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Nicaragua Project 2013-2014

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Nicaragua Project 2013-2014

Description
The College of Health Professionals of Pacific University in collaboration with the Jessie F. Richardson Foundation, a non-profit organization, completed its seventh annual visit to Nicaragua in December 2013. An interprofessional team of Pacific University students and faculty from the audiology, dental health sciences, occupational therapy, pharmacy, physical therapy, physician assistant, and psychology programs provided direct services to Nicaraguan older adults, older adult home staff, and caregivers. The team worked with Nicaraguan gerontologist and physician Dr. Milton Lopez, as well as local caregiver staff to provide care to residents at Hogar de Ancianos Dr Agustin Sanchez Vigil, in Jinotepe, and Hogar de Ancianos San Vincente de Paul in Jinotega.

The team prepared for the ten day, out of country trip through fundraising events, donation gathering, marketing, and educating local community members about this rare opportunity to provide care for elders in Nicaragua. Upon return, the occupational therapy student team worked diligently to further develop the interprofessional team relationship, develop educational materials for future implementation in provider workshops, create evidenced-based activities for caregiver staff, administrators and community members to use with older adults, create preparatory documents to aid student understanding of the trip goals, as well as presented culminated work to interprofessional health provider audiences across the campus. The goal of this project is to assist each older adult home in becoming self-sufficient in providing adequate health care to every one of its residents.

Disciplines
Occupational Therapy

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Nicaragua Project 2013-2014

Pacific University School of Occupational Therapy
Innovative Practice Project

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Nicaragua Project

Description

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NEEDS ASSESSMENT

Fall 2013

Prior to leaving for Nicaragua, Anah Gunesch and Elizabeth Martin completed an extensive needs assessment to determine the greatest needs of the elders within their contemporary context. After an extended history of economic hardship, natural disasters, and political unrest, the country of Nicaragua has had minimal opportunity to rebuild and recover.

Visionary models that emerged through the process included Bronfenbrenner’s Ecology of Human Development Model (1979), The Kawa River Model (Iwama, 2006). The models were applied at the population level and served as a theoretical basis for organizing and synthesizing information about the Nicaraguan older adults living in hogares or literally, “homes.” The needs assessment identified two areas of need as follows:

(1) The need for elders to engage in activities beyond a daily routine of care, and

(2) The need for caregiver education so that safe and effective care will promote occupational performance of the elder population.
OTD 630 Community Based Practice
Needs Assessment: Nicaragua Initiative
Anah Gunesch
Elizabeth Martin
Pacific University
Fall 2013
Advisor: Tiffany Boggis

“Marginalized individuals are those who live ‘on the fringe’ of a society; they are often unable, for a variety of reasons, to take advantage of many of the various social and economic opportunities which surround them” (Fisher and Hotchkiss, 2008).
Nicaragua Initiative

“For most of human history, reaching old age was an exception” (Crampton, 2009). This is not the case in current history and populations are growing old all over the world, making global aging a very important issue. The Jessie F. Richardson Foundation (JFRF) is committed to creating sustainable models of healthcare and housing for a vulnerable and aging population both in the U.S. and across the globe. Through the global scope of their mission and at the invitation of health directors in Central America, the JFRF foundation has created an umbrella for many volunteers to participate in direct service to indigent Nicaraguan elders who live in charitable homes known as hogares. In addition, volunteers focus on the building of sustainable community connections and projects to further the foundation’s mission of improving the lives of vulnerable older adults in developing areas. Pacific University has been a partner with the Jessie F. Richardson foundation since 2007 as part of its service-learning initiative in Nicaragua. Interdisciplinary health professional students from Pacific travel to Nicaragua annually where they participate in direct health care service in the hogares, community outreach, and education of caregivers and local health professionals. This report will first discuss the wide scope of the elder population being served in hogares as it relates to the larger macrosystem (Bronfenbrenner, 1979) of Nicaragua. It will then investigate the population with a close focus on understanding the microsystem that shapes the everyday experience of the elders. It will also examine factors in the exosystem which offer potential for growth and support of the project, with special attention to the work of JFRF. Successful strategies and materials will be highlighted, specifically in the school of occupational therapy. The Kawa model (Iwama, 2006) will be used as an interpretive tool for understanding the specific population and to determine goals and recommendations for future endeavors of the project.

Macrosystem: Population & Environment

In Spanish, the word hogar means home. Nicaraguan elders who are impoverished, without family, and can no longer care for themselves, live in hogares de ancianos, literally, homes of the elderly. There are currently 21 such homes in Nicaragua, and the need is growing due to multiple factors affecting the demographics of the country. Historically, Nicaraguans, like other Latin Americans, have had large families and lived with multiple generations under the same roof. Demographics of families in Latin America are changing, with a trend toward smaller households, lower birth rates, higher divorce rates, more women joining the workforce, and higher numbers of single parents (St. Bernard, 2003). In addition, there is a demographic trend in increased life expectancy. Nicaraguans have an average life expectancy of 73 years, lower than the regional average of 76 years, but higher than the average global life expectancy of 70 years (WHO, 2011). By the year 2050, it is estimated that one in five persons in Nicaragua will be over the age of 65 (CEPAL, 2007). The population of elders is dramatically increasing, while at the same time the stable family structure is fading. These facts suggest that there are and will be many elders without family support in the future. To compound the situation, Nicaragua is the second poorest country in the Western hemisphere. The country has a history of political unrest, a recent history of civil war, and a long history of natural disaster (Library of Congress, 2010). Difficult living conditions and the promise of a better life have led to increased levels of migration to neighboring Costa Rica and further abroad. As a 2003 development report for the United Nations points out, “the prospects of dissolution and difficult circumstances loom in cases where family members migrate and remain abroad sometimes [undocumented] - to
secure a livelihood” (St. Bernard, 2003). Many elders have family members who have migrated and cannot help them, who have died, or who simply cannot afford to care for them.

Health care in Nicaragua is semi-privatized, generally difficult to access and not comprehensive. Approximately ninety percent of the population “is poorly served at public facilities that are typically mismanaged, inadequately staffed, and underequipped. Health care services are concentrated in the larger cities, and rural areas are largely unserved” (Library of Congress, 2010). The government has historically funded programs to support mothers and children rather than those that support the aged, and it lacks monetary resources for overall healthcare reform. The Ministry of Family in Nicaragua does state four priorities for the elderly population. One of which is securing homes for the abandoned elderly, in family homes or in hogares (Ministerio de la Familia, 2013). In spite of this, real government support for elders is scarce. Access to government social security funds are limited and difficult to access, and a subject of current political protest (Rogers, 2013). One major factor contributing to limited social security is the large informal work sector that exists in Nicaragua. Many senior citizens are not able to collect pensions, leaving them to rely solely on charity, which includes hogares when they can no longer live independently. The hogares also rely heavily on charity for their funding, including charitable donations from the local community and from private organizations and institutions, both local and abroad. The state may contribute a small stipend, usually inadequate to cover the cost of even one resident (Lopez, 2008). Hogares throughout the country of Nicaragua are typically run by local orders of Catholic nuns. The Roman Catholic Church has historically had close ties to the government of Nicaragua (Library of Congress, 2010) and the charitable role of the church in running the hogares is complicated by the relationship of church and state. Each hogar has a different relationship with the Catholic Church and third party funding, which can complicate the community’s role in interacting with the local hogares. In addition, despite their personal religious beliefs, residents may be required to observe specific religious practices due to the hogares affiliation with the Catholic Church (A. DeLaTorre, personal communication, October 22, 2013).

