2013

Community Based Program for Young Adults with High Functioning Autism: Social Participation and Dating

Brook Dahle
University of North Dakota

Laura Hennes
University of North Dakota

COMMUNITY BASED PROGRAM FOR YOUNG ADULTS WITH

HIGH-FUNCTIONING AUTISM: SOCIAL PARTICIPATION AND DATING

by

Brook Dahle, MOTS; Laura Hennes, MOTS

Advisor: Sarah K. Nielsen, Ph.D., OTR/L

A Scholarly Project

Submitted to the Occupational Therapy Department

of the

University of North Dakota

In partial fulfillment of the requirements

for the degree of

Master's of Occupational Therapy

Grand Forks, North Dakota
May 11, 2013

APPROVAL

This Scholarly Project Paper, submitted by Brook Dahle and Laura Hennes in partial fulfillment of the requirement for the Degree of Masters of Occupational Therapy from the University of North Dakota, has been read by the Faculty Advisor under whom the work has been done and is hereby approved.

_____

Faculty Advisor

_____

Date

PERMISSION

Title: Community Based Program for Young Adults with High-
                 Functioning Autism: Social Participation and Dating

Department: Occupational Therapy

Degree: Master's of Occupational Therapy

In presenting this Scholarly Project in partial fulfillment of the requirements for a graduate degree from the University of North Dakota, we agree that the Department of Occupational Therapy shall make it freely available for inspection. We further agree that permission for extensive copying for scholarly purposes may be granted by the professor who supervised our work or, in her absence, by the Chairperson of the Department. It is understood that any copying or publication or other use of this Scholarly Project of part of thereof for financial gain shall not be allowed without our written permission. It is also understood that due recognition shall be given to us and the University of North Dakota in any scholarly use which may be made of any material in our Scholarly Project Report.

Signature _____ Date _____

Signature _____ Date _____

TABLE OF CONTENTS

LIST OF TABLES

ACKNOWLEDGMENT

We would like to thank all of those who helped us along in this journey to become occupational therapists. To our family, thank you for your support and all your help throughout our academic careers. Thank you to all of the faculty in the occupational therapy department at the University of North Dakota for your clinical wisdom and knowledge. A special thanks goes to our advisor, Dr. Nielsen, for all of the time and effort you put into this project, as well as your wonderful advice.

-Laura Hennes, MOTS & Brook Dahle, MOTS

ABSTRACT

Purpose

In the United States, autism spectrum disorders affect 1 in 88 individuals (Centers for Disease Control and Prevention, 2012). Autism spectrum disorders affect individuals throughout their lifespan (Alexander, 2011). The most significant impairment in individuals with high functioning autism experience is qualitative impairment in social interaction (Sadock & Sadock, 2008). Services for individuals with autism spectrum disorders are available until the age of 21. Therefore, adults with autism spectrum disorders have limited access to intervention even though they continue to struggle (Shattuck, Wagner, Narendorf, Sterzinger, & Hansley, 2011). The focus of this project is young adults with high functioning autism spectrum disorder and the social interactions that occur in relationships, specifically dating.

Methods

An extensive literature review was conducted in order to understand difficulties individuals face in dating along with evidenced-based interventions for social participation. The information obtained from the literature review was then analyzed using the Person Environment Occupation model (Law et al., 1996). Through the use of the Person Environment Occupation model, a systematic analysis of the occupational performances issues was conducted. Areas of need were then identified and interventions were created to improve occupational performance specific to dating.

Results

      Based upon the methodology described above, we developed a community based

dating intervention protocol for young adults with high functioning autism spectrum

disorders. The program includes weekly 90 minute sessions for 14 weeks. Each session

focuses on a deficit area identified in the literature review as well as the systematic

analysis. Sessions are graded to build upon one another in order to facilitate successful

acquisition of dating skills.

Conclusion

      Several barriers may limit this programs implementation, such as the length of

dedicated time to the program, limited funding and resources, and the effectiveness and

validity of the program have not yet been researched. Despite these weaknesses, the

program has several areas of strength including filling a current need, serving adults with

autism spectrum disorders. The program is also based on research and grounded in a

model.

CHAPTER I

INTRODUCTION

In the United States, autism spectrum disorders affect 1 in 88 individuals (Centers for Disease Control and Prevention, 2012). Autism spectrum disorders describe individuals who have deficits in three major categories: (a) qualitative impairment in social interaction, (b) qualitative impairment in communication, and (c) restricted, repetitive, and stereotyped patterns of behaviors, interests, and activities (American Psychiatric Association [APA], 2000). The most significant impairment in individuals with high functioning autism experience is qualitative impairment in social interaction (Sadock & Sadock, 2008). Autism spectrum disorders affect individuals throughout their lifespan, and its impact on occupational performance is wide-ranging. Level of severity determines the specific diagnoses given to the child on the autism spectrum (Alexander, 2011). The focus of this project will be young adults with high functioning autism spectrum disorder and the social interactions that occur in relationships, specifically dating.

Impairment in social interaction may involve the inability to understand nonverbal behaviors or engage in meaningful activities with others (APA, 2000). They also experience verbal communication challenges which involve difficulty initiating or sustaining a conversation (APA, 2000). Individuals with autism spectrum disorders often times demonstrate sensory difficulties (Ben-Sasson et al., 2008; Brock et al., 2012). Sensory difficulties impact an individual's daily life, including socializing (Cole &

Tufano, 2008). Despite these challenges, young adults with autism spectrum disorders still want meaningful relationships, both platonic and intimate (Bauminger & Shulman, 2003; Hellman, Colson, Verbraeken, Vermeiren, & Deboutt, 2007; Mehzabin & Stokes, 2011). Even though individuals with high functioning autism disorders want relationships, they often need support in forming and maintaining these relationships (Bauminger & Shulman, 2003; Bauminger et al., 2008; Hellman et al., 2007; Mehzabin & Stokes, 2011).

Children with autism spectrum disorders receive a wide variety of services that are offered to assist the families and the individual. Services for individuals with autism spectrum disorders are available until the age of 21, when the individual no longer qualifies for many of the services (Shattuck, Wagner, Narendorf, Sterzinger, & Hansley, 2011). The challenges faced by individuals with autism spectrum disorder persist throughout their lifespan (Alexander, 2011). The treatment of autism spectrum disorders in adults remains an understudied area, suggesting there is a lack of services being provided to these individuals.

The Person Environment Occupation (PEO) model was chosen to guide this project as it clearly describes the dynamic relationship between a person, various environments, and the occupations they participate in. Individuals with autism spectrum disorders have deficits in the areas of social cognition, social perception, expressive skills, emotion regulation skills, executive function, and sensory (Ben-Sasson et al., 2008; Kennedy & Adolphs, 2012; Muller, Schuler, & Yates, 2008; Smith, Montagne, Perrett, Gill, & Gallagher, 2010). These individuals also experience challenges within their environment such as noise level, visual stimuli, and large groups of people. Services for

adults with autism spectrum disorders are also lacking (Shattuck et al., 2011). Adults

with autism spectrum disorders experience challenges with the skills of social

participation making it difficult to engage in social interactions (Bauminger & Shulman,

2003; Bauminger et al., 2008; Hellman et al., 2007; Mehzabin & Stokes, 2011). The goal

of the social participation program that we are proposing is to increase the area of

occupational performance by aligning aspects of the person, environment, and occupation

to make them more congruent.

Based on the social participation needs of young adults with autism spectrum

disorders that were informed by the literature review, a community-based social

participation program has been developed with an emphasis on dating. The goal of this

program is to increase this population's comfort level with social participation in social

settings in order to develop relationships. Factors that may influence the application of

this community-based program include: (a) number of participants, (b) resources, (c)

location, (d) available technology, and (e) funding.

<h2 style="text-align:center">Key Terminology</h2>

The following terms and concepts are used throughout the literature review and

program plan. Therefore, we have defined the following terms for clarification.

- **Young adults**: Individuals between the ages of 18 and 30 years old.

- **Asperger's disorder**: "Asperger's disorder can be distinguished from autistic

  disorder by the lack of delay or deviance in early language development" (APA,

  2000, p. 74).

- **High functioning autism:** High functioning autism is characterized as a less

  severe form of autistic disorder. The DSM-V is proposing that autism spectrum

<p style="text-align:center">3</p>

disorders exist on a continuum. Therefore, individuals with less severe symptoms

would be placed on the higher end of the continuum and be classified as high

functioning (APA, 2012).

- **Dating**: The social interaction between two people with mutual feelings who

    participate in public activities together as a method of determining compatibility

    for an intimate relationship (Ramey & Ramey, 2008).

Chapter II presents the results of a comprehensive literature review that provides a

basis for the community-based program. Chapter III will present the methodology and

the activities used to develop the program. The program is describe in Chapter IV and

available in its entirety in the Appendix. Finally, Chapter V is a summary of the program

that includes recommendations and limitations of the program.

CHAPTER II

LITERATURE REVIEW

Autism spectrum disorders describe individuals who have deficits in three major categories: (a) qualitative impairment in social interaction, (b) qualitative impairment in communication, and (c) restricted, repetitive, and stereotyped patterns of behaviors, interests, and activities (American Psychiatric Association [APA], 2000). Autism spectrum disorders affect 1 in 88 individuals in the United States (Centers for Disease Control and Prevention [CDC], 2012). Autism spectrum disorders affect individuals throughout their lifespan, and its impact on occupational performance is wide-ranging. Level of severity determines the specific diagnoses given to the child on the autism spectrum (Alexander, 2011). Specific diagnoses considered under the autism spectrum disorders include Rett's disorder, childhood disintegrative disorder, autistic disorder, Asperger's disorder, and pervasive developmental disorder, not otherwise specified. The APA (2012) has significantly revised the diagnostic criteria of autism spectrum disorders in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) which is to be released in the spring of 2013. The proposed changes to the descriptions of symptoms of autism will be on a spectrum from mild to severe instead of having three distinct diagnoses of autism, Asperger's, and pervasive developmental delay. The changes will aid in providing more accurate diagnosis and more focused treatment for those on the autism spectrum.

Diagnostic Criteria for Autism Spectrum Disorders

Qualitative Impairment in Social Interaction

Impairment in social interaction may involve the inability to understand nonverbal behaviors or engage in meaningful activities with others (APA, 2000). Individuals with autism spectrum disorders may demonstrate difficulty with the use and interpretation of non-verbal communication, such as eye contact and facial expressions. Individuals may display a lack of emotional reciprocity which makes it difficult to develop empathy for others. The social challenges that are included in diagnostic criteria for autism spectrum disorder may lead to difficulty with developing peer relationships, and the individual's behavior can be awkward or inappropriate.

Qualitative Impairment in Communication

One of the major criteria when diagnosing autism spectrum disorder involves disturbance in communication and language development (APA, 2000). Communication impairments include delay in spoken and non-verbal language as well as difficulty initiating or sustaining a conversation. Language impairment is one of the key features when diagnosing autism. A child with delayed development of language for communication or abnormal social interaction by the age of three years meets the criteria for autism (APA, 2000). Individuals with autism spectrum disorders can demonstrate echolalia and difficulties in articulation. Some individuals never develop language capability. According to Sadock and Sadock (2008), individuals with autism only develop useful speech approximately 50% of the time. Individuals with Asperger's disorder generally do not have clinically significant general delays in cognitive or language development (APA, 2000). Individuals with Asperger's disorder are also more

likely to seek social interaction than individuals diagnosed with autism (Sadock &

Sadock, 2008).

