Intellectual Disability Research*, 48(2), 93-102.
- Kampert, A. L., & Goreczny, A. J., (2007). Community involvement and socialization among individuals with mental retardation. *Research in Developmental Disabilities*, 28(3), 278-286.
- Krahn, G. L., Hammond, L., & Turner, A. (2006). A cascade of disparities: Health and health care access for people with intellectual disabilities. *Mental Retardation and Developmental Disabilities Research*, 12, 70-82.
- Li, C. L., Chick, G. E., Zinn, H. C., Absher, J. D., & Graefe, A. R. (2007). Ethnicity as a variable in leisure research. *Journal of Leisure Research*, *39*(3), 514-545.
- Mandler, D., & Naon, D. (1998). An evaluation of a "continuum of employment services" for the mentally retarded in four Israeli cities. Jerusalem: JDC-Brookdale Institute.
- Mazawee-Margia, M. (2001). Staff attitudes in the Arab sector to the integration of persons with mental retardation in the community. MA thesis, School of Social Work. Haifa: University of Haifa (Hebrew).
- Naon, D., Morginstin, B., Schimmel, G., & Rivlis, G. (2000) *Children with special needs: An assessment of needs and coverage by services*. Jerusalem [In Hebrew]. JDC-Brookdale Institute.
- Patterson, I., & Pegg, S. (2009). Serious leisure and people with intellectual disabilities: Benefits and opportunities. *Leisure Studies*, *28*(4), 387-402.
- Rimmerman, A., & Araten-Bergman, T. (2009). Social participation of employed and unemployed Israelis with disabilities. *Journal of Social Work in Disability & Rehabilitation*, 8(3/4), 132-145.
- Ruddick, L. (2005). Health of people with intellectual disabilities: A review of factors influencing access to health care. *British Journal of Health Psychology*, 10, 559-570.
- Sandler-Loeff, A., & Shahak, Y. (2006). Report: Individuals with disabilities in the Arab sector in Israel: An opportunity for social change. [In Hebrew]. Jerusalem: JDC-Brookdale Institute (Hebrew).
- Schleien, S. J., Germ, P. A, & McAvoy, L. H. (1996). Inclusive community leisure services: Recommended professional practices and barriers encountered. *Therapeutic Recreation Journal*, 30(3), 260-273.

- Schwartz, C., Duvdevany, I., & Azaiza, F. (2002). Working with families whose children have disabilities: Services provision by Jewish and Arab Israeli social workers. *International Social Work*, 45(3), 353-373.
- Strosberg, N., Naon, D., Bar. S., & Morginstin, B. (2004). General disability benefit recipients and work injury benefit recipients in Israel: Health, functional, and welfare characteristics and needs. [in Hebrew]. Jerusalem: Myers-JDC-Brookdale Institute and National Insurance Institute.
- Szymanski, E. M., Parker, R. M., Ryan, C., Merz, M. A., Trevino-Esinoza, B., & Johnston- Rodriguez, S. (2003). Work and disability: Basic constructs In E. M. Szymanski and R. M. Parker (Eds.), Work and disability issues and strategies in career development and job placement (2<sup>nd</sup> ed.).
- Verdonschot, M. M. L., de Witte, L. P., Reichrath, E., Buntinx, W. H. E., & Curfs, L. M. G. (2008). Community participation of people with an intellectual disability: A review of empirical findings. *Journal of Intellectual Disability Research*, 53(4), 303-318.
- Villeponteaux, L., DeCoux, V., & Beardshall, A. (1998). Self report of functional abilities in older adults with mental retardation: ADLs and IADLs. (Activities of Daily Living, Instrumental Activities of Daily Living). *Journal of Applied Gerontology*, 17(1), 53-66.
- Williams, R., & Dattilo, J. (1997). Effects of leisure education on self determination, social interaction and positive affect of young adults with mental retardation. *Therapeutic Research Journal*, 31, 244-258.
- World Leisure and Recreation Association (2001). Leisure Studies, 22, 293-297.