**Microsystem: Population of Elders in the Hogares**

On average, the elders who live in the hogares are 79 years old, and the demographic is slightly more male than female (Lopez, 2008). The majority of the elders are retired, have no resources, and do not collect any pension from the government. During their adult life-spans, the elders have lived through a civil war in their own country. This experience has shaped their personal and collective history, and memories and results of war continue to affect their current lives. The elders generally speak Spanish and do not speak English. They have a strong sense of cultural pride related to being Nicaraguan (R. Žuniga, personal communication, October 22, 2013). Many of them have been abandoned by their families as a result of war, poverty, migration and other issues affecting the greater society of the country. The elders interact primarily with caregivers, other residents, and the nuns who run the hogar. Most of the elders adhere to the Catholic faith and believe their fate is in God’s hands. According to the 2006 study of the hogares, 39.4% of the elders require assistance with at least one activity of daily living, and the study noted a strong positive correlation between dependence in ADLs and urinary or fecal incontinence as well as increased age (Lopez, 2008). Their lives consist of a daily routine of care which is usually bereft of opportunity for engaging in activities beyond chores of daily living. Normal routine at the hogares has a limited component of planned activities for the
elders to participate in. Occupational therapy students conduct activity groups to engage residents in meaningful activities each year when they visit the hogares. Activities include simple craft projects, dancing, and physical exercise in collaboration with the physical therapy students. These activities are well-received by the residents who enjoy participating.

The elders have a wide variety of physical and mental disabilities, which can be barriers to their functional engagement. Common conditions include dementia, mental health issues, vision and hearing loss, CVA complications, diabetes, pressure sores, fractures, loss of mobility, and general age-related deterioration of body systems and functions (Butz, N., Wandell, N., Syron, C., & Hess, E., 2012). During the annual visit, students use developing professional skills to assess individual residents of the hogares across disciplines of occupational and physical therapy, physician assistant, pharmacy, and dental health. (Audiology and psychology are being piloted in 2013). Although residents generally participate willingly in these assessments, health conditions, along with cultural and language barriers, make it challenging for students to get accurate results. These assessments are done using an inter-disciplinary checklist which is used to identify areas for direct treatment during the visit, as well as for the individual to have on record at their residence to be used by caregivers and health professionals as a resource to provide more comprehensive and appropriate care in the future.

Microsystem: Environment within the Hogares
In the past seven years, the service-learning team from Pacific University has visited 4 hogares, and the university has a relationship with 14 hogares, all of which are different (T. Boggis, personal communication, October 29, 2013). Each hogar has a different internal culture, depending on the nuns who are in charge. For example, in Estelí the nuns are very involved in the care of the elders. This is a positive asset to students who volunteer there, as the nuns are willing to share information about elders as well as learn from students. On the other hand, these nuns have many rules, for instance, all resources are to be shared. The religious affiliation of the hogares mandates that male and female residents cannot reside in the same sleeping quarters, and that they should be cared for by same sex caregivers (Boggis, T.L, Kelly, M., Schumacher, K., Randt, N., Erickson, D., 2013). Caregivers and volunteers have to be adaptable and sensitive to the culture within each hogar. Each hogar also has a different physical environment as well. The physical layout affects affordances for group activities, safety and accessibility for mobility, comfort, and privacy. In general, the hogares have poor accessibility, poor orientation aids, are in need of building repairs, have very small spaces for support workers, and low levels of comfort and privacy (Lopez, 2006). Again, caregivers and volunteers need to be flexible and very safety conscious within each hogar environment. In the greater community, there is often minimal interaction between the community and the hogar, and in many cities the hogar is located in the outskirts of town. The elderly are being placed at the literal and metaphoric fringes of society, where they are disconnected from the resources of the city and everyday life in the community. Poor transportation access to the sites of the hogares and a disconnected feeling to life inside the hogar further isolates residents. (A. DeLaTorre, personal communication, October, 22 2013).

Microsystem: Caregivers
A staff of mostly female caregivers is responsible for the day to day care of the elders. The ability to assist residents in their activities of daily living is one of the major strengths identified by Dr. Lopez in his 2006 study. Most of the caregivers are young and have little or no education. They have very little knowledge about caregiving and working with elders in particular; this is problematic as this is a population with unique needs, such as the safety concerns associated with mobility or dementia behavior intervention. Low pay, combined with the high demands and stress levels of working in the hogar, alternative job options in the community, and personal complications and environmental barriers in their own lives, usually means that caregivers do not work in a setting for a long period of time. This high turnover rate translates into caregiver training which is not supported by long-term experience, or relationships between staff and residents that do not have time to develop. This lack of knowledge is compounded by the fact that there is little dissemination of information within the hogares. Also, there is a low ratio of staff per resident (Lopez, 2008).

Caregiver education has been a large part of the service-learning provided by the students from Pacific University and it has been identified as an important need year after year. Students have presented and taught educational information to caregivers each year on topics of safe and effective caregiving. In addition, occupational therapy students have created caregiver education resources. In 2011, students created a caregiver resource manual with visuals, which is also translated into Spanish. In 2012, students used the Pool Activity Level (PAL) assessment tool to identify activity levels of residents and educate caregivers in Estelí on activity modification with leisure activity modification guidelines. Specific evaluation of resident’s recommended activity level was left in personal charts and ideally will allow caregivers to engage the residents more effectively in activities. Lack of knowledge and information dissemination creates question of usability regarding educational tools.

Exosystem: Community Stakeholders and JFRF

The Community Based Rehabilitation (CBR) model first proposed by the World Health Organization in the 1970s provides a framework for outside organizers to assist a community in growing and furthering support for disabled persons (WHO & AIFO, 2001). The Jessie F. Richardson Foundation has worked to develop momentum within the Nicaraguan government, local community organizations, educational institutions, and the medical community to support elders in hogares around the nation. Through their partnerships, JFRF has employed micro and macro strategies. These include supporting small, community-run groups that meet to identify needs in the community, improving local infrastructure in a sustainable way to lay the foundation for health promotion, and the development of a national training center for the hogares in Juigalpa. Though the work of JFRF fosters supports that actively involve many stakeholders within the community, many challenges still exist which prevent a fluidity in the delivery of competent care. Poverty, transportation barriers, limited access to healthcare, low ratio of healthcare providers to population, uneducated care staff with a high turnover rate, and limited community resources are some of the main barriers identified by JFRF. The primary intervention identified by the foundation is to provide educational support to the community in the form of healthcare training. JFRF identifies four levels where training is needed: professionals, paraprofessionals, civil servants, and community members (see Appendix F). Ultimately, without a call to action by the Nicaraguan government to support the aging
population, the elder population will continue to be marginalized. (A. DeLaTorre, personal communication, October 22, 2013).

Applying the Lens of the Kawa River Model
The Kawa (Iwama, 2006) model is useful to illuminate the unique social, environmental, and personal context of the Nicaraguan elders living in hogares, in relation to both their larger and more immediate contexts which have been discussed in the report above (see Appendix A). This is an extremely disenfranchised population; in the language of the Kawa model, there are many rocks blocking the flow of the river, such as occupational deprivation, limited access to healthcare, and physical and mental health conditions. There are also many intrinsic supports and barriers shaping the riverbed in the macro and micro environment, including caregivers, community organizations, and local government. Personal assets (driftwood) include cultural pride, life experience, and faith. The goal is not necessarily to move all of the barriers away, but to work within the spaces where the water is still flowing, and mobilize existing environmental (riverbed) and personal supports (driftwood) to improve the flow. As illustrated by the work of JRF, mobilization happens through the lens of the CBR framework to unite and connect many professionals, organizations, and community members to achieve a common and sustainable goal: health promotion for Nicaraguan elders. The Kawa illustrates the unique context of this vulnerable population in the metaphor of a river, and just like in nature, the river can shift and change. The Kawa reveals eloquently that the main occupational therapy goal with this population is to improve elder engagement in meaningful and functional activity by focusing intervention on areas where there is flow and working with elements of the river to improve flow. Using the lens of the Kawa model to understand the work being done by JRF and Pacific University with the population of Nicaraguan elders, it is clear that ultimately it is community who works together to remove barriers to elder engagement.

Recommendations
Two primary needs identified by this report are: (1) the need for elders to engage in activities beyond a daily routine of care, and (2) the need for caregiver education so that safe and effective care will promote occupational performance of the elder population. Two recommendations address these needs:

- Development of a well-defined and easily disseminated caregiver education program that can be used widely in Nicaraguan hogares.
- Continued development of the PALs activity level modification as an effective tool for caregiver education in improved activity facilitation for elders of varying physical and cognitive levels.