Restricted, Repetitive, and Stereotyped Patterns of Behaviors, Interests, and

Activities

Individuals with autism spectrum disorders can demonstrate stereotyped patterns

of behaviors, such as restricted topics of interests, inflexible routines, and repetitive

motor movements (APA, 2000). Individuals might be intensely preoccupied with

interests, such as spiders or cars. Sometimes individuals with autism spectrum disorders

are preoccupied with a specific part of an object of interest. If a change in schedule or

plan occurs, an individual may become upset and anxious. Finger flapping and other

repetitive motor movements can also be demonstrated by individuals with autism

spectrum disorder (APA, 2000).

As described previously, autism spectrum disorders include a broad range of

abilities which results in the child being diagnosed with autism, Asperger's disorder, or

pervasive developmental disorder, not otherwise specified. For the purpose of this

project, the program developers will be focusing on Asperger's disorder or high

functioning autism. The DSM-V will propose that Asperger's disorder be eliminated,

and instead it is more likely to be called high functioning autism (APA, 2012; Sadock &

Sadock, 2008). High functioning autism is characterized as having impairment with

social interactions and restriction in interests. Similar to autism spectrum disorders, high

functioning autism involves a spectrum of abilities. Some individuals experience more

challenges with social interactions than others. The most significant impairment

individuals with high functioning autism experience is qualitative impairment in social

interaction (Sadock & Sadock, 2008). Impairments in social interaction make it difficult for individuals with high functioning autism to develop relationships.

<div align="center">**Person Environment Occupation Model**</div>

The Person Environment Occupation (PEO) model was chosen to guide this project, as well as be the organizing frame of the literature review (Law et al., 1996). The PEO model clearly describes the dynamic relationship between people and the occupations they participate in their various environments (Strong & Gruhl, 2011). The person, environment, and occupation aspects of this model are interdependent and are unique to each individual's experience. The characteristics of the person include spirituality, as well as social and cultural experiences. Environment involves the context in which the person engages in occupation including cultural, institutional, physical, and social environments. Occupations are considered to be the activities people engage in while in various roles and settings, such as activities of daily living, instrumental activities of daily living, education, work, play, leisure, and social participation (Strong & Gruhl, 2011).

Person

Nonverbal skills. Research has shown that individuals with high functioning autism have difficulty interpreting subtle facial expressions (Smith, Montagne, Perrett, Gill, & Gallagher, 2010; Kennedy & Adolphs, 2012). Kennedy and Adolphs (2012) found that adults with high functioning autism have an overall decreased specificity in facial expression. Adolescent males with high functioning autism have been shown to have increased difficulty with the subtle facial expressions of disgust, anger, and surprise

(Smith et al., 2010). Impairment in recognizing facial expressions may make it difficult for individuals to build relationships.

Dratsch et al. (2012) found that individuals with high functioning autism have an impaired ability to distinguish between direct and averted eye gaze. During a study in which participants with high functioning autism used a computer mouse to signal when eye gaze was direct, the participants with high functioning autism were less accurate than the control group which consisted of typically developing individuals. The data suggests that individuals with high functioning autism may have difficulty with passive perception of social cues (Dratsch et al., 2012).

Sensory skills. Sensory integration is defined as, "the brain's ability to organize sensory information received from the body and environment and to produce an adaptive response" (Cole & Tufano, 2008, p. 229). Sensory integration involves all five senses of the human body which are auditory, vestibular, proprioceptive, tactile, and visual. When these senses are unbalanced, individuals may have difficulty in everyday occupations. Individuals with autism spectrum disorders often times demonstrate sensory processing difficulties (Ben-Sasson et al., 2008; Brock et al., 2012). Ben-Sasson et al. (2008) found that individuals with autism spectrum disorders have more sensory difficulties than typically developing individuals. These difficulties involve being over and under responsive to sensory stimuli (Ben-Sasson et al., 2008). Sensory modulation difficulties impact an individual's daily life, including socializing (Cole & Tufano, 2008). Pfeiffer (2012) found that hypersensitivity and anxiety are interconnected, and that when hypersensitivity is treated, individuals may experience a decrease in anxiety. According

to Ramey and Ramey (2008), sensory difficulties may negatively affect forming and maintaining relationships.

Feelings of anxiety and isolation. Individuals with high functioning autism describe social challenges as feeling isolated and have difficulty in social situations, such as initiating conversations (Muller, Schuler, & Yates, 2008). Another challenge that these individuals encounter is intimacy. Individuals with high functioning autism do, in fact, desire greater intimacy with other individuals. Research has concluded that social anxiety impacts social interactions for individuals with high functioning autism (Gillott & Standen, 2007; Muller et al., 2008; Pfeiffer, 2012; Rieske, Matson, May, & Kozlowski, 2012; Trembath, Germano, Johanson, & Dissanayake, 2012).

The social deficits that individuals with high functioning autism encounter may have a link to the degree of anxiety they experience (Rieske et al., 2012). When compared to adults with intellectual disabilities, adults with autism are three times more anxious in the areas of obsessive-compulsive, generalized anxiety, and separation anxiety (Gillott & Standen, 2007). High anxiety has been shown to stem from stress in daily life, such as inability to cope with change and sensory stimuli. A great amount of anxiety has been revealed to lower one's ability to effectively cope with stressors (Gillott & Standen, 2007). Young adults with autism spectrum disorders report several additional sources of anxiety ranging from the environment to interactions with others to fearful anticipation of an outcome (Trembath et al., 2012). When feeling anxious, these individuals experience increased heart rate, distraction, obsessive thoughts, behaviors, and frustration. High amounts of stress and anxiety may deter individuals with autism spectrum disorders from engaging in social interactions (Trembath et al., 2012).

Gender differences. In regard to gender differences, males are more often diagnosed with autism spectrum disorder than females. Males out number females in ratios as high as 2.7–7.2: 1, respectively (CDC, 2012). Meng-Chuan et al. (2011) found that self-reports of males and females with high functioning autism do not differ in the areas of empathy, anxiety, or obsessive-compulsive traits. Tamara, Kim, and Rinehart (2012) found that males demonstrate increased inattention, communication difficulties, and repetitive motor movements more than females; regardless if they are typically developing children or diagnosed with an autism spectrum disorder. Hyperactive symptoms in males may contribute to more clinical referrals leading to an autism spectrum disorder diagnosis (Tamara et al., 2012). Females have been found to report more lifetime sensory symptoms and more self-reported autistic traits than what they display. Research has shown that females may be able to better adapt or compensate for autistic traits than males, which may account for why females are diagnosed less often than males (Dworzynski, Ronald, Bolton, & Happe, 2012). Despite having equally high levels of autistic traits, females are not likely to meet autism spectrum disorder criteria unless they have additional intellectual or behavioral problems. This indicates that females may be able to camouflage characteristics of autism spectrum disorder better than males (Dworzynski et al., 2012; Meng-Chuan et al., 2011).

Environment

Virtual environment. With the increasing ease of access to the internet, video games, and social media, the population as a whole has increased interaction with virtual environments. However, recent studies have shown that individuals with autism spectrum disorders tend to spend more time in these virtual environments than the

typically developing population (Orsmond & Kou, 2011; Reynolds, Bendixen, Lawrence, & Lane, 2011). Virtual environments may be appealing to individuals with autism spectrum disorders due to that fact that they are often rules based and require fewer social skills than face to face interactions (Wilkinson, Ang, & Goh, 2008).

    The internet and social media. Modern society includes people communicating with other people without having to speak or even be in the same room. This technology has benefitted individuals with autism spectrum disorders. Computer based communication, such as chat rooms, instant messaging, Facebook, and countless others offer an environment where individuals can socialize in a structured exchange with a reduction of nonverbal cues (Burke, Kraut, & Williams, 2010). Burke et al. (2010) found that 38% of individuals with high functioning autism use computer-based communication in the area of online dating. When compared to the United States population, only 6% of the typically developing population utilizes online dating services. Similarly, 56% of the sample of individuals with high functioning autism used discussion forums, and only 40% of the United States population use those (Burke et al., 2010).

    Online environments can provide the ideal setting for individuals with autism spectrum disorders to meet new people. Burke et al. (2010) also found that 56% of the participants used the internet to form new friendships or to look for a romantic partner. Individuals with autism spectrum disorders have identified online environments as beneficial for making initial contact with others due to the fact that they offer individuals more time to think about what they want to say without having the stress of maintaining social norms, such as eye contact (Burke et al., 2010; Reynolds et al., 2011).

As beneficial as online environments are for initiating contact, maintaining relationships and transferring from virtual to physical environment is a challenge. Many of the difficulties come from knowing who to trust online and knowing how much information to disclose. Individuals also struggled with understanding social rules from face to face interaction and applying them to virtual interactions (Burke et al., 2010).

Social and economic systems. Individuals with autism spectrum disorders and their families often face many challenges in navigating services that are available to them. When the individuals are young, there is a wider variety of services that are offered to assist the families and the individual. With the establishment of the Home and Community-Based Services (HCBS) waivers as authorized in §1915(c) of the Social Security Act, each state has the option to request waivers to provide home and community-based alternatives to institutional care. The HCBS waiver program allows states to have the option to create specific waivers. A few states have specific waivers for children with autism. However, 86% of the states have waivers for individuals with developmental disabilities which may cover services for children with autism (Spigel, 2007). Each state can decide what services the waiver covers for individuals with autism spectrum disorders. Some of the services they can receive include: (a) respite care, (b) environmental accessibility adaptations, (c) family training, (d) case management, (e) supported employment, (f) residential habilitation, (g) intensive individual support services, and (h) therapeutic integration (Maryland State Department of Education, 2009). However, once the individual reaches 21 years of age, or younger in some states, he or she would no longer be covered under the waiver (Maryland State Department of Education, 2009; Spigel, 2007).

In the state of North Dakota, individuals from birth though four years of age with a diagnosis of an autism spectrum disorder may qualify for services under the Autism Waiver. The North Dakota Autism Waiver was approved by the Centers for Medicare and Medicaid Services from November 1, 2010 to October 31, 2013 with the capacity to serve 30 children. In its second year (November 1, 2011 to October 31, 2012), 19 children received services. The services covered by the Autism Waiver of North Dakota included: (a) in home supports, (b) equipment and supplies, (c) environmental modification, and (d) therapy services such as occupational therapy, speech therapy, and physical therapy (North Dakota Department of Human Services, 2012).

In the state of Minnesota, there currently is not a specific autism waiver. In Minnesota individuals with autism spectrum disorders may qualify for services under a comprehensive developmental disabilities waiver or for more specific waivers such as a Personal Care Assistance waiver or for the Family Support Grant Program. Services covered under Minnesota's Developmental Disabilities waiver include services such as: (a) in-home family support, (b) assistive technology, (c) case management, (d) home and vehicle modification services, (e) specialist services, and (f) transportation services (Minnesota Department of Human Services, 2011).

Children and young adults with autism spectrum disorders can receive services through their school system until they are 21 years of age. Once again, after they age out of the system children with autism lose their services. Shattuck, Wagner, Narendorf, Sterzinger, and Hansley (2011) conducted a nationwide study using data from the National Longitudinal Transition Study 2 (NLTS2), a study conducted by the United States Department of Education. Upon review of the data, Shattuck et al. (2011) found

that while in the school system, 46.9% of individuals with autism spectrum disorders had

medical services, 46.2% received mental health services, and 63.6% had a case manager.

However, after children aged out of the programs, the percentages of individuals

receiving services dramatically dropped by almost 20% in each category (Shattuck et al.,

2011).

The exit from high school is a pivotal time for all youth; and a positive transition

creates a solid foundation for an adaptive adult life. For young adults with high

functioning autism, this period can be an especially vulnerable and challenging time in

their life as the structure and assistance fades away (Shattuck et al., 2011). Services for

young adults who age out of the system are limited, especially for those who are high

functioning. After age 21, individuals with high functioning autism may receive services

only if they are deemed medically or psychologically necessary. Professionals making

the referrals may also be unintentionally limiting access to services by narrowing in on

specific problems and not looking at the individual holistically (Koenig & Kinnealey,

2010).