Outcome
Caregivers in Nicaraguan hogares will demonstrate increased knowledge of effective caregiving techniques and activity facilitation to promote improved occupational performance of elders in ADLs and leisure activities.
References


Appendix A

KAWA MODEL: A POPULATION STUDY OF NICARAGUAN ELDERS LIVING IN HOGARES

By: Anah Gunesch

KAWA MODEL DISCUSSION & DRAWING

By: Elizabeth Martin
KAWA MODEL: A POPULATION STUDY OF NICARAGUAN ELDERS LIVING IN HOGARES
The Kawa River Model is a tool which can be used to explain the unique situation of an individual or a population through the metaphor of a river. The Kawa originated in Japan and was designed to look at individuals and populations as integral and inseparable parts of their whole environment, just as rivers are integral to and inseparable from the world. The drawing above illustrates the population of the Nicaraguan elders that are living in hogares, or charitable homes. In this illustration, each element of the river is given a different color. The water (mizu) is purple. Water represent life flow and energy. Water is the space where people live their lives and fulfill roles. The rocks (iwa) are blue. These rocks represent life circumstances that are blocking the water, or blocking life’s flow. These circumstances can be health problems or other situations identified to be a barrier to the individual or the population. For example in this model, caregiver limitations is a barrier in multiple ways. There is a low ratio of caregivers to elders living in the hogares, and in addition, caregivers lack education in elder care and may subject elders to abuse. The driftwood (ryuboku) is red. Driftwood represent personal assets and liabilities of an individual or a population. Driftwood can be many things, such as values, personality traits, material assets and immaterial assets like family. Driftwood has the potential to be both positive and negative. It is a powerful mobile element of the river, and can move around and effect the flow of the water and the location of rocks. The riverbed (kawa) represents both the physical and social environment and has two levels. The micro level of the riverbed is green. The micro level of the riverbed represents direct community, this includes physical and social aspects of the environment that are part of the local community for an individual or a population, like their homes, families, and social organizations. The macro level of the riverbed is orange. The macro level represents the greater environment of society on both physical and social levels. In this illustration, the macro level includes environmental factors which are part of whole country of Nicaragua and beyond, such as government policy and natural disasters. All of the elements of the river influence each other and create an interactive environment. The water takes its shape from the riverbed and all of the elements in the river, and the individual or population is an inextricable part of this relationship. Spaces where the water has flow are areas which can be used effectively for occupational therapy. Occupational therapy focuses on improving the functional engagement in life activities of an individual or a population. The water represents this life flow and the occupational therapist can work with the assets, environments, and identified barriers to create an effective and unique intervention to improve the water’s flow.

Kawa Model (Iwama, 2006)
NICARAGUA INITIATIVE
The Kawa model helps to define the areas in which a person or population’s life force is compromised due to a variety of factors including the environment, client factors, assets and life circumstances as impediments. Though the Kawa has a worldview that looks at how individuals are an intricate part of the universe, the Nicaragua project is looking at the population of elders as its level of focus. Central to a myriad of issues that define the elders in Nicaragua is the life circumstance that they do not have family available to support them any longer, and the only place they can go is a “hogar” or “home.” The structure of the family is such that intergenerational care is a value well integrated into the Latino society. An underlying expectation exists in which the parents take care of the child and the child will eventually care for the parents in their lifetime, and thus a cultural life cycle and legacy is reinforced.

Some of the pieces included in the Kawa for the elders describes some of the adverse aspects that have created their life situation or circumstance. Much like the familial structure can be broken down in the lives of the elders, so can their life force and flow degrade through social and cultural deprivation. In addition to political unrest that has created decades of fear, poverty and ultimately trauma, the mass migration of economically and academically valuable people has left the country depleted of natural resources. For these reasons, the picture of the Kawa that is represented is primarily full of debris (like rocks and driftwood) that greatly reduces the life flow and fulfillment.

Assets and liabilities, or the “driftwood” in the model, present in the lives of the elders include: family (or lack of), cultural pride, religious faith, and limited resources. As identified by Alan De La Torre, a liaison with the Jessie F. Richardson Fund, the religious system has a strong impact on how and when healthcare services are delivered. It can both support and hinder the hogar to succeed in elder care. For example, the hogar is both funded and run by primarily Catholic organizations. If an elder wants to stay there, they would most likely claim to be Catholic, regardless of their faith. Also, hogares are being run by Christian (Protestant or Evangelic) caregivers, even if funded by a Catholic source, and therefore have a more relaxed view on what religions are welcomed.

It could be easy to make the assumption that the elders might view their lives as disparate and lacking in ways that are foreign to the American mind. Quite the contrary, the history of the country has created a resiliency unmatched by other Central American countries. There are many assets such as cultural pride that impacts the elders in a way to slow the degradation of social apartheid.
IN COUNTRY ACTIVITIES

Students traveled to two different towns to provide occupational therapy services to the hogares there along with other health professions from Pacific University. 22 healthcare students served 2 different hogares with a focus on direct care, education, social capacity building and interprofessional teamwork.

<table>
<thead>
<tr>
<th>Types of Activity</th>
<th>Specific Details</th>
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<tbody>
<tr>
<td>Direct Service</td>
<td>• Interprofessional healthcare screenings, assessments and interventions.</td>
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<td></td>
<td>• Interventions included a variety of services such as occupational and physical therapy groups, dental cleaning, ear wax removal, and hearing tests.</td>
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<tr>
<td>Interprofessional Shadowing</td>
<td>• Students were encouraged to shadow students from other professions to learn more about their education, skillset and professional reasoning when selecting interventions.</td>
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<tr>
<td>Spanish Language Lessons</td>
<td>• Students participated in daily Spanish language lessons given by local teachers.</td>
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<tr>
<td>Community and Caregiver Education and Training</td>
<td>• Pharmacy and psychology faculty gave two community workshops.</td>
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<td></td>
<td>• Students trained caregivers in topics such as patient handling, importance of occupation, dental hygiene, and medication management.</td>
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<tr>
<td>Community Mobilization</td>
<td>• Established on-going in-country dental services for Jinotepe hogar via local dentist.</td>
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<tr>
<td></td>
<td>• Gained support of local monsignor in Jinotega.</td>
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In collaboration with the Nicaragua project, the students created educational materials to support future trainings for health care providers, hogar staff, and caregivers. Education being a primary aspect of sustainable programming, occupational therapy students produced materials to enhance older adult care using professional models as a guide. The hope is that the materials will then be used to help hogar staff and caregivers encourage greater social and leisure participation between residents, direct efforts of community members to interact with the residents during visits, and positively impact community perceptions of aging populations. All educational materials were written to target literacy levels of less than 6th grade.

The following pieces of educational materials were created for this project:

**Research Paper**

**Presentation**

**Activity Protocols**
The following research paper was developed as a foundation for the PowerPoint educational material.
Occupational Therapy Educational Materials:
Enhancing Social and Leisure Participation for Older Adults in Nicaraguan Residential Facilities

Anah Gunesch, Kimberly Larsen, Elizabeth Martin, Kirstin Stoker

Pacific University
School of Occupational Therapy

Advisor: Tiffany Boggis
Occupational therapy is a practice strongly rooted in the ideal that every person has the potential to engage with the world around them, regardless of ability, age, and functional capacity. Occupational therapy helps people across the lifespan participate in the things they want and need to do through the therapeutic use of everyday activities (AOTA, 2013). The profession outlines the areas of practice, ways in which therapists practice, and guiding principles in the Occupational Therapy Practice Framework (AOTA, 2008). Two of the primary areas of occupation addressed under the domain of occupational therapy, and that will be addressed in this educational material, include social participation and leisure. Both areas of occupation are vital in supporting engagement in everyday meaningful activities. Social participation is defined as, “organized patterns of behavior that are characteristic and expected of an individual or a given position within a social system,” (AOTA, 2008). This concept describes how an individual contributes to social interactions in his or her community through a variety of roles, including both verbal and nonverbal interactions. Leisure is defined as, “nonobligatory activity that is intrinsically motivated and engaged in during discretionary time, that is, time not committed to obligatory occupations such as work, self-care, or sleep,” (AOTA, 2008). Leisure is often thought of as activities that people enjoy doing that are relaxing, fun, and consisting of time away from life’s obligations. Positive social and leisure participation can have a powerful impact on an individual’s quality of life. This paper will look at overall supporting research for social and leisure participation as well as specific proven methods used with older adults. A core model that is used in occupational therapy is the Person-Environment-Occupation (PEO) model (Law, et. al, 1996), and it will be discussed later as a framework for understanding an individual’s ability to fully participate in social and leisure occupations within their environment, and in meaningful ways. When individuals are able to independently engage in activities that
they want to do, occupational therapy believes that their sense of purpose is improved, supporting and maintaining health through participation (AOTA, 2008).