As more is learned about autism spectrum disorders and the challenges

individuals face across a lifespan, the greater the importance of service availability for

individuals with autism spectrum disorders. Some states across the nation have begun to

recognize this need and have started to take action. In 2007, Wisconsin implemented an

interagency agreement with the state's Department of Instruction, Department of

Workforce Development, and the Department of Health Services to address transitional

issues faced by individuals with developmental disabilities, including those with autism

spectrum disorders (Centers for Medicare and Medicaid Services, 2011). In 2010, the

group developed the Transition Action Guide for Post-School Planning (TAG). The goal of the guide is to support the smooth transition of children with disabilities from school to further education, work, and/or independent living by improving the communication between agencies and services about the child's strengths and needs. The guide outlines the expectations of each member of the transition team as well as techniques and strategies to involve family members and prepare for Individualized Education Program (IEP) and Individualized Services Plan (ISP) meetings. The Transition Action Guide for Post-School Planning helps to connect the individual to community services and to coordinate services with an emphasis towards daily living skills, community engagement, and independent living (Centers for Medicare and Medicaid Services, 2011).

In 2009, Pennsylvania implemented the Adult Community Autism Program (ACAP) (Centers for Medicare and Medicaid Services, 2011). The program offers adults with autism spectrum disorders and their families a range of services and supports through a managed care system. The program is primarily funded through Pennsylvania's Department of public Welfare and operates much like a special needs plan. The Adult Community Autism Program provides a wide variety of community based services such as: medical, psychological, habilitation, prevocational, companion, transportation, therapies, supported employment, respite, and many others. This is one of the few programs that require the individual to be 21 years or older and focuses on specific needs of the adult with autism spectrum disorder (Centers for Medicare and Medicaid Services, 2011). As the need for services for adults with autism spectrum disorders is recognized, more and more states are starting to reach out to this population and develop programs to meet their needs.

Occupation

Another component of the PEO model is occupation. Occupations are the activities and tasks completed in managing a person's daily life (Cole & Tufano, 2008). As a population, we all participate in similar occupations such as grooming, education, and leisure activities. The level of importance is uniquely defined by each individual. By learning how an individual spends their time, one can gain insight into what they find meaningful. In a time usage study of adolescents with autism spectrum disorders, Orsmond and Kuo (2011) found that on average 36% of their time is spent sleeping, 18% of their time was spent participating in non-discretionary activities, 11% on personal care, and 35% of their time is spent participating in discretionary activities (Orsmond & Kuo, 2011).

Leisure. Understanding people's use of free-time is one method of understanding their interests. Orsmond and Kuo (2011) found that adolescents with autism spectrum disorders spent the majority of their time participating in watching television, using the computer, and physical activities including walking. Similarly, Reynolds et al. (2011) found children (6-12 years old) with autism spectrum disorders spent their leisure time reading, using computer, and playing video games. It was also found that these individuals participated in activities by themselves or with a relative, such as a parent or sibling (Orsmond & Kuo, 2011). A commonality between these studies is that the individuals participated in occupations in which there is a low demand for face to face social interaction; therefore, requiring fewer social skills.

Social Participation. One of the more well-known diagnostic criteria for autism spectrum disorders is the difficulty faced with social participation. With such difficulties

in participating socially, one may wonder if individuals with autism spectrum disorders are interested in forming relationships with others. Do they want friends? Do they want to date? Are they interested in sexual relationships? Studies have shown that, yes, individuals with high functioning autism disorder do want relationships both platonic and intimate. Even though individuals with high functioning autism disorder want relationships, they often need support in forming and maintaining these relationships (Bauminger & Shulman, 2003; Bauminger et al., 2008; Hellman, Colson, Verbraeken, Vermeiren, & Deboutt, 2007; Mehzabin & Stokes, 2011).

Friendship. Friendship is a significant social experience that enables individuals to develop and practice prosocial behaviors. Developing friendships and being a friend helps develop empathy, sharing, caring, and emotional support (Buhrmester, 1996). Developing friendships and intimate relationships requires certain skills, such as the ability to understand another's perspective, emotional regulation, conflict resolution skills, and the ability to compromise (Bauminger & Shulman, 2003; Bauminger et al., 2008; Buhrmester, 1996).

Using qualitative interviews with mothers of children with autism spectrum disorders, Bauminger and Shulman (2003) found that the following factors contributed to forming friendships: (a) studying in the same class, (b) spending time together in afterschool activities, and (c) support from the individual's family and teachers. Mothers of individuals with autism spectrum disorders believed that their friends' same level of function and social activity was important to maintaining the friendship when both friends had autism spectrum disorders. In the case of typically developing friends, mothers reported that the friends' warmth and compassion helped maintain the

friendship. Relationships were very rarely formed spontaneously or persisted without the

help and support of others in the individual's social environment (Bauminger & Shulman,

2003).

Although individuals with high functioning autism disorder may need support to

form and maintain relationships, there are many benefits to being a friend and having a

friend. Bauminger et al. (2008) found that friendships between an individual with autism

spectrum disorders and a typical developing individual were more stable and durable.

This friendship exhibited higher levels of goal orientated behaviors. Friendships

promoted responsiveness to others and cohesiveness. Friendships between individuals

who both have autism spectrum disorder or other developmental disorders also have

benefits. The reciprocal nature of friendship helps to improve consideration and

awareness of others feelings. It is clear that these individuals want to form relationships

and can do very well in friendships when supported. Individuals with autism spectrum

disorders are able to learn from their peers to improve social skills (Bauminger &

Shulman, 2003; Bauminger et al., 2008).

Intimate Relationships. Friendship is an important building block to developing

more serious and intimate relationships. Research has concluded that individuals with

high functioning autism are interested in sexual relationships (Hellman et al., 2007;

Mehzabin & Stokes, 2011). Hellman et al. (2007) found that 23 out of 24 male

participants with high functioning autism were interested in sexuality. Nearly half of the

participants wanted to give and receive affectionate touch from others. Ten of the

participants expressed desires to be in an affectionate and/or sexual relationship and five

participants expressed frustration about not being able to establish such a relationship. In

conjunction with this, Mehzabin and Stokes (2011) surveyed young adults and adults

with high functioning autism and typically developing individuals on sexual behavior,

sex education, sexual experience, and sexual concerns. The participants with high

functioning autism had less experience, fewer behaviors, less sex education, and more

sexual concerns than the typically developing participants. The majority of the

individuals with high functioning autism did continue to express interest in sexual

relationships (Mehzabin & Stokes, 2011).

Several studies support that individuals with high functioning autism are

interested in forming sexual relationships (Hellman et al., 2007; Mehzabin & Stokes,

2011). With the desire to form these relationships, also come challenges unique to those

individuals with high functioning autism. Hellman et al. (2007) reported that the most

common problems males with high functioning autism had with sexuality involved

talking too frankly about sexuality, touching self in public, and lack of intimate hygiene.

It was also reported that the participants had difficulties knowing who and when it was

appropriate to touch affectionately including acts of hugging, kissing, and cuddling.

Individuals were challenged with understanding social cues that would direct this

behavior. Mehzabin and Stokes (2011) found that young adults and adults with high

functioning autism knew less about sexual education than their typically developing peers

and what they did know about sex was often reported as learned from the television and

"by making mistakes" (Mehzabin & Stokes, 2011, p. 619). They also found that the

participants with high functioning autism had more concerns about their sexual responses

than their typically developing counterparts (Mehzabin & Stokes, 2011). These concerns

indicate that individuals with high functioning autism are thinking about intimate

relationships, yet they need help and support in knowing how to appropriately form these types of relationships.

Role of Occupational Therapy

Following the occupational therapy domain and practice, the role of the occupational therapist within the autism spectrum disorder population is similar to that of any other population occupational therapist work with, "to support the individuals' health and participation in life through engagement in occupations" (American Occupational Therapy Association [AOTA], 2008, p. 626). Occupational therapists provide "evaluation, intervention, and assessment outcomes" (AOTA, 2010, p. 127). Throughout this process, the family is often involved and is in collaboration with the therapist and the individual. Occupational therapy is client-centered, and interventions for individuals with autism spectrum disorders are determined by the individual's specific goals and priorities for participation in occupation (AOTA, 2010). As described earlier, individuals with autism spectrum disorders often experience challenges in social participation, communication, and sensory integration, so interventions typically focus on those areas. Occupational therapy is holistic and looks at the entire person and the environments in which the person interacts with. Occupational therapists working with individuals with autism spectrum disorders are in continuous collaboration with family members, caregivers, and educators to determine goals and areas of priority (AOTA, 2010).

Occupational therapy is most frequently utilized with individuals with autism spectrum disorders in the younger years. The majority of research on occupational therapy services and autism spectrum disorders interventions consist of child participants. However, many of the principles of occupational therapy interventions researched may be

applied across the life span of the individual, such as social skills training. Occupational

therapists use a variety of social- emotional approaches, such as social stories or training

scripts, to promote social emotional performance, communication, and self-esteem

(Bauminger, 2002; Howlin & Yates, 1999). Occupational therapists also utilize

structured activities to improve social participation (LeGoff & Sherman, 2006). These

interventions can help teach the individual with autism spectrum disorder valuable life

and social skills that can help them become as independent as possible.

When choosing the type of intervention for a client, the occupational therapist not

only considers the unique client factors, but also the occupational therapist considers the

evidence behind the intervention. In the field of occupational therapy, there has been a

considerable amount of research conducted to identify evidence-based interventions for

children with autism spectrum disorders. However, little is found for interventions with

young adults or adults. In a review of interventions used with children with autism

spectrum disorders, Case-Smith and Arbesman (2008) identified six different intervention

approaches researched and used by occupational therapists. Interventions included: (a)

sensory integration/sensory based, (b) relationship based or interactive, (c) developmental

skills based, (d) social-cognitive skills training, (e) parent directed/mediated, and (f)

intensive behavioral interventions (Case-Smith & Arbesman, 2008). No one intervention

can work for all individual client factors, yet when combined, it can create a cohesive

individualized treatment plan to target goal areas.

Evidenced-Based Interventions

One of the main goals of intervention for individuals with high functioning autism

is to target behaviors that will aid in their ability to develop meaningful relationships with

peers. Autism spectrum disorders are social participation disorders in which individuals

have impairment with their social skills making it difficult to form meaningful

relationships. Many interventions used with individuals with autism spectrum disorders

have been researched and published into literature. However, most of the literature is

specific to children (Alexander, 2011). Even though the challenges individuals with

autism spectrum disorders face as children and adolescents follow them into adulthood,

autism spectrum disorders in adults remains and understudied area (Alexander, 2011;

Case-Smith & Arbesman, 2008; Gillott & Standen, 2007).

Based upon the needs of individuals with autism spectrum disorders, the

following evidenced-based theoretical principles and approaches will be reviewed: (a)

visual learning, (b) behavioral theory, (c) social learning theory, (d) peer based

approaches, and (e) sensory integration.

Visual Learning

Individuals with high functioning autism have strengths in the areas of visual

perception and visual-spatial tasks rather than verbal reasoning (Alexander, 2011; Sadock

& Sadock, 2008). Klin et al. (2007) found that individuals with high functioning autism

may have difficulty with adapting previously learned skills into real life. Techniques that

can be used to assist with adaptive skills involve social skills training, role playing, and

practicing in real life (Alexander, 2011).