Findings from several research studies have yielded data demonstrating positive effects of social and leisure participation groups for older adult participants. Research shows that social activity programs implemented for engaging older adults in community-based settings have reduced rates of depression and increased positive group identity, self-efficacy, and overall psychosocial and physical health (Greaves & Farbus, 2005). One study, particularly aimed at engaging older adults in cultural and artistic social activities found that group interventions led to improved physical health, fewer doctor visits, less medication use, and fewer falls and fewer overall health issues among older adults who participated regularly (Cohen et al., 2006). Additionally, this study found that participants in intervention groups that focused on expressive arts (i.e. singing) saw reduced rates of loneliness, increased overall morale, and fewer physical health problems than those who did not participate (Cohen et al., 2006).

Furthermore, leisure activities, whether solitary or in a group setting, may contribute to increased mood and improved quality of life for older adults. Research has shown that engagement in leisure activities of interest can have a critical impact on happiness, life satisfaction, and sense of belongingness (Simone & Haas, 2013). Another study found that participation in social groups resulted in enhanced cognitive functioning among older adults as compared to peers who did not participate (Winningham & Pike, 2006). Those who did not participate in these groups showed further cognitive decline and increased self-perception of loneliness (Winningham & Pike, 2006).
Proven Methods

There are several specific social participation methods used by occupational therapists that have yielded positive results among older adults. The concept of connectedness, or salient connections that people form that ultimately affect overall quality of life, has been documented as having positive effects on older adults. This is especially evident in terms of improved psychosocial factors, such as mood, personality, stress level and perceived social support (Register & Scharer, 2010). In fact, researchers have found that social connectedness contributes to and supports spiritual connectedness, as participants in studies on connectedness have conveyed a deep sense of spiritual connectedness, especially toward the end of life (Register & Scharer, 2010). Another study notes that, while people in Western societies often value independence and are motivated by expressing their own personal interests and goals, individuals from non-Western societies may value interdependence, or reliance on friends, family, and community (Markus & Kitayama, 1991). This study showed that people from a culture that values interdependence are more motivated to participate in activities that allow them to connect with others (Markus & Kitayama, 1991).

This sense of connectedness shows that social reciprocity, or the positive or negative reactions that an individual may have in response to interactions with other people, can have a tremendous impact on the level of social participation and the meaning that one might place on social interactions. The social reciprocity component of connectedness and interaction is crucial, as supporting others and having the support returned, allows for individuals to feel like they are cared for and needed. One interviewee in this study stated, “I love to cook for people and take things around. I’m always in the kitchen cooking. I like to share” (Register & Scharer, 2010). This theme of social reciprocity was evident in several other statements recorded from various
participants in the same study. Values of social connectedness were observed by occupational therapy students working in the residential facilities for older adults, or hogares, in Nicaragua as well (2013). For instance, in the hogar in Jinotega, there was a gentleman who consistently helped a friend, a man with Parkinson’s disease, by bringing him water or helping him get to the cafeteria. The gentleman helping his friend demonstrated a need to help others and to connect with his peers. Also, in making a paper chain to decorate the hogar in Jinotepe, many of the elders demonstrated increased motivation to participate when told that their painted strip of paper would contribute to the overall decoration for the hogar. Knowing that their peers and caregivers were relying on their decoration to contribute to the group seemed to increase participation and satisfaction levels.

Also, having something purposeful to do, especially when other people are relying on one’s participation, was found to be a motivator for older adults in social interaction and participation, regardless of health issues or socioeconomic status (Register & Scharer, 2010). Participants expressed that they were able to rely on peers for support and felt that they were a part of something meaningful (Register & Scharer, 2010). The study found that, ultimately, social interaction and connectedness in older adulthood yielded results of increased health status and emotional well-being, with reports of decreased loneliness and alienation (Register & Scharer, 2010).

Various interventions involving a mentor-mentee relationship and buddy system are proven to be beneficial to improving quality of life and social engagement. Depression and social isolation impact one in seven adults over 65 years of age and there is increasing recognition that social isolation adversely affects long-term health (Graves, Farbus, & Greaves,
2006). By eliciting help and creating a greater responsibility in those who are higher functioning, social networks can be strengthened and social isolation reduced.

One study outlines a program that trains older adult mentors to engage in creative and meaningful activities on an outreach basis with community-dwelling older adults. The aim of the study is to rekindle the older adults’ passion for life by engaging in participant-determined programs of creative, exercise-based and/or cultural activities with a focus on social participation (Graves, Farbus, & Greaves, 2006). This study incorporated mentors that visited participants initially on a weekly basis, with regular telephone contact, and then decreased visits as the individual felt more confident and able to socially participate. Self-identified mentorship also engages the older adult in a sense of fulfillment in helping others and promotes altruism later in life. By providing something to do for the mentors and mental stimulation through training, both mentors and mentees benefit by engagement in a meaningful social interaction.

The activities in this study were tailored to meet individual abilities and interests in an attempt to promote personal meaningfulness and sustained engagement. Despite the differences in individual intervention pathways, the training given to mentors and the approach used was consistent (Graves, Farbus & Greaves, 2006). Mentor training included orienting the individual to organizational values and purpose of mentorship, as well as training in working with elderly clients, risk management, falls awareness and prevention, and basic first aid. Qualitative data analysis of this study indicated a range of benefits including psychosocial benefit and depressed mood being the most reported. Overall, the analysis of quantitative data indicated a notable improvement in the mental component of SF12 (a reliable self-report measure used to evaluate mental and physical well-being), reduced scores in the geriatric depression scale, and an improvement of perceived social support over a period of 12 months (Graves, Farbus & Greaves,
2006). While data indicates improvement of some mental and physical testing, there is not a strong correlation between long-term physical and mental health improvement. Evidence shows that participants of an individualized, mentor-based program, such as this one above, may experience the benefits of a better social network and reduced depression.

The model of a mentor/mentee relationship can be applied to the hogar context in Nicaragua. Higher functioning adults can greatly benefit from employing social skills to create a greater social network, and in turn, older adults that have reduced capacity can also reap the benefits of increased social interaction and maintained mental stimulation. This might be implemented, for example, by identifying adult mentors to assist in recruiting adults around the facility to participate in an activity. During the activity the adult mentor could be asked to help distribute supplies and/or assist an adult mentee in completing an arts and crafts project. The previous example of the man in the Jinotega hogar who helped his friend that has Parkinson’s disease is one such example of how the mentor-mentee relationship is already working to strengthen social participation.

**Person-Environment-Occupation**

The Person, Environment, Occupation model (Law et al., 1996) is one of the core models that informs occupational therapy. Essentially, this theory states that there are three main overlapping areas that contribute to an individual’s overall functional performance. These areas are 1) **person:** the physical and mental capacity of an individual, as well as their values and beliefs; 2) **environment:** the physical environment where people live, work, and play, as well as the social and cultural contexts; 3) **occupation:** the everyday activities that people engage in like leisure, work, and self-care. Each one of these areas can both support and/or hinder an individual’s participation and functional performance. In an attempt to explore strategies that can
maximize the social and leisure participation of older adults, it is valuable to look at each one of these three areas (person, environment, and occupation) and ways that they can serve as both supports and barriers for this particular population. Barriers are considered circumstances or obstacles that prevent progress whereas supports are those that enable success. Occupational therapy aims to build on the existing and potential supports, while at the same time decreasing the impact of the existing and potential barriers.

In the PEO model, the person is seen as a holistic combination of body, mind, and spirit (Law et al., 1996). The person component is made up of physical and mental capacity, as well as the individual set of values that inform the way he or she lives. Personal values, beliefs, and spirituality bring meaning and motivation to a person’s life, and they play a big part in who a person is (AOTA, 2008). Values are personal convictions held by an individual, for example, a priority placed on open and honest communication, independence, or loyalty. Beliefs are what people hold as truths about the world. For example, people from many different cultures all over the world believe that certain foods or herbs have healing properties.

Spirituality is the belief that ties an individual to a greater meaning in life that goes beyond the personal (Bonder & Bello-Haas, 2009). Spirituality is often expressed through an organized religion, such as Catholicism. Although for many people, spirituality may be expressed in a personal way, for example, by spending time in nature. In the older adult population, spirituality is significant and has been shown to be correlated with positive outcomes for aging (Bonder & Bello-Haas, 2009). Many values, beliefs, and spiritual practices are tied to cultural norms, and for this reason it is extremely important to be aware of what these cultural norms may be. In the older adult population, certain values, beliefs, and commitments to spirituality may have been held for many years and reinforced by life experience. A strong
conviction is an asset and a support for an individual. For example, if a person has a strong Catholic faith, an organized social group that draws on this faith will motivate the person to participate. Strong convictions can also be barriers; if an individual believes that their personal convictions are not being addressed in an activity, then the activity may lack meaning. Understanding what values a person holds is an important step toward motivating them to engage (Kielhofner, 2008).

As individuals age, their physical and mental capacities naturally decline compared to youthful abilities, which often create barriers for engagement in everyday activities (Bonder & Bello-Haas, 2009). All activities that people engage in throughout the day make demands on their physical and mental capacity. The level of functional ability will be different for each person as he or she ages, and maintaining an active lifestyle is a valuable tool to decrease the impact of natural decline. Physically, people will lose muscle as they age, particularly after the age of 70; loss of muscle leads to less strength and endurance. Endurance is also affected by natural lower levels of cardiovascular functioning. In addition, older adults will lose flexibility and range of motion in their joints. These factors lead to lowered levels of coordination and increased risk of falling (Bonder & Bello-Haas, 2009). Physical activities can be modified to be less demanding, while at the same time, maximizing existing strength, endurance, and range of motion. Assets to continued engagement for older adults include established routines, experience, muscle memory, and preferences (Crepeau & Schell, 2009).

Older adults also lose some of their sensory capacity as they age. Hearing and vision loss are very common. Both of these factors can lead to decreased motivation for the individual who may not hear or see what is going on and consequently become frustrated, anxious, confused, irritable, and socially isolated (Bonder & Bello-Haas, 2009). There are many adaptive tools and
environmental strategies to alleviate the barriers created by loss of hearing and vision. In the areas of social and leisure participation, craft materials should have visual contrast and substantial size, and extra visual clutter should be avoided. Communication should be clear, lower in tone, and directed to the individual (Bonder & Bello-Haas, 2009). Limiting environmental noise is also helpful. Taste, touch, and smell often become less acute with age as well, which can also lead to decreased motivation to eat certain foods and engage in fine motor activities. Preferences, routine, and memory can all be assets to maintain engagement despite sensory loss (Crepau & Schell, 2009). A loss of touch can be adapted by using larger, thicker materials that require less precise grip for handling, such as large sized puzzle pieces.

One other very important area of capacity for older adults is mental functioning. In the process of normal aging, adults may lose some of their memory capacity and speed of processing; verbal skills, reasoning, and problem solving remain intact for many older adults (Bonder & Bello-Haas, 2009). For these adults, mental capacity is a big asset in functional performance, and can help them compensate for loss of physical capacity. Many older adults get dementia, which will compromise their functioning in areas of memory, problem solving, and reasoning (Zoltan, 2007). For these adults, loss of mental capacity creates a sizable barrier to functional performance. Enabling people with dementia to engage in activity using their existing capacity has been shown to have many benefits, including improved mood and emotion, improved participation in ADLs, decreased behavioral problems, and improved quality of life (Cohen-Mansfield, Dakheel-Ali & Marx, 2009). Social and emotional skills are closely linked to mental functioning, and continued social participation has been shown to have positive outcomes for older adults in areas of both physical and mental health (Bonder & Bello-Haas, 2009).
Many aspects of the physical environment will serve as either a barrier or a support. For example, ample lighting is a support for older adults with low vision, where low lighting may be a safety hazard and cause difficulty for engaging in everyday activities. Other physical features of an environment to consider for older adults are floor coverings, temperature, noise, accessibility and stairs, layout, doors, furniture, and much more (Bonder & Bello-Haas, 2009).

Other aspects of the environment that impact a person’s functional ability are the social and cultural environment (AOTA, 2008). Social supports are an extremely valuable asset for older adults. Examples include spouses, family members, friends, church members, health care workers, and community volunteers. Social connections can provide companionship, assistance, medical services, and more. As many adults age, they lose some of the social connections and supports that they may have had previously in life due to loss, relocation, changing interests, or lack of mobility and access to the community (Bonder & Bello-Haas, 2009). Withdraw from the workforce at retirement can create both barriers and supports. For example, older adults may have fewer financial resources when they are no longer working; freedom from the workforce can mean more leisure time, or the loss of valuable roles filled as a worker. The cultural environment can have a direct impact on older adults, for example, a culture that values and respects its’ elders may provide supportive community programs; stigma against aging may mean there are fewer opportunities for community engagement. Culture can affect individuals on an indirect level as well, through laws and policies which support the legal rights of a particular population (Nisbet, 2009).

As defined earlier, occupations are considered everyday activities in which a person engages. The older adult population experiences many barriers and supports to their performance in a wide range of occupational areas. Each occupation has a set of activity demands which are
the specific features of an activity that influence the type and amount of effort required to perform the activity (AOTA, 2008). Examples of activity demands include the objects and their properties used in the activity, the physical space requirements to perform the activity, the social demands, sequence and timing, the actions or skills needed to perform the activity, and the required body functions (AOTA, 2008). Each aspect of a social or leisure activity can either be a barrier to success in the activity or be modified to support performance. If the demands for the activity exceed a person’s capacity, their performance is compromised and a performance discrepancy exists (Rogers & Holm, 2009). The following will demonstrate examples of how activity demands can be either supports or barriers.

Occupational therapists are experts in grading and modifying activity demands in order to enhance performance (Thomas, 2012). In the area of objects and their properties, a simple craft activity may use tools that are too small for an older adult to manipulate due to physical or cognitive limitations. Tools can be modified by building up handles or using a universal “U” cuff to limit the need for precise fine motor control. Space demands can also be a barrier or support for an activity. A current events group may require a quiet room in order to meet the needs for an older adult population with hearing impairments whereas a large space may be required for a balloon volleyball game. Having the incorrect space for an activity can lead to immediate frustration for the group leader and participants. Social demands of an activity include the rules of a game or expectations of other participants during the activity and can be extremely important to the success of the participants. A group of older adults with dementia may not have the cognitive ability to follow the rules of a complex game and may need the rules simplified and written out as a reminder throughout the game. A group leader may try to lead a
game that is familiar in his or her culture but foreign the older adult population which can lead to frustration throughout the activity.

The steps, sequence, and timing requirements of an activity make up the process and are also important to consider in order to ensure success (AOTA, 2008; Thomas, 2012). Older adults often have a routine in their day and may have more energy in the morning compared to the afternoon. They may also become very sleepy after taking certain medications which would impact their function during an activity group. It is important that the group leader and participants are clear on the steps of an activity through a clear model or instructions. Many older adults are not able to remember several steps at once and may need a step by step assistance through a physical or verbal cue. Also, the number of choices available in an activity can be reduced for older adults with cognitive declines in order to facilitate their ability to make decisions independently. For example, if an older adult hesitates to begin a craft activity, the activity may be too complex; they may need assistance limiting the colors or tools they can use to decorate a project. While it is valuable to consider an individual’s physical and cognitive abilities when designing a group or activity, it is more important to consider how the activity can be modified to fit the person’s current abilities in order to foster successful participation (Thomas, 2012).