Visual learning approaches. Research has also shown that visual learning and

visual cuing methods are beneficial to those on the autism spectrum regardless of the

theoretical approach (Case-Smith & Arbesman, 2008; Rao & Gagie, 2006). Parker and

Kamps (2011) found that the use of social scripts and language cards used as visual cues

helped to increase peer-directed verbalizations. Modeling and role playing activities have been utilized to improve behavior in social situations and have shown to have positive outcomes (Palmen, Didden, & Lang, 2012). Video modeling has been shown to enhance social initiation skills, and the behavior changes were maintained through a two month follow-up (Nikopoulos & Keenan, 2007; Reichow & Volkmar, 2010). Video modeling tunes into the visual learning style of those with autism spectrum disorders, and this method tends to have a positive effect. However, this method should be used with other intervention methods (Reichow & Volkmar, 2010). A more modern approach to improve social skills is through the use of virtual conversation (Trepagnier, Olsen, Boteler, & Bell, 2011). Participants with high functioning autism who utilized the virtual conversation program gave positive feedback on the quality and credibility of the interaction with the virtual conversation partner. Most of the participants stated the prototype conversation simulation was helpful (Trepagnier et al., 2011).

Behavioral Theory

In behavioral learning theory, learning is transferred to novel situations by practicing new information (Braungart, Braungart, & Gramet, 2011). Individuals implementing the behavioral learning theory utilize techniques such as instruction, modeling, coaching, and reinforcements in order to facilitate desired behaviors (Cole & Tufano, 2008). These techniques can be combined through shaping and chaining in which the individual is rewarded for the desired outcome. Reinforcements can be used to increase a desired behavior as the individual progresses towards more complex tasks (Cole & Tufano, 2008). Reinforcements are most effective when applied in a systematic

and conscientious method (Watling & Schwartz, 2004). The change in behaviors are external in the fact that they are observable and measureable (Cole & Tufano, 2008).

      Behavioral theory approach. Developmental skill-based programs may have positive effects in the area of social interactions and relationships (Case-Smith & Arbesman, 2008; Reichow & Volkmar, 2010). When social cognitive skills are explained, modeled, and practiced, they are capable of having positive effects (Case-Smith & Arbesman, 2008; Chung et al., 2007). Applied behavioral analysis is an intervention type that includes prompting and reinforcement (Reichow & Volkmar, 2010). The efficacy of positive reinforcement has been supported for over 35 years, and it is also useful when modifying behavior in children with developmental disabilities (Watling & Schwartz, 2004). Applied behavioral analysis was the most common intervention types used in a literature review focusing on improving social skills for individuals with autism spectrum disorders (Reichow & Volkmar, 2010; Watling & Schwartz, 2004).

Social Learning Theory

      The social learning theory looks at the person, environment, and behavior as well as cognition and its role in person-environment interactions (Cole & Tufano, 2008). Major aspects of this theory include observational learning, modeling, hierarchy of reinforcement, self-control and self-regulation, self-efficacy, self-awareness, and insight. The social learning interaction includes the environment, person, and behavior. These three features overlap and contribute to social learning. Individuals with high functioning autism may benefit from social learning theory as they are visual learners (Sadock & Sadock, 2008). Research suggests that through social learning theory, individuals can

learn within a social context through role play, observation, modeling, problem solving, reinforcement, and practicing skills in real life scenarios (Cotugno, 2009; Stern, 2009).

A variety of interventions to improve social skills have been shown through research as having positive results when working with this population; such as modeling, role playing, leisure engagement, social cognition and interaction training, relationship-based interventions, skill-based programs, visual cueing and visual learning, video modeling, parent assisted social skills programs, virtual conversation, and social scripts (Case-Smith & Arbesman, 2008; Laugeson, Frankel, Gantman, Dillon, & Mogil, 2012; Nikopoulos & Keenan, 2007; Palmen, Didden, & Korzilius, 2011; Palmen et al., 2012; Parker & Kamps, 2011; Tumer-Brown, Perry, Dichter, Bodfish, & Penn, 2008). Relationship-based, interactive interventions and developmental skill-based programs have been shown to have small, positive effects. Small positive effects have occurred during social-cognitive training interventions when skills are explained, modeled, and practiced. Social stories and social skills training groups both have positive effects as well (Case-Smith & Arbesman, 2008).

Social learning approaches. A study conducted to explore the feasibility of the Social Cognition and Interaction Training (SCIT) modified for the use with individuals with high functioning autism (SCIT-A) found that the majority of the participants said it was "useful" or "very useful" (Tumer-Brown et al., 2008). Three phases were utilized during this training. The first phase was "emotion training" which consisted of defining emotions, emotion mimicry training, and understanding interest/disinterest. The second phase included "figuring out situations" which consisted of distinguishing socially relevant facts from socially irrelevant facts, jumping to conclusions, and understanding

bad events. The third phase was "integration" which consisted of checking out guesses in real life. A videotape of social situation examples was also shown to the participants. Participants demonstrated improvements in theory-of-mind skills and social communication skills (Tumer-Brown et al., 2008). Utilizing visual learning experiences, such as modeling, role playing, and videos have been shown to improve behavior in social situations (Palmen et al., 2012).

Leisure and social supports. An additional method for increasing social connections includes participating in leisure activities. According to Palmen et al. (2011), a leisure program that offers client support strategies and a cognitive behavioral component may successfully increase participation in leisure activities in young adults with autism spectrum disorder. The program contained five components: (a) introduction, (b) assessment, (c) leisure engagement, (d) leisure management, and (e) generalization. Within the experimental group, the authors found that participants had a statistically significant decrease in the need for leisure support in the areas of making leisure choices, arranging leisure activities, and planning leisure activities. The authors also found that participants in the program reported higher satisfaction with leisure activities (Palmen et al., 2011). This increase in satisfaction and independence may improve a young adult's confidence for participating in social activities and forming relationships with others.

Adults with high functioning autism suggest the following social supports to aid in the process of overcoming social challenges: (a) external supports, (b) communication supports, and (c) strategies for coping with anxiety (Muller et al., 2008). External supports can include small groups and structured activities based on shared interests of

one another. Communication supports may involve strategies for interpreting social cues

and how to use them effectively. Individuals describe examples of coping strategies for

anxiety as creative outlets, spending time alone, and exercise (Muller et al., 2008).

Additional strategies young adults with autism spectrum disorders have utilized to deal

with anxiety involve developing multiple interests, therapy, exercise, self-talk, deep

breathing, and talking with a trusted person (Trembath, et al., 2012). Meng-Chuan et al.

(2011) found that males and females with high functioning autism equally self-report as

experiencing social anxiety. However, males and females with high functioning autism

do differ in the areas of diagnosis, sensory symptoms, and attention (Meng-Chuan et al.,

2011; Tamara et al., 2012).

     Peer based. Peer-based intervention programs have been utilized to address

social competency needs of children with autism spectrum disorders (Cotugno, 2009).

These programs have been shown to significantly improve social behavior and

adjustment behavior when carried out through a structured, staged program (Cotugno,

2009). Training peers to assist with interventions may be beneficial to individuals with

high functioning autism. Chung et al. (2007) found that prerequisites are needed in order

to carry out a successful peer-training program. Some of these skills include the ability to

attend, listen, take turns, and use appropriate voice volume. The use of trained peers to

carry out the interventions has been found to be more beneficial than untrained peers

(Chung et al., 2007; Kamps et al., 2002; Pierce & Schreibman, 1997). Reichow and

Volkmar (2010) suggest using peer training for individuals with autism of all ages, even

though research has primarily been done with preschool and school-aged children.

Kamps et al. (2002) found that peer-mediated interventions for individuals with autism

spectrum disorder may be effective with improving social interactions. In a systematic review of 42 studies with 172 participants and 396 trained peers, 91% reported the outcomes were mostly positive (Chan et al., 2009). Trained peers have the prior knowledge of how and when to provide feedback and verbal prompts. Chung et al. (2007) suggest the importance of developing a more orderly peer-training program so that the quality of the program may be increased.

Sensory Integration Theory

As stated above, individuals with autism spectrum disorders have sensory difficulties. Anxiety and hypersensitivity impact one another and can interfere with daily life (Pfeiffer, 2012). Hypersensitivity to stimuli may cause an increase in anxiety. When treating hypersensitivity, it has been reported that the individuals also have a decrease in anxiety. Pfeiffer (2012) suggests that the intervention approach should promote self-advocacy and be incorporated into the individual's daily routines so that they will be able to make adaptations in their environment as well as social supports. The program developers will address the impact of sensory modulation difficulties and its role in relationships in the program plan.

Sensory integration interventions. Some of the most commonly used interventions by occupational therapists include sensory integration and sensory based, which have been shown to modulate behavior and assist in encouraging participation in social interactions (Case-Smith & Arbesman, 2008; May-Benson & Koomar, 2010; Pfeiffer, Koenig, Kinnealey, Sheppard, & Henderson, 2011). Sensory integration interventions have been shown to have positive effects for individuals with autism spectrum disorder (May-Benson & Koomar, 2010; Pfeiffer et al., 2011). Unfortunately,

the majority of sensory integration studies have been completed with children. According to Pfeiffer et al. (2011), sensory integration interventions may assist with treating the core symptoms of autism spectrum disorders in children. When focusing on sensory processing, motor skills, and social functioning, children participating in a sensory integration program showed more improvement than children in a fine motor program. The children also demonstrated fewer stereotyped patterns of behaviors than the fine motor group (Pfeiffer et al., 2011). Sensory integration has also been shown to have positive results in the areas of attention, behavioral regulation, reading, and play (May-Benson & Koomar, 2010).

CHAPTER III

METHODOLOGY

Our initial project idea was to develop programming for young adults who have

an autism spectrum disorder. Through an initial review of the literature, it was identified

that there were limited services for young adults with autism spectrum disorders,

specifically those with high functioning autism or Asperger's Disorder. It was further

identified that although difficulties with social participation and forming relationships

persist into adulthood, there are significantly limited community services related to these

issues for young adults with high functioning autism who wish to date (Gillott &

Standen, 2007; Muller, Schuler, & Yates, 2008; Pfeiffer, 2012; Rieske, Matson, May, &

Kozlowski, 2012; Trembath, Germano, Johanson, & Dissanayake, 2012). Once the

problem was identified, an extensive review of the literature was completed. Literature

articles were obtained through a search of the CINAHL database, PubMed, and the

American Occupational Therapy Journal using the search terms "autism," "autism

spectrum disorders," "autism and young adults," "high functioning autism," and "autism

and dating." The autism spectrum disorder Critically Appraised Topics and Critically

Appraised Papers on the American Occupational Therapy Association website were also

reviewed to ensure that current and evidenced based information was obtained.

Information obtained from the review of the literature was organized using the

Person Environment Occupation model (Law et al., 1996). This model was chosen to

organize the literature and to guide the program development due to its unique look at the

individual aspects of the person, environment and the occupation; as well as the

combined effects of these on occupational performance (Law et al., 1996; Strong &

Gruhl, 2011). Findings of the literature review were organized into the categories of

person, environment, and occupation. Following the model, information pertaining to the

person included skills and skill deficits, as well as social and cultural experiences of the

individual with autism. The environment section describes the context in which the

person engages in occupation including cultural, institutional, physical, and social

environments. The occupation section includes information regarding activities related to

social participation and relationship of those with autism including the various roles and

settings.

Once the information was obtained and organized, patterns of deficits started to

emerge. Through a systematic analysis of the occupational performances issues, as

shown in Table 1, areas of need were identified using the Person Environment

Occupation model. Each component (person, environment, and occupation) was first

assessed individually. Then the transactions between the person and the occupation,

occupation and the environment, and the person and the environment were assessed.

From this, interventions were identified to improve occupational performance specific to

dating.

Intervention methods that have been used when working with individuals with

autism were researched and identified through the literature review process. Aspects of

social learning theory, cognitive behavioral continuum, and sensory integration theory

were identified as having successful outcomes with individuals with autism and were

applied in the development of the interventions. Interventions were then developed based

on the issues related to dating recognized in the systematic analysis and by incorporating

the above mentioned theories. The interventions were structured by using Cole's Seven

Steps (Cole, 2005) to create a format that is easy for group members to follow and

occupational therapist to lead.

Table 1
Systematic analysis of occupational performance of dating

Occupational Performance Issue		
Dating: The occupational performance issue is dating secondary to difficulty forming relationships with others due to deficits in communication and social skills, as well as emotion regulation skills.		
Assessment of Main Components		
<u>**Person**</u>	<u>**Environmental Conditions**</u>	<u>**Occupational Demands**</u>
Deficits in Social Cognition (Alexander, 2011) • Effective analysis of social stimulus. • Ability to plan an effective response. • Integration and generalizing novel information and previously learned information • Understanding appropriate physical space **Deficits in Social Perception** (Smith, Montagne, Perrett, Gill, & Gallagher, 2010; Kennedy & Adolphs, 2012) • Identifying affective cues • Perceiving physical responses and space **Deficits in Expressive Skills** (Dratsch et al., 2012) • Appropriate nonverbal behavior • Eye contact • Initiation and termination of conversations **Deficits in Emotion Regulation Skills** (Gillott & Standen, 2007; Muller, Schuler, & Yates, 2008; Trembath et al., 2012) • Displaying appropriate emotions • Recovering from an emotional experience • Controlling anxiety	**Cultural** (Wade, 2002) • Society's belief of non-typically developing individuals should not be in intimate relationships **Institutional** (Shattuck, Wagner, Narendorf, Sterzinger, & Hansley, 2011; Spigel, 2007) • Lack of available services due to aging out of the system **Physical** (Ben-Sasson et al., 2008) • Noise, visuals and lots of people may cause sensory overload **Social** (Wade, 2002) • Lack of understanding by others **Virtual** (Orsmond & Kou, 2011; Reynolds, Bendixen, Lawrence, & Lane, 2011) • Higher use of virtual environment	Analysis of dating • Understand sensory needs • Understand non-verbal cues • Understand appropriate physical space and touch • Initiate social interaction • Be reciprocal in conversation • Understand when to disclose personal information • When to terminate conversation • Effectively resolve conflict • Identify social activities to engage in • Safely use online dating websites • Know safety strategies when meeting someone for the first time • Develop and maintain relationship • Know when to progress the relationship • Identify various levels of intimacy

Executive Function (Alexander, 2011) • Deficits: ○ Self-awareness ○ Cognitive flexibility • Strengths: ○ Intellectually bright **Sensory** (Ben-Sasson et al., 2008; Brock et al., 2012) • Hyper/hyposensitive to touch, auditory, visual, olfactory, taste, and vestibular stimuli **Gender Differences** (Dworzynski, Ronald, Bolton, & Happe, 2012) • Females report more symptoms than are displayed when compared to males • Males are diagnosed more than females		

Assessment of PEO Transactions		
Person – Occupation	**Occupation – Environment**	**Person – Environment**
• Anxiety in social participation • Sensory issues in social participation • Individuals want meaningful social interactions • Restricted interests may negatively impact social participation • Lack of expressive skills influence reciprocal conversation	• Community resources not available for this population • Social norms in different environments, such as virtual, social, and physical • Society may inhibit the development of relationships • Aspects of the environment and occupation such as noise, visuals and lots of people may cause sensory overload	• Anxiety may hinder the individual to seek out or advocate for community resources • Limited knowledge regarding social norms in various environments • Environment impacts sensory perception

Intervention/Strategies to Improve Occupational Performance

Social Learning Theory (Palmen, Didden, & Lang, 2012; Tumer-Brown, Perry, Dichter, Bodfish, & Penn, 2008)
       Methods: Role modeling, problem solving, reinforcement, practicing skills, observing, peer-based, and video modeling
       Intervention Topics:
       • Anxiety
       • Verbal communication
       • Online/virtual environments

- Sensory
- Progressing from friends to something more
- Planning a social event
- Participating in a social event

Cognitive Behavioral Learning Theory (Chung et al., 2007; Reichow & Volkmar, 2010)
   Methods: Prompting with social scripts and visual cues, reinforcement while learning skill sets, and educational information
   Intervention Topics:
- Non-verbal communication
- Conflict resolution and compromise
- Healthy versus unhealthy relationships
- Intimacy

Sensory (May-Benson & Koomar, 2010; Pfeiffer et al., 2011)
   Methods: Adolescent and Adult Sensory Profile (Brown, & Dunn, 2002), experimentation, and analysis of sensory environment
   Intervention Topics:
- Anxiety
- Leisure
- Progressing from friends to something more
- Intimacy
- Understanding sensory diet

Note. Adapted from "Systematic analysis of occupational performance of dating," by Strong, S, & Gruhl, K. R. (2011), Person-environment-occupation model. In C. Brown & V. C. Stoffel (Eds.), *Occupational therapy in mental health: A vision for participation* (31-46). Philadelphia: F. A. Davis Company.

Conclusion

Based upon the methodology described above, we developed a community based dating program for young adults with high functioning autism spectrum disorders. The program is held once per week for 14 weeks for approximately 90 minutes each session. Each session focuses on a deficit area identified in the literature review as well as the systematic analysis. Sessions are graded to build upon one another in order to facilitate successful acquisition of dating skills. The product is further described in Chapter IV and is located in its entirety in the Appendix.

CHAPTER IV

PRODUCT

In the United States, autism spectrum disorders affect 1 in 88 individuals (Centers for Disease Control and Prevention, 2012). Autism spectrum disorders affect individuals throughout their lifespan, and its impact on occupational performance is wide-ranging. Level of severity determines the specific diagnoses given to the child on the autism spectrum (Alexander, 2011). The most significant impairment in individuals with high functioning autism experience is qualitative impairment in social interaction (Sadock & Sadock, 2008). Services for individuals with autism spectrum disorders are available until the age of 21. At which point, the individual no longer qualifies for many of the services (Shattuck, Wagner, Narendorf, Sterzinger, & Hansley, 2011). The treatment of autism spectrum disorders in adults remains an understudied area, suggesting there is a lack of services being provided to these individuals. The focus of this project will be young adults with high functioning autism spectrum disorder and the social interactions that occur in relationships, specifically dating.

An extensive literature review was conducted and information on the population was obtained. The information obtained from the literature review was then analyzed using the Person Environment Occupation model (Law et al., 1996). Following the model, information pertaining to the person included skills and skill deficits, as well as social and cultural experiences of the individual with autism. The environment section describes the context in which the person engages in occupation including cultural,

institutional, physical, and social environments. The occupation section includes information regarding activities related to social participation and relationships of those with autism including the various roles and settings. Through the use of the Person Environment Occupation model, a systematic analysis of the occupational performances issues was conducted. Areas of need were then identified and interventions were created to improve occupational performance specific to dating.

Based upon the methodology described above, a community based dating program for young adults with high functioning autism spectrum disorders was developed. The program is held once per week for 14 weeks for approximately 90 minutes each session. Each session focuses on a deficit area identified in the literature review as well as the systematic analysis. Sessions are graded to build upon one another in order to facilitate successful acquisition of dating skills.

Intervention methods that have been used when working with individuals with autism were researched and identified through the literature review process. Aspects of social learning theory, cognitive behavioral learning theory, and sensory integration theory were identified as having successful outcomes with individuals with autism and were applied in the development of the interventions. Interventions were then developed based on the issues related to dating recognized in the systematic analysis and by incorporating the above mentioned theories. Over the 14 week period, the following topics will be discussed: (a) individual informal evaluation with leader to discuss sensory needs and communication skills, (b) building rapport with group members, (c) sensory experiences and dating, (d) non-verbal communication, (e) verbal communication, (f) conflict resolution and compromise, (g) leisure, (h) skill building with a peer, (i)

interacting in an online/virtual environment, (j) safety when meeting people in person for

the first time, (k) progressing the relationship, (l) intimacy, (m) participating in a social

event, and (n) reevaluation and closure. The interventions were structured by using

Cole's Seven Steps to create a format that is easy for group members to follow and

occupational therapist to lead (Cole, 2005). The full product is presented in its entirety in

the Appendix.

CHAPTER V

SUMMARY

Purpose

The focus of this project was young adults with high functioning autism spectrum

disorder and the social interactions that occur in relationships, specifically dating.

Through the use of the Person Environment Occupation model, a systematic analysis of

the occupational performance issues was conducted (Law et al., 1996). Areas of need

were identified and interventions were created to improve occupational performance

specific to dating. A community based dating program for young adults with high

functioning autism spectrum disorders was developed to address the areas of need. The

program includes one weekly 90 minute session over 14 weeks. Each session focuses on

a deficit area identified in the literature review as well as the systematic analysis.

Sessions are graded to build upon one another in order to facilitate successful acquisition

of dating skills.

Strengths

The community dating program for adults with high functioning autism spectrum

disorders has many strengths. This program provides a service to young adults with high

functioning autism spectrum disorder that currently is not available. It is easy for leaders

to follow for those who wish to implement the program. This program is based on

evidenced-based literature and is grounded in a model, specifically the Person,

Environment, and Occupation model (Law et al., 1996). Another strength of this

program is that it can be modified and adapted to meet the needs of individuals with general social participation deficits.

Limitations

The community dating program for adults with high functioning autism spectrum disorders also has several limitations. A barrier to implementation of this program is that it is 14 weeks long and may be difficult for people to commit to this amount of time. Although the program is long, the program developers limited the amount of sessions to cover the most significant deficits experienced by this population. Some individuals may not have successful outcomes with this program, because not every skill area mentioned in the literature was addressed in this program. An additional barrier to this program is the aspect of funding. There is limited funding and resources for adults with autism spectrum disorders (Shattuck, Wagner, Narendorf, Sterzinger, & Hansley, 2011). Methods for funding to be explored include grant options. Another option is to explore local, state, and national funding resources. Another barrier is that the implementation of this program has not been researched; therefore, the effectiveness and validity of the program are yet to be determined. Follow-up with leaders and analysis of participant outcomes will help determine effectiveness and validity of the program.

Recommendations

As previously described, effectiveness and validity of the program have yet to be determined. However, at initial implementation of the program, the product's overall usefulness will be measured. This will be done by the outcome measurement at the completion of the program and by feedback from participants. Usefulness can also be determined by the leaders' feedback and willingness to carry out the program again.

Because this is the first edition of the program, there is room for improvement. As the program is implemented and research on adults with high functioning autism spectrum disorders increases, additional skill deficits may be identified. Skill deficits that are not currently addressed in this program may be added as the literature advances. Interventions of this product may be altered and improved to meet these needs. This program also has the potential to be altered and expanded to meet the needs of additional populations with social skill deficits or difficulties with dating.

This program can also be used to further the research on adults with high functioning autism spectrum disorders. In the future, the effectiveness and validity of the program may be researched through scholarly collaboration. The program has the potential to be published, marketed, and distributed to facilities working with this population.

REFERENCES

Alexander, K. (2011). Pervasive developmental disorders. In C. Brown & V. C. Stoffel
(Eds.), *Occupational therapy in mental health: A vision for participation* (83-97).
Philadelphia: F. A. Davis Company.

American Occupational Therapy Association. (2008). Occupational therapy practice
framework: Domain and process (2nd ed.). *American Journal of Occupational
Therapy, 62*, 625-688.

American Occupational Therapy Association. (2010). The scope of occupational therapy
services for individuals with an Autism Spectrum Disorder across the lifespan.
American Journal of Occupational Therapy, 64, 125-136.

American Psychiatric Association. (2012). *News release: DSM-5 proposed criteria for
autism spectrum disorder designed to provide more accurate diagnosis and
treatment* (Release No. 12-03). Arlington, VA.