**Examples from Nicaraguan Hogares**

Many examples of barriers and supports to person, environment, and occupation were observed by occupational therapy students during their week long service learning trip to Nicaragua in 2013. Several of the residents of the Jinotega hogar demonstrated strong values of helping others within the hogar community. One gentleman routinely assisted another gentleman to group activities and meals by pushing his wheelchair and helping with activity set-
up and participation. Another resident in a wheelchair would regularly carry her bags and the bags of her companion from destination to destination throughout the hogar. These personal attributes of the residents offer supports for others, through a strengthened social network, to be more successful in their daily occupations. Another gentleman who was a resident in the Jinotepe hogar demonstrated signs of depression as he rarely left his room during the day and mentioned thoughts of “waiting to die.” Occupational therapy students were able to investigate deeper into this man’s values and interests to find a deep passion for art. With the proper encouragement, this man’s barrier of depression could be alleviated with continued opportunities to explore his interest in art.

Barriers and supports may also exist within the environment that a person performs daily occupations. In Jinotega, there was a large main room that served as an inviting location for group activities and exercise. Residents could come into the room to participate in activities or just watch and be social with other residents. In contrast, the hogar in Jinotepe was under construction and offered no central location to hold group activities. The room that was used for activities also functioned as the meal preparation and dining room which was a barrier to leading successful groups. The outside space was large enough for physical activity groups, but was difficult to access by wheelchair due to the rocky dirt pathway. These two examples show how the environment can either serve as a support for successful participation in group leisure and social activities or a barrier.

Though they may not be as easy to see with the untrained eye, barriers and supports also exist to the occupations that a person performs. In Jinotega, a few male residents were given the voluntary responsibility to dry the coffee beans that would be used for the staff and residents. They clearly enjoyed the task and were able to also benefit from the social
participation during the activity. This activity was an appropriate fit for the group as the activity demands met their interests and abilities. A barrier to successful participation could have existed if the residents did not have the fine motor or cognitive abilities for the task. However, such barriers can be reduced with the proper activity modification such as offering the role of drying the beans rather than sorting to those residents with fine motor problems, or giving verbal step by step cueing to those residents with cognitive deficits. In Jinotepe, occupational therapy students designed a craft activity that would be appropriate for the majority of residents and would also promote a sense of togetherness among the residents. Mobile craft kits were created with a variety of tools that could enable the complexity of the project to range from very simple to more intricate depending on the abilities of the resident. If an activity appears to be difficult or complicated, a resident may not feel motivated to even attempt it. During the fiesta at the end of the week, both hogares offered activities that were accessible for most residents and had easy to follow directions. Activities included balloon volleyball, water bottle bowling and dancing; and activities were easily modified to accommodate residents who were in wheelchairs or using mobility devices.

In conclusion, research supports both social participation and leisure engagement as ways to promote positive mental and physical health in older adults, including improved mood, well-being, cognition, and self-efficacy. Using the proven methods of social reciprocity and mentorship can enhance and the process of engaging older adults in social and leisure activities, and strengthen the supports of the social environment. Examining all of the elements of the person, the environment, and the occupation can bring a greater understanding of how to reduce barriers to engagement and enhance participation for older adults. Examples from the Nicaraguan hogares in Jinotega and Jinotepe, visited by occupational therapy students in 2013,
reveal specific existing supports for increased social and leisure participation with attention to aspects of person, environment, and occupation.
References


The Importance of Social & Leisure Activities for Older Adults in Nicaraguan Hogares

The below presentation was established in order to maintain sustainability through education in the Nicaragua Project. In accordance to information received from JFRF, the presentation is intended to train hogar staff, administrators, and caregivers on the importance of social and leisure participation. With additional training, the hope is for hogares to understand how leisure activities can improve overall quality of life for the older adults. Additional information provided on an occupational therapy model of practice, the Person-Environment-Occupation model, can assist hogar staff to consider broader contexts when encouraging social and leisure participation. Brief activities were incorporated in the presentation for greater understanding of the person, environment, and occupation interaction. This document includes a detailed script for each slide to assist a presenter in fluid use of the presentation along with activity plans specifically designed to promote social interactions.
The Importance of Social & Leisure Activities for Older Adults in Nicaraguan Hogares

By: Anah Gunesch, Kimberly Larsen, Elizabeth Martin, and Kirstin Stoker

Pacific University
School of Occupational Therapy
Objectives

At the end of this session, each person here will be able to...

• Appreciate the importance of doing social and leisure activities to support health and wellness

• Understand the three parts to doing an activity: person, environment, and occupation (activity)

• Be aware that there are both things that limit and things that support doing an activity
Overview

• What is Occupational Therapy?
• Doing Social and Leisure Activities
• Proven Methods
• Person-Environment-Occupation (PEO) Model
• Examples from Nicaraguan Hogares
Introduction

• What is occupational therapy (OT)?
• What does “occupation” mean?
• Importance of doing social & leisure activities
Social Participation

Being with other people while doing an activity
Leisure Participation

An activity that a person can do alone or with other people that is relaxing or enjoyable.
Research

Social & leisure participation for older adults has been shown to:

• Decrease depression
• Increase positive attitudes
• Improve mental and physical health
Proven Methods

**Connectedness**: Important relationships that people make that affect overall quality of life

- Positive connections with others can improve mental and emotional well-being
  - For example: mood, attitudes, and social support can be improved
Social Reciprocity: feelings or responses that a person might have when talking to or being with another person

- Supporting others and being supported in return can make people feel like they are cared for and needed
Proven Methods (Continued)

- What is mentorship?
- Mentorship can help older adults to feel good about helping others and encourages them to continue to do nice things for other people
- Research shows that people who participate in a mentor program may benefit from a strong social network and less depression and sadness
- An example from an hogar in Nicaragua
The PEO Model looks at the fit of three important areas to help us understand how a person can function in the best possible way. These three areas are:

- Person
- Environment
- Occupation
Physical ability in older adults

• **Barriers:** weaker muscles, slower & more difficult movement, gets tired easily

• **Supports:** routines and preferences

Example: A person might have trouble lifting their arms over their head to get dressed, but they have a routine of getting dressed at the same time every morning so they are ready, and they know what to expect.
Sensory ability in older adults

**Barriers:** Less ability to see and hear. Less sensitive to touch, taste, and smell

**Supports:** change the environment to create support

Example: When someone has trouble seeing, remove extra objects that are not being used. When someone has trouble hearing, remove extra noise so they can listen better.
Mental and emotional ability in older adults

- **Barriers:** Problems with memory, slower to understand things, difficulty paying attention, depression or sadness, feeling lonely

- **Supports:** Values, beliefs, spirituality, positive mood

Example: If someone has a poor memory, set out all of the materials needed for an activity and remind them of each step. Use an activity that has meaning for the person.
Person Activity

Let’s meet Pedro...
Physical Environment

- **Barriers:** poor lighting, uncomfortable temperature, slippery floors, uncomfortable furniture, stairs
- **Supports:** good lighting, comfortable temperature, comfortable furniture, good layout of rooms

Example: Poor lighting is a barrier for someone who has low vision, but good lighting is a support and can help someone see better.
Environment (Continued)

Social & Cultural Environment

• **Barriers:** loss of social connections, less ability to go places, attitude

• **Supports:** family, friends, church members, health-care workers, community, laws & services

Example: Someone might have lost connection with old friends, but new friendships can be made with other residents in the hogar
Environment Activity

Let’s take Pedro to the Fiesta!
Occupation

Each activity has a set of demands that includes:

- materials used
- physical space
- social interaction
- order of activity steps
- skills needed to do the activity
- body parts needed to do the activity
<table>
<thead>
<tr>
<th>Modification</th>
<th>Purpose</th>
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</thead>
<tbody>
<tr>
<td>Make bigger handles on activity tools (paintbrushes, pens, etc.)</td>
<td>Limit the need for using the fingers to pick up or hold small things (ex. holding a pen)</td>
</tr>
<tr>
<td>Move activity to a quieter room</td>
<td>Meet the needs of residents with hearing problems</td>
</tr>
<tr>
<td>Do the activity in the morning</td>
<td>Older adults often have more energy in the morning</td>
</tr>
<tr>
<td>Limit the number of choices to make during an activity</td>
<td>Meet the needs of residents with mental difficulties (ex. understanding, memory)</td>
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</tbody>
</table>
Occupation Activity

How can we help Pedro do what he likes to do?
Review of Activities

- Person
- Environment
- Occupation (activity)
Examples from Hogares

Person
• Barrier: Feelings of depression, hopelessness
• Support: Help from other residents and staff throughout the day

Environment
• Barrier: An activity area that is not accessible by wheelchair
• Support: A main community space for activities
More examples from Hogares

Occupation
• Barrier: Using small paint brushes with a resident who has arthritis or movement problems
• Support: Finding activities that participants can do from a wheelchair, such as balloon volleyball, blowing bubbles, or drying coffee beans.
Activity Plans

Included with this presentation are the following activity protocols:

<table>
<thead>
<tr>
<th>Activity Plans</th>
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<tbody>
<tr>
<td>Corn Husk Angels</td>
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<tr>
<td>Dancing</td>
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<tr>
<td>The Perfect Rainstorm (Music)</td>
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<tr>
<td>Dried Beans &amp; Corn Art</td>
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<tr>
<td>Reminiscing with Pictures</td>
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<tr>
<td>Storytelling</td>
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<tr>
<td>Mindfulness</td>
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<td>Bowling</td>
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<td>Balloon Volleyball</td>
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<td>Piñata</td>
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<tr>
<td>Card Games</td>
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<tr>
<td>Poetry Collage</td>
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</tbody>
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Activity Plan Example:

**Balloon Volleyball**

**Appropriate Age Level:** Child to Older Adult

**Why this activity is important to do:**
- To be social with other residents
- To exercise arms, body, heart, and lungs
- To improve how hands and eyes work together
- To increase endurance and activity tolerance

**Things You Will Need:**
- Inflated large, colorful balloons
- Chair for residents who may need to sit

**Space needed for this activity:**
- Large, well-lit, open area
- If outside, area should not be too windy
Activity Plan Example:

What staff should do:
- A minimum of one staff is recommended for this activity.
- More staff would help to get balloons that fly away or help residents who may need more help.

How to do the activity:
1. Blow up balloons
2. Have residents stand or sit facing each other in a line or circle. Provide chairs as needed.
3. Toss balloon to resident by using their names to alert them to the game.
4. Ask residents to hit the balloon as many times as they can before it hits the ground.
5. Ask residents to call other resident’s names before they toss it to them.

Things That Could Go Wrong:
- Residents may become scared if balloon is hit towards them too quickly. Be sure to hit balloon gently towards these residents and tell others to do the same.
- Residents could fall out of their chairs while trying to get a balloon that is far away from them. Be sure residents in chairs have both feet firmly on the ground. Use chairs with arms for residents without good center body control.
Activity Plan Example:

Ways to make activity easier or harder:
1. Ask residents to help blow up balloons if they are in good enough health.
2. Show residents different ways to hit the balloon with both hands, one hand, head, or feet.
3. Add more balloons to the circle to add more difficulty to the activity.
4. Add a goal number of hits to reach to add purpose to the game. (Ex: “Let’s see if we can hit the balloon 20 times in a row!”
5. Have different residents count how many times the balloon is hit.
Summary

Here is what you’ve learned...

• Why it is important for older adults to do social and leisure activities for their health
• The three parts of doing an activity: person, environment, occupation & how they fit together
• Different types of barriers and supports that a person might have when doing an activity
References


Activity Protocols

Description

Twelve activity protocols were provided by authors in order to enhance caregiver education and sustainability of the Nicaragua Project. Activities were organized to address the areas of 1) arts, crafts and movement, 2) communication, and 3) games. The activities were created to provide the hogar staff with simple ways to engage the older adults. Literacy levels, cultural relevancy, and sustainability were considered when choosing activities that best fit with the Nicaraguan population.
Dried Beans & Corn Art

Appropriate Age Level: Children to older adults

Why this activity is important to do:
• To be social with peers and staff
• To exercise fingers and hands
• To do something that is enjoyable
• To use the brain in ways that help with memory, learning, understanding, and attention

Things you will need:
• Dried beans (variety of colors—i.e. red kidney beans, black beans)—1lb of each type of bean for large group of 10-12 people
• Dried corn- 1lb for large group of 10-12 people
• Dried cacao- 1lb for large group of 10-12 people
• Coffee beans- 1lb for large group of 10-12 people
• Paper (one sheet for each person, with extras in case someone wants to create a second picture)- at least 20 sheets of paper for large group
• Small sponges- (one per person) 10-12 for large group
• All-purpose glue- two 16oz. containers
• Paper plates- 4-5 (to use as trays for glue)
• Crayons or colorful pencils (2-3 boxes with many colors)

Space needed for this activity:
• Use an area with lots of light with a large table with enough space around it for all people.
• Make sure that there are enough chairs for all people.
• Make sure the room is quiet (turn off the the TV or loud music) so all people can hear staff and others who are speaking.

What staff should do:
• At least one staff member is needed for this activity
• It would be helpful to have more staff members (2-3) in order to help each person with their craft (especially for larger groups).
How to do the activity:
1. Place 3-4 paper plates in the center of the table, each with enough glue for a few people to use for their craft
2. Take crayons out of boxes and place them in different places across the middle of the table, so that all people are able to reach at least 2-3 crayons.
3. Place dried beans, corn, and cacao beans in piles in the middle of the table in several places so that all people are able to reach at least 1-2 piles of materials
4. Give each person one piece of paper and one sponge
5. Have each person choose a crayon
6. Have each person draw a picture of their choice on their sheet of paper. Help them draw a picture of their choice if they are cannot do it alone.
7. Have each person dip their sponge in glue (from the paper plate close to them) and spread the glue across their picture
8. Have each person choose different colors of beans, corn, and cacao and press them onto the glued space of their picture
9. Have each person continue gluing beans, corn, and cacao until the space is filled; have them sign their name at the bottom.
10. Let the glue dry; then ask the person if they would like to hang their picture in their room or in the main area. People can choose what to do with their picture.

Things that could go wrong:
• Watch people around craft materials to make sure they are using them correctly.
• Make sure that people do not eat glue or dried beans, corn, and cacao.

Ways to make this activity easier or harder:
1. Have staff draw picture for the person if they cannot do this on their own.
2. Give larger sponge to people with pain or weakness in their hands or fingers. Larger sponges make it easier to hold.
3. Make larger handles for colored pencils (can wrap foam or sponge around handle or wrap tape around handle of pencil to make a bigger handle) for people with pain or weakness in their hands or fingers. Can also use a marker with a larger handle.

4. For people with hearing problems, speak loudly and slowly to make sure that they hear directions.
5. For people who have dementia or other mental difficulties, give directions one step at a time. Speak slowly and clearly. Give them materials one at a time if they appear confused by choices. For example: give them only a sponge and explain that they use the sponge to dip in
glue and put it on their paper. Then give the person the glue and have them use the sponge to glue. Next, give them 2-3 beans and have them press the beans onto the glue on the paper.

6. If the person has problems with vision, decrease the number of things in front of them by giving them only a few items at a time (example: only two crayons and a few beans at one time). Also, use brighter colors for the drawing that are easier to see. For example, use a bright green marker to draw a big picture so that it is easier to see. If the person continues to have problems with seeing the picture and materials, help them by describing what the pictures and materials look like (example: small red beans), and help them glue them on the paper.