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental
disorders* (4th ed., text rev.). Washington, DC: American Psychiatric Association.

Bauminger, N. (2002). The facilitation of social–emotional understanding and social
interaction in high-functioning children with autism: Intervention outcomes.
Journal of Autism and Developmental Disorders, 32(4), 283-298.

Bauminger, N., & Shulman, C. (2003). The development and maintenance of friendship in high-functioning children with autism: Maternal perceptions. *Autism, 7*(1), 81-97.

Bauminger, N., Solomon, M., Aviezer, A., Heung, K., Brown, J., & Rogers, S. J. (2008). Friendship in high-functioning children with autism spectrum disorder: Mixed and non-mixed dyads. *Journal of Autism and Developmental Disorders, 38*, 1211-1229.

Ben-Sasson, A., Hen, L., Fluss, R., Cermak, S. A., Engel-Yeger, B., & Gal, E. (2008). A meta-analysis of sensory modulation symptoms in individuals with autism spectrum disorders. *Journal of Autism and Developmental Disorders, 39,* 1-11.

Braungart, M., Braungart, R., & Gramet, P. (2011). Applying learning theories to healthcare practice. In S. B. Bastable, P. Gramet, K. Jacobs, & D. L. Sopczyk (Eds.). *Health professional as educator: Principles of teaching and learning* (pp. 55-101). Sudbury, MA: Jones & Bartlett Learning.

Brock, M. E., Freuler, A., Baranek, G. T., Watson, L. R., Poe, M. D., & Sabatino, A. (2012). Temperament and sensory features of children with autism. *Journal of Autism and Developmental Disorders, 42*(11), 2271-2284. doi 10.1007/s10803-012-1472-5

Brown, C., & Dunn, W. (2002). *Adolescent/ Adult Sensory Profile manual*. San Antonio, TX: Psychological Corporation

Burmester, D. (1996) Need fulfillment, interpersonal competence and the development contexts of early adolescent friendship. In W.M. Bukowski, A. F. Newcomb &

W. W. Hartup (Eds.), *The company they keep: Friendship in childhood and adolescents, (pp.158-185).* Cambridge: Cambridge University Press.

Burke, M., Kraut, R., & Williams, D. (2010). Social use of computer-mediated communications by adults on the autism spectrum. *Computer Supported Cooperative Work,* 425-434. doi: 10.1145/1718918.1718991

Case-Smith, J., & Arbesman, M. (2008). Evidence-based review of interventions for autism used in or of relevance to occupational therapy. *American Journal of Occupational Therapy, 62,* 416–429.

Centers for Disease Control and Prevention. (2012). Prevalence of autism spectrum disorders. *MMWR*, *61*(3), 1-19.

Centers for Medicare and Medicaid Services. (2011). Report on state services to individuals with autism spectrum disorders (ASD). *ASD Services Project, 33*(2), 1-117.

Chan, J. M., Lang, R., Rispoli, M., O'Reilly, M., Sigafoos, J., & Cole, H. (2009). Use of peer-mediated interventions in the treatment of autism spectrum disorders: A systemic review. *Research in Autism Spectrum Disorders, 3,* 876-889.

Chung, K. M., Reavis, S., Mosconi, M., Drewry, J., Matthews, T., & Tasse, M. J. (2007). Peer-mediated social skills training program for young children with high-functioning autism. *Research in Developmental Disabilities, 28,* 423-436.

Cole, M. B. (2005). Group leadership: Cole's seven steps. In M. B. Cole (eds), *Group Dynamics in occupational therapy third edition* (pp. 3-23). Thorofare, NJ: SLACK Incorporated.

Cole, M. B., & Tufano, R. (2008). *Applied theories in occupational therapy: A practical approach*. Thorofare, NJ: SLACK Incorporated.

Cotugno, A. J. (2009). Social competence and social skills training and interventions for children with autism spectrum disorders. *Journal of Autism and Developmental Disorders, 39*, 1268-1277. doi 10.1007/s10803-009-0741-4

Dratsch, T., Schwartz, C., Yanev, K., Schilbach, L., Vogeley, K., & Bente, G. (2012). Getting a grip on social gaze: Control over other's gaze helps gaze detection in high-functioning autism. *Journal of Autism and Developmental Disorders,* 12(4). doi: 10.1007/s10803-012-1569-x

Dworzynski, K., Ronald, A., Bolton, P., & Happe, F. (2012). How different are girls and boys above and below the diagnostic threshold for autism spectrum disorders? *Journal of the American Academy of Child & Adolescent Psychiatry, 51*(8), 788-797.

Gillott, A., & Standen, P. J. (2007). Levels of anxiety and sources of stress in adults with autism. *Journal of Intellectual Disabilities, 11*(4), 359-370. doi: 10.1177⁄1744629507083585

Hellman, H., Colson, K., Verbraeken, C., Vermeiren, R., & Deboutt, D. (2007). Sexual behavior in high-functioning male adolescents and young adults with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders, 37.* 260-269. doi:10.1007/s10803-006-0159-1

Howlin, P., & Yates, P., (1999). The potential effectiveness of social skills groups for adults with Autism. *Autism, 3*(3), 299-307.

Kamps, D., Royer, J., Dugan, E., Kravits, T., Gonzalez-Lopez, A., Garcia, J., Carnazzo, K., Morrison, L., & Garrison-Kane, L. (2002). Peer training to facilitate social interaction for elementary students with autism and their peers. *Exceptional Children, 68,* 173-187.

Kennedy, D. P., & Adolphs, R. (2012). Perception of emotions from facial expressions in high-functioning adults with autism. *Neuropsychologia*, *50*, 3313-3319.

Klin, A, Saulnier, C. A., Sparrow, S. S., Cicchetti, D. V., Volkmar, F. R., & Lord, C. (2007). Social and communication abilities and disabilities in higher functioning individuals with autism spectrum disorders: The Vineland and the ADOS. *Journal of Autism and Developmental Disorders, 37*, 748-759. doi 10.1007/s10803-006-0229-4

Koenig, K. P., & Kinnealey, M. (2010). Adults with an autism spectrum disorder. In M. Kuhaneck & R. Watling (Eds.), *Autism A Comprehensive Occupational Therapy Approach* (pp. 235-254). Bethesda, MD: American Occupational Therapy Association, Inc.

Laugeson, E. A., Frankel, F., Gantman, A., Dillon, A. R., & Mogil, C. (2012). Evidence-based social skills training for adolescents with autism spectrum disorders: The UCLA PEERS Program. *Journal of Autism and Developmental Disorders, 42,* 1025-1036. doi: 10.1007/s10803-011-1339-1

Law, M., Cooper, B., Strong, S., Stewart, D., Rigby, P., & Letts, L. (1996). The person-environment-occupation model: A transactive approach to occupational performance. *The Canadian Journal of Occupational Therapy, 63*(1), 9-23.

LeGoff, D. B., & Sherman, M. (2006). Long-term outcomes of social skills interventions based on interactive LEGO play. *Autism: The International Journal of Research and Practice, 10*(4), 317-329.

Maryland State Department of Education. (2009, November 5). Autism waiver fact sheet. Retrieved from http://www.pathfindersforautism.org/articleItem.aspx?id=13

May-Benson, T. A., & Koomar, J. A. (2010). Systematic review of the research evidence examining the effectiveness of interventions using a sensory integrative approach for children. *American Journal of Occupational Therapy, 64*, 403–414. doi: 10.5014/ajot.2010.09071

Mehzabin, P., & Stokes, M. A. (2011). Self-assessed sexuality in young adults with high-functioning Autism. *Research in Autism Spectrum Disorders, 5,* 614-621. doi: 10.1016/j.rasd.2010.07.006

Meng-Chuan, L., Lombardo, M. V., Pasco, G., Ruigrok, A. N. V., Wheelwright, S. J., Sadek, S. A., Chakrabarti, B., Consortium, M. A., & Baron-Cohen, S. (2011). A behavioral comparison of male and female adults with high functioning autism spectrum conditions. *PLoS ONE*, *6*(6), 1-10. doi:10.1371/journal.pone.0020835

Minnesota Department of Human Services. (2011, September 19). Developmental disability waiver. Retrieved from http://www.dhs.state.mn.us/main/idcplg?IdcService=GET_DYNAMIC_CONVE RSION&RevisionSelectionMethod=LatestReleased&dDocName=id_003900

Muller, E., Schuler, A., & Yates, G. B. (2008). Social challenges and supports from perspective of individuals with Asperger syndrome and other autism spectrum disabilities. *Autism, 12*(2), 173-190. doi: 10.1177/1362361307086664

Nikopoulos, C. K., & Keenan, M. (2007). Using video modeling to teach complex social

    sequences to children with autism. *Journal of Autism and Developmental*

    Disorders, 37, 678-693. doi: 10.1007/s10803-006-0195-x

North Dakota Department of Human Services. (2012, July 31). Testimony to human

    services committee. Retrieved from http://www.nd.gov/dhs/info/testimony/2011-

    2012-interim/human-services/7-31-medicaid-autism-waiver.pdf

Orsmond, G., & Kuo, H. (2011). The daily lives of adolescents with an Autism Spectrum

    Disorder: Discretionary time use and activity partner. *Autism, 15*(5), 579-599. doi:

    10.1177/1362362361310386503

Palmen, A., Didden, R., & Korzilius, H. (2011). An outpatient group training programme

    for improving leisure lifestyle in high-functioning young adults with ASD: A pilot

    study. *Developmental Neurorehabilitation, 14*(5), 297-309.

Palmen, A., Didden, R., & Lang, R. (2012). A systematic Review of behavioral

    intervention research on adaptive skill building in high-functioning young adults

    with Autism Spectrum Disorder. *Research in Autism Spectrum Disorders, 6*, 602-

    617. doi:10.1016/j.rasd.2011.10.001

Parker, D., & Kamps, D. (2011). Effects of task analysis and self-monitoring for children

    with autism in multiple social settings. *Focus on Autism and Other*

    Developmental Disabilities, 26(3), 131-142. doi: 10.1177/1088357610376945

Pfeiffer, B. A. (2012). Sensory hypersensitivity and anxiety: The chicken or the egg?

    Sensory Integration Special Interest Section Quarterly, 35(2), 1–4.

Pfeiffer, B. A., Koenig, K., Kinnealey, M., Sheppard, M., & Henderson, L. (2011).

    Research Scholars Initiative—Effectiveness of sensory integration interventions

in children with autism spectrum disorders: A pilot study. *American Journal of Occupational Therapy*, *65*, 76–85. doi: 10.5014/ajot.2011.09205

Pierce, K., & Schreibman, L. (1997). Multiple peer use of pivotal response training to increase social behaviors of classmates with autism: Results from trained and untrained peers. *Journal of Applied Behavior Analysis, 30,* 157-160.

Ramey, E. M., & Ramey, J. J. (2008). *Autistics' guide to dating: A book by autistic's, for autistics and those who love them or who are in love with them*. Philadelphia, PA:. Jessica Kingsley Publishers.

Rao, S. M., & Gagie, B. (2006). Learning through seeing and doing: Visual supports for children with autism. *Teaching Exceptional Children, 38*(6), 26-33.

Reichow, B., & Volkmar, F. R. (2010). Social skills interventions for individuals with autism: Evaluation for evidence-based practices within a best evidence synthesis framework. *Journal of Autism and Developmental Disorders, 40*, 149-166. doi: 10.1007/s10803-009-0842-0

Reynolds, S., Bendixen, R. M., Lawrence, T., & Lane, S. (2011). A pilot study examining activity participation, sensory responsiveness, and competence in children with high function autism spectrum disorder. *Journal of Autism Development Disorders, 41*, 1496-1506. doi: 10.1007/s10803-010-1173-x

Rieske, R. D., Matson, J. L., May, A. C., & Kozlowski, A. M. (2012). Anxiety in children with high-functioning autism spectrum disorders: Significant difference and the moderating effects of social impairments. *Journal of Developmental and Physical Disability, 24*, 167-180. doi:10.1007/s10882-011-9264-y

Sadock, B. J., & Sadock, V. A. (2008). *Kaplan & Sadock's concise textbook of clinical psychiatry* (3rd ed.). Philadelphia, PA: Lippincott Williams & Wilkins.