7. People who are more aware of what to do may help other people who have dementia or other mental problems.

8. Staff member can sign the person’s name for them if they cannot sign their own name due to pain or weakness in hands or vision problems.
Balloon Volleyball

Appropriate Age Level: Child to Older Adult

Why this activity is important to do:
• To be social with other residents
• To exercise arms, body, heart, and lungs
• To improve how hands and eyes work together (hand-eye coordination)
• To increase endurance and activity tolerance

Things You Will Need:
• Inflated large, colorful balloons
• Chair for residents who may need to sit

Space needed for this activity:
• Large, well-lit, open area
• If outside, area should not be too windy

What staff should do:
• A minimum of one staff is recommended for this activity.
• More staff would help to get balloons that fly away or help residents who may need more help.

How to do the activity:
1. Blow up balloons
2. Have residents stand or sit facing each other in a line or circle. Provide chairs as needed.
3. Toss balloon to resident by using their names to alert them to the game.
4. Ask residents to hit the balloon as many times as they can before it hits the ground.
5. Ask residents to call other resident’s names before they toss it to them.

Things That Could Go Wrong:
• Residents may become scared if balloon is hit towards them too quickly. Be sure to hit balloon gently towards these residents and tell others to do the same.
• Residents could fall out of their chairs while trying to get a balloon that is far away from them. Be sure residents in chairs have both feet firmly on the ground. Use chairs with arms for residents without good center body control.
Ways to make activity easier or harder:
1. Ask residents to help blow up balloons if they are in good enough health.
2. Show residents different ways to hit the balloon with both hands, one hand, head, or feet.
3. Add more balloons to the circle to add more difficulty to the activity.
4. Add a goal number of hits to reach to add purpose to the game. (Ex: “Let’s see if we can hit the balloon 20 times in a row!”)
5. Have different residents count how many times the balloon is hit.
Reminiscing with Picture Collages

Appropriate Age Level: Youth to older adult

Why this activity is important to do:
• To get adults to remember good experiences from the past
• To get adults to talk and socialize with each other
• To give adults a chance to feel good about things they have done in the past

Things you will need:
• Magazines with pictures. These can be used magazines with any type of pictures in them: food, people, outdoors, fashion, sports, etc. It is best to have at least 1 magazine per person or more.
• Glue sticks, tape, or glue
• Construction paper to use for collages (1 sheet per person)
• Scissors (one pair for every 2-3 people)
• Sample collage (make one ahead of time)

Space needed for this activity:
• This activity can be done in a small space, with a table and one chair for each group member. Chairs can be set up in a circle or around the table.
• Use good lighting so that group members can see well.

What staff should do:
• One staff member is needed to lead this activity.
• If there is a large group of 8 or more, a second staff member should help.

How to do this activity:
1. Group should all sit in a circle around a table.
2. Leader will put magazines in the center of the table.
3. Leader will describe the activity:
   “Today we are going to make collages with pictures that you choose from these magazines. Look through the magazine and find pictures that you like. The pictures might remind you of something from your life. For example, someone you know or something that makes you
happy. Maybe it is a picture of a food you like, or somewhere you have been or have always wanted to visit.”

Show the group the sample collage.
4. Tell the group to cut or tear out pictures they like and glue them on the paper.
5. Allow each person to work by themselves. Move around the group and help people cut pictures and use glue if they need help.
6. When the collages are finished, give people a chance to talk about their collage. If they do say anything, ask them questions about the pictures. Examples:
   • “I see you have a picture of a boat, can you tell me what the boat means to you?”
   • “I notice you have a picture of a cake, do you have a memory about a cake?”
7. Be sure to give each person positive feedback, and ask questions that will keep the conversation going.
   • “Thank you for sharing”
   • “That sounds like a wonderful story, can you tell us more about it?”
8. Give everyone a chance to talk.

What could go wrong:
• Some topics might bring up bad or emotional memories for people. If someone seems upset, give them a chance to share and offer them support. Ask others if they feel the same way. Let the person know that it is OK to feel emotional.
• Be very careful with scissors and make sure only people who are capable use scissors.
• Watch group members closely to make sure they do not eat glue.

Ways to make activity easier or harder:
1. Take away other noises in the area, such as turning off the TV.
2. Make sure there is plenty of good light in the room.
3. Give people help cutting by placing your hand over their hand and guiding them.
4. Demonstrate how to use glue or tape for someone that needs helps.
5. Circle around the group and make sure everyone is getting the help they need.
6. To make it easier, have some pre-cut pictures to choose from for people that cannot cut easily.
7. If someone is slow to get started, give them fewer choices. For example, instead of giving them a whole magazine to look through, give them two pictures to choose from.
8. Tell people they can make a collage for a friend and give it away when they are finished.
9. Ask someone who is very able to sit next to someone who needs help.
10. During the discussion, call group members by their name and give each person a chance to talk. Thank them for sharing. If someone is talking a lot and others do not have a chance, tell them, “thank you for sharing, I would like to hear from some other people as well”.
11. If someone has poor vision, describe the picture to them. Include all the details: what is happening in the picture, as well as colors and feelings.
Corn Husk Dolls

Appropriate Age Level: Adolescent through older adult

Why this activity is important to do:
• Create a craft with other people
• Practice using your hands to make something
• Mental stimulation through creative task

Things you will need:
• string
• scissors
• a bucket of water
• bags of cornhusks- what is available (dried, cleaned and in uniform sizes)

What staff should do:
• Peer mentors may assist a person in steps that they cannot do alone, like tying string and starting the next step.
• Peer mentors can ask people to join the activity.

Space needed for this activity:
• A room that is well lit is very important. This activity can be done outdoors if the weather is nice.
• Clear debris and other items from the workspace so people do not get confused.

How to do the activity:
Before beginning, soak corn husks in a bucket of water until they are soft and pliable.

1. Take four cornhusks and arrange them with the narrow end pointing down
2. Using a small piece of string, tie the straight ends together tightly
3. Trim and round the edges with scissors
4. Turn upside down and pull long ends of husks down over the trimmed edges
5. Tie with string to form the "head"
6. Take another husk, flatten it, and roll into a tight cylinder
7. Tie each end with string. This forms the doll’s arms
8. Fit the arms inside of the long husks, just below the "neck"
9. Tie with string, as shown, to form a "waist"
10. Drape a husk around the arms and upper body in a criss-cross pattern to form "shoulders"
11. Take four or five husks, straight edges together, and arrange around waist. These form a "skirt" for the doll
12. Tie with string
13. If desired, tie legs with small strips of husks to make legs. Finish off the doll by tying small strips of husk around the neck and waist to hide the string. Small scraps of cloth may be used to dress the doll

What can go wrong:
• Watch people to make sure they do not hurt themselves on the scissors
• People may not be able to tell which side is the narrow end of the corn husk

Ways to make activity easier or harder:
• Corn husks may also be made into angels. To do so, do not tie the ends of the dolls' arms. Instead, fan the arms out to look like wings
• Corn husks may also be used to weave a simple placemat or basket
• This craft may be made and given to someone in the hogar as a gift to create more friendships
• If an person is having a hard time tying parts of the corn husk, help by making the tie for them. Encourage independence in every step of the process.
• It is not necessary to make arms and legs on the dolls. A doll can be finished after step 5.
• For people do not follow directions easily, tell them how to do it one piece at a time. Wait until they are complete with one piece, and move on to the next piece.
Presentations

School of Occupational Therapy Research and Practice Symposium

May 2, 2014
The College of Health Professions offers an interdisciplinary travel opportunity to Nicaragua for approximately 20 students and faculty to provide health-related services for Nicaraguan older adults in partnership with the Jessie F. Richardson Foundation (JFRF). JFRF is a local charitable non-profit organization that advocates for quality of life and well-being for older adults both domestically and abroad.

Navigating Nicaragua Using the Occupational Therapy Process
Anah Gunesch, Kimberly Larsen, Elizabeth Martin, Kirstin Stoker

Advisor: Tiffany Boggis, MBA, OTR/L