Shattuck, P. T., Wagner, M., Narendorf, S., Sterzinger, P. & Hansley, M. (2011). Post high school services use among young adults with Autism Spectrum Disorder. *Archives of Pediatric and Adolescent Medicine, 165*(2), 141-146. doi: 10.1001/archpediatrics.2010.279

Smith, M. J. L., Montagne, B., Perrett, D. I., Gill, M., & Gallagher, L. (2010). Detecting subtle facial emotion recognition deficits in high-functioning autism using dynamic stimuli of varying intensities. *Neuropsychologia*, *48*(9), 2777-2781. doi: 10.1016/j.neuropsychologia.2010.03.008

Social Security Act, §1915(c) (1935).

Stern, P. (2009). Principles of learning and behavior change. In E. B. Crepeau, E.S. Cohn, & B. A. B. Schell (Eds.). *Willard and Spackman's occupational therapy* (11th ed., pp. 375-386). Philadelphia: Lippincott Williams & Wilkins.

Strong, S., & Gruhl, K. R. (2011). Person-environment-occupation model. In C. Brown & V. C. Stoffel (Eds.), *Occupational therapy in mental health: A vision for participation* (31-46). Philadelphia: F. A. Davis Company.

Spigel, S. (2007). *Medicaid autism waivers and state agencies serving people with autism* (Report No. 2007-R-0319). Medical Care: Welfare-Medical Assistance (Medicaid).

Tamara, M., Kim, C., & Rinehart, N. J. (2012). Gender profiles of behavioral attention in children with autism spectrum disorder. *Journal of Attention Disorders,* 1-9. doi: 10.1177/1087054712455502

Tumer-Brown, L. M., Perry, T. D., Dichter, G. S., Bodfish, J. W., & Penn, D. L. (2008).

    Brief report: Feasibility of social cognition and interaction training for adults with

    high functioning autism. *Journal of Autism and Developmental Disorders, 38*,

    1777-1784. doi: 10.1007/s10803-008-0545-y

Trembath, D., Germano, C., Johanson, G., & Dissanayake, C. (2012). The experience of

    anxiety in young adults with autism spectrum disorders. *Focus on Autism and*

    Other Developmental Disabilities, 27(4), 213-224. doi:

    10.1177/1088357612454916

Trepagnier, C. Y., Olsen, D. E., Boteler, B. S., & Bell, C. A. (2011). Virtual conversation

    partner for adults with autism. *Cyberpsychology, Behavior, and Social*

    Networking, 14(1-2), 21-27. doi: 10.1089/cyber.2009.0255

Wade, H. A. (2002). Discrimination, sexuality and people with significant disabilities:

    Issues of access and the right to sexual expression in the United States. *Disability*

    Studies Quarterly, 22(4), 9-27.

Watling, R., & Schwartz, I. S. (2004). Understanding and implementing positive

    reinforcement as an intervention strategy for children with disabilities. *American*

    Journal of Occupational Therapy, 58(1), 113-116.

Wilkinson, N., Ang, R. P., & Goh, D. H. (2008). Online video game therapy for mental

    health concerns: A review. *International Journal of Social Psychiatry*, *54*(4), 370-

    382. doi: 10.1177/0020764008091659

APPENDIX

A GUIDE TO DATING: A SOCIAL PARTICIPATION AND DATING PROGRAM

FOR INDIVIDUALS WITH HIGH FUNCTIOING AUTISM

A Guide to Dating:

A Social Participation and Dating Program for Individuals with High-Functioning Autism

Used with
Permission

By Brook Dahle and Laura Hennes

Table of Contents

Introduction

In the United States, autism spectrum disorders affect 1 in 88 individuals (Centers for Disease Control and Prevention, 2012). Autism spectrum disorders affect individuals throughout their lifespan, and its impact on occupational performance is wide-ranging. Level of severity determines the specific diagnoses given to the child on the autism spectrum (Alexander, 2011). The most significant impairment in individuals with high functioning autism experience is qualitative impairment in social interaction (Sadock & Sadock, 2008). Services for individuals with autism spectrum disorders are available until the age of 21. At which point, the individual no longer qualifies for many of the services (Shattuck, Wagner, Narendorf, Sterzinger, & Hansley, 2011). This program is designed to fill a void in the services for young adults with high functioning autism spectrum disorders.

Background on Autism

Autism spectrum disorders describe individuals who have deficits in three major categories: (a) qualitative impairment in social interaction, (b) qualitative impairment in communication, and (c) restricted, repetitive, and stereotyped patterns of behaviors, interests, and activities (American Psychiatric Association [APA], 2000). All three deficit areas create unique challenges for the individuals. For the purpose of this program, the focus is directed at the first category, impairment in social interaction.

Impairment in social interaction may involve the inability to understand nonverbal behaviors or engage in meaningful activities with others (APA, 2000). They also experience verbal communication challenges which involve difficulty initiating or sustaining a conversation. (APA, 2000). Individuals with autism spectrum disorders

often times demonstrate sensory difficulties (Ben-Sasson et al., 2008; Brock et al., 2012). Sensory difficulties impact an individual's daily life, including socializing (Cole & Tufano, 2008). Despite these challenges, young adults with autism spectrum disorders still want meaningful relationships, both platonic and intimate (Bauminger & Shulman, 2003; Hellman, Colson, Verbraeken, Vermeiren, & Deboutt, 2007; Mehzabin & Stokes, 2011). Even though individuals with high functioning autism disorders want relationships, they often need support in forming and maintaining these relationships (Bauminger & Shulman, 2003; Bauminger et al., 2008; Hellman, Colson, Verbraeken, Vermeiren, & Deboutt, 2007; Mehzabin & Stokes, 2011).

Methodology

The Person Environment Occupation (PEO) model was chosen to guide this program (Law et al., 1996). The PEO model clearly describes the dynamic relationship between people and the occupations they participate in their various environments (Strong & Gruhl, 2011). The person, environment, and occupation aspects of this model are interdependent and are unique to each individual's experience. The characteristics of the person include spirituality, as well as social and cultural experiences. Environment involves the context in which the person engages in occupation including cultural, institutional, physical, and social environments. Occupations are considered to be the activities people engage in while in various roles and settings, such as activities of daily living, instrumental activities of daily living, education, work, play, leisure, and social participation (Strong & Gruhl, 2011).

An extensive literature review went into building the foundations for this program. The full literature review can be viewed in Dahle and Hennes (2013). Once the

information was obtained and organized, patterns of deficits started to emerge. Through

a systematic analysis of the occupational performances issues, as shown in Table 1 on

page 7, areas of need were identified using the Person Environment Occupation model.

Each component (person, environment, and occupation) was first assessed individually.

Then the transactions between the person and the occupation, occupation and the

environment, and the person and the environment were assessed. From this,

interventions were identified to improve occupational performance specific to dating.

Intervention methods that have been used when working with individuals with

autism were researched and identified through the literature review process. Aspects of

social learning theory, cognitive behavioral continuum, and sensory integration theory

were identified as having successful outcomes with individuals with autism spectrum

disorders and were applied in the development of the interventions. Interventions were

then developed based on the issues related to dating recognized in the systematic analysis

and by incorporating the above mentioned theories. The interventions were structured by

using Cole's Seven Steps (Cole, 2005) to create a format that is easy for group members

and group leaders to follow.

Learning Theories Applied

Visual Learning

Individuals with high functioning autism have strengths in the areas of visual

perception and visual-spatial tasks rather than verbal reasoning (Alexander, 2011; Sadock

& Sadock, 2008). Klin et al. (2007) found that individuals with high functioning autism

may have difficulty with adapting previously learned skills into real life. Techniques that

can be used to assist with adaptive skills involve social skills training, role playing, and practicing in real life (Alexander, 2011).

Behavioral Theory

In behavioral learning theory, learning is transferred to novel situations by practicing new information (Braungart, Braungart, & Gramet, 2011). Individuals implementing the behavioral learning theory utilize techniques such as instruction, modeling, coaching, and reinforcements in order to facilitate desired behaviors (Cole & Tufano, 2008). These techniques can be combined through shaping and chaining in which the individual is rewarded for the desired outcome. Reinforcements can be used to increase a desired behavior as the individual progresses towards more complex tasks (Cole & Tufano, 2008). Reinforcements are most effective when applied in a systematic and conscientious method (Watling & Schwartz, 2004). The changes in behaviors are external in the fact that they are observable and measureable (Cole & Tufano, 2008).

Social Learning Theory

Cognitive behavioral theory, and more specifically, social learning theory, looks at the person, environment, and behavior as well as cognition and its role in person-environment interactions (Cole & Tufano, 2008). Major aspects of this theory include observational learning, modeling, hierarchy of reinforcement, self-control and self-regulation, self-efficacy, self-awareness, and insight. The social learning interaction includes the environment, person, and behavior. These three features overlap and contribute to social learning. Individuals with high functioning autism may benefit from social learning theory as they are visual learners (Sadock & Sadock, 2008). Research suggests that through social learning theory, individuals can learn within a social context

4

through role play, observation, modeling, problem solving, reinforcement, and practicing skills in real life scenarios (Cotugno, 2009; Stern, 2009).

Sensory Integration Theory

Individuals with autism spectrum disorders often have sensory difficulties. Anxiety and hypersensitivity impact one another and can interfere with daily life (Pfeiffer, 2012). Hypersensitivity to stimuli may cause an increase in anxiety. When treating hypersensitivity, it has been reported that the individuals also have a decrease in anxiety. Pfeiffer (2012) suggests that the intervention approach should promote self-advocacy and be incorporated into the individual's daily routines, so that they will be able to make adaptations in their environment as well as social supports. Sensory issues are addressed throughout the program in a variety of ways, such as practicing sensory modulation skills and discussion of how sensory impacts social participation and dating.

Table 1
Systematic analysis of occupational performance of dating

Occupational Performance Issue		
Dating: The occupational performance issue is dating secondary to difficulty forming relationships with others due to deficits in communication and social skills, as well as emotion regulation skills.		
Assessment of Main Components		
<u>Person</u>	<u>Environmental Conditions</u>	<u>Occupational Demands</u>
Deficits in Social Cognition (Alexander, 2011) • Effective analysis of social stimulus. • Ability to plan an effective response. • Integration and generalizing novel information and previously learned information • Understanding appropriate physical space **Deficits in Social Perception** (Smith, Montagne, Perrett, Gill, & Gallagher, 2010; Kennedy & Adolphs, 2012) • Identifying affective cues • Perceiving physical responses and space **Deficits in Expressive Skills** (Dratsch et al., 2012) • Appropriate nonverbal behavior • Eye contact • Initiation and termination of conversations **Deficits in Emotion Regulation Skills** (Gillott & Standen, 2007; Muller, Schuler, & Yates, 2008; Trembath, Germano, Johnson, & Dissanayke, 2012) • Displaying appropriate emotions • Recovering from an emotional experience • Controlling anxiety	**Cultural** (Wade, 2002) • Society's belief of non-typically developing individuals should not be in intimate relationships **Institutional** (Shattuck, et al., 2011; Spigel, 2007) • Lack of available services due to aging out of the system **Physical** (Ben-Sassen et al., 2008) • Noise, visuals and lots of people may cause sensory overload **Social** (Wade, 2002) • Lack of understanding by others **Virtual** (Orsmond & Kou, 2011; Reynolds, Bendixen, Lawrence, & Lane, 2011) • Higher use of virtual environment	**Analysis of dating** • Understand sensory needs • Understand non-verbal cues • Understand appropriate physical space and touch • Initiate social interaction • Be reciprocal in conversation • Understand when to disclose personal information • When to terminate conversation • Effectively resolve conflict • Identify social activities to engage in • Safely use online dating websites • Know safety strategies when meeting someone for the first time • Develop and maintain relationship • Know when to progress the relationship • Identify various levels of intimacy

Executive Function (Alexander, 2011)
 • Deficits:
   o Self-awareness
   o Cognitive flexibility
 • Strengths:
   o Intellectually bright
 	
 Sensory (Ben-Sassen et al., 2008; Brock et al., 2012)
 • Hyper/hyposensitive to touch, auditory, visual, olfactory, taste, and vestibular stimuli
 	
 Gender Differences (Dworzynski, Ronald, Bolton, & Happe, 2012)
 • Females report more symptoms than are displayed when compared to males
 • Males are diagnosed more than females		

Assessment of PEO Transactions		
Person – Occupation	**Occupation – Environment**	**Person – Environment**
• Anxiety in social participation • Sensory issues in social participation • Individuals want meaningful social interactions • Restricted interests may negatively impact social participation • Lack of expressive skills influence reciprocal conversation	• Community resources not available for this population • Social norms in different environments, such as virtual, social, and physical • Society may inhibit the development of relationships • Aspects of the environment and occupation such as noise, visuals and lots of people may cause sensory overload	• Anxiety may hinder the individual to seek out or advocate for community resources • Limited knowledge regarding social norms in various environments • Environment impacts sensory perception

Intervention/Strategies to Improve Occupational Performance

Social Learning Theory (Palmen, Didden, & Lang, 2012; Tumer-Brown, Perry, Dichter, Bodfish, & Penn, 2008)
      Methods: Role modeling, problem solving, reinforcement, practicing skills, observing, peer-based, video modeling
      Intervention Topics:
      • Anxiety
      • Verbal communication
      • Online/virtual environments

- Sensory
- Progressing from friends to something more
- Planning a social event
- Participating in a social event

Cognitive Behavioral Learning Theory (Chung et al., 2007; Reichow & Volkmar, 2010)

Methods: prompting with social scripts and visual cues, reinforcement while learning skill sets, and educational information

Intervention Topics:
- Non-verbal communication
- Conflict resolution and compromise
- Healthy versus unhealthy relationships
- Intimacy

Sensory (May-Benson & Koomar, 2010; Pfeiffer et al., 2011)

Methods: Adolescent and Adult Sensory Profile (Brown, & Dunn, 2002), experimentation, analysis of sensory environment

Intervention Topics:
- Anxiety
- Leisure
- Progressing from friends to something more
- Intimacy
- Understanding sensory diet

Note. Adapted from "Systematic analysis of occupational performance of dating," by Strong, S, & Gruhl, K. R. (2011), Person-environment-occupation model. In C. Brown & V. C. Stoffel (Eds.), *Occupational therapy in mental health: A vision for participation* (31-46). Philadelphia: F. A. Davis Company.

How to Use the Program

This program is comprised of 14 different group sessions. The recommended number of participants for this program is 12. The sessions are to be followed in order as each session builds upon the previous session. Each session focuses on a specific skill needed for dating and social participation, and is approximately 90 minutes long. Within each weekly session section, the leader will find an outline for the session along with a list of supplies needed, a description of the homework, and the handouts required for the session to be copied and distributed to the participants.

Program Budget

Operating budget	
Printing	30.00
Pens (60)	7.00
Binders (15)	35.00
Gum	5.00
Cups (200)	14.00
Snacks	20.00
Rubber Bands	5.00
Staples	3.00
Note Cards	15.00
Facility space cost	Determined by facility
Total	**134.00 + Facility Space Cost**

Start Up Budget	
Television	400.00
Laptop computers (3)	1200.00
CD player	35.00
Headphones (3)	45.00
Disco ball/strobe light	25.00
Adolescent and Adult Sensory Profile	135.00
Water pitchers (2)	10.00
stapler	6.00
Total	**1,856.00**

Weekly Group Content Overview

Week 1: Evaluation and Orientation
    Individual session: The purpose of this session is to get to know the participants and learn more about their social and dating experiences. We also want to gain an understanding of their sensory needs. Evaluation methods are completed in order to track progress throughout the course.
    Evaluation: Informal interview, Adolescent and Adult Sensory Profile, and Dating Skills Checklist

Week 2: Group Rapport Building
    Purpose: The purpose of this session is to build rapport and become comfortable with one another as a group.
    Theory: Sensory and Social learning
    Teaching Method: Role modeling, problem solving, reinforcement, and practicing skills

Week 3: Sensory Experiences and Social Participation
    Purpose: The purpose of this session is to help individuals understand their own sensory needs and issues and what may be encountered in a social setting, such as dating.
    Theory: Sensory Integration
    Teaching Methods: Experiential learning

Week 4: Non-Verbal Communication
    Purpose: The purpose of this group is to help you understand and interpret non-verbal cues in social situations.
    Theory: Behavioral Learning
    Teaching Method: Video modeling, prompting with social scripts and visual cues, as well as reinforcement

Week 5: Verbal Communication
    Purpose: The purpose of this group is to build verbal communication skills in order to help with developing social connections which may lead to dating.
    Theory: Social Learning
    Teaching Method: Role playing, observations, practice skills in real-life scenarios, and reinforcement

Week 6: Conflict Resolution and Compromise
    Purpose: The purpose of this group is to provide the participants with effective strategies to handle conflict and learn how to compromise when there is a disagreement.
    Theory: Behavioral learning
    Teaching method: Video modeling, reinforcement, prompting, social scripts, and visual cues

Week 7: Leisure
    Purpose: The purpose of this group is to explore leisure and how leisure activities can be used to enhance relationships and the dating experience.
    Theory: Social learning and Sensory Integration
    Teaching method: Peer based approach

Week 8: Skill Building with a Peer
    Purpose: The purpose of this group is to integrate previously learned social skills that will assist in building relationships and dating.
    Theory: Social learning
    Teaching method: Observing and practicing skills in real-life scenarios

Week 9: Interacting in an Online/Virtual Environment
    Purpose: The purpose of this group is to become more aware of the dos and don'ts of interacting in an online/virtual environment. It is important to emphasize safety when interacting with others online whether it is for friendship or dating.
    Theory: Social learning
    Teaching method: Problem solving and role modeling

Week 10: Safety: Meeting People for the First Time in Person
    Purpose: The purpose of this session is to increase awareness and safety when meeting someone for the first time in person. When people meet online or through a mutual friend, they may decide to move the relationship forward and meet in person. It is important that your safety is a priority, especially when you have not met this person before.
    Theory: Behavioral learning
    Teaching methods: Visual cues, problem solving, and educational information

Week 11: Progressing from Friends to Something More/ Healthy vs. Unhealthy Relationships
    Purpose: The purpose of this group is to identify when it is appropriate to progress the relationship and how you might do that as well as when it may be time to end the relationship.
    Theory: Sensory and Social learning
    Teaching method: Role playing and problem solving

Week 12: Intimacy in Relationships
    Purpose: The purpose of this group is to learn about what types of intimacy are appropriate at different stages in a relationship and how to address intimacy in relationships.
    Theory: Sensory and Behavioral learning
    Teaching method: Visual cues through handouts

Week 13: Participate in a Social Event
    Purpose: The purpose of this group is to combine and utilize all the social participation skills learned from previous weeks. Participants will have the

opportunity to engage in social interactions with individuals in the group and outside of the group to increase their confidence and decrease anxiety when in social situations. The increase in confidence may lead to developing meaningful relationships and dating.
Theory: Social learning
Teaching method: Practicing skills in real-life scenario and problem solve

Week 14: Conclusion
Individual session: The purpose of this group is to reflect on personal growth throughout the past 14 weeks. It is a time to ask final questions and have them answered. This session is also used for closure of the dating program.
Evaluation: Informal interview

Week 1

Week 1

Name: Individual Session Evaluation and Orientation

Session purpose and objectives: The purpose of this meeting is to get to know the participants and learn more about their social and dating experiences. We also want to gain an understanding of their sensory needs and how they relate to others.

Supplies/ Materials:
- Interview questions
- Adolescent and Adult Sensory Profile
- Dating Skills Checklist
- Group outline
- Paper
- Pen

1. Introduction. Leader states, "Hi ____, My name is ___. Thank you for joining this group on dating. Throughout the course of the program, you will be learning important skills and strategies that will help develop meaningful relationships that may lead to dating."

> **Warm up**. Leaders introduce themselves and propose the following questions:
> a. How did you hear about the group?
> b. What do you hope to learn from this group?
> c. What are you main concerns about dating?
>
> **Setting the Mood.** Leader should display a welcoming facial expression and open body language when setting the mood of this session. Tone of voice should be calm and clear.
>
> **Expectation of participation:** Leader states, "All participants are expected to engage in group discussion and activities, actively listen when an individual is talking, and ask clarifying questions when they arise."
>
> **Session purpose and objectives:** Leaders state, "The purpose of this meeting is to get to know you and learn more about your social and dating experiences. We also want to gain an understanding of your sensory needs and how you relate to others."
>
> **Brief outline of the session.** Leader states, "This session will take approximately 90 minutes. We will be conducting an informal interview regarding your experiences with dating. We will also ask that you complete the Adolescent and Adult Sensory Profile (Brown & Dunn, 2002)."

2. Activity.
Administer *Adolescent and Adult Sensory Profile* (Brown & Dunn, 2002).
The Adolescent and Adult Sensory Profile (Brown & Dunn, 2002), will be completed in the waiting area when participant is waiting to meet with the leader.

Ask *Informal Interview Questions* (see handout *Informal Interview Questions*)

Administer *Dating Skills Checklist* (see handout *Dating Skills Checklist*)

15

3. Sharing.
The participant and leader will review the results of the assessments.

4. Processing.
Leader asks, "What are your thoughts about the results of the assessments? Do you have any questions?"

5. Generalization.
Leader says, "Based upon our discussion today, what are some general concerns you have about dating?"

6. Application.
Set individual goals in regards to dating.
Leader asks, "Given what we have discussed today, what do you think would be most useful for an individual with autism who is participating in a dating program?"

7. Summary.
   a. Review the participant's goals.
   b. Hand out the binder with group outline and go over it with the participant.
   c. Homework: Have the participants complete a dating plan. Use the *Dating Plan* handout and encourage the participants to reflect on the questions and be as honest as possible. Inform them that we will be using this later in the program.
   d. Thank them for participating.

Informal Interview Questions

Tell us who you are and what you enjoy doing for fun.

Have you dated before?

Think back to some of your first dating experiences, what was it like?

      How comfortable were you?

      Please describe some positive experiences.

      Please describe some challenges you have had with dating.

Tell us about strategies you used in dating.

      What did you do to become more comfortable /have more positive

      experiences with dating?

      Did you participate in any interventions to help you in dating? What did you

      learn from them?

As a relationship progressed, tell us about that experience.

What did you find to be motivating about dating?

      For example, what led to your decision to date?

Is there anything else you would like to tell us about yourself?

Dating Skills Checklist

Name: Date Completed:

Rating Scale	
How often do you do this?	How satisfied are you?
1 – Never 2 – Almost never 3 – Sometimes 4 – Almost always 5 – Always	1 – Not at all 2 – A little bit 3 – Very satisfied

Dating Skills Checklist		
	How often do you do this?	How satisfied are you?
Do you notice the body language of others when you talk to them?	1 2 3 4 5	1 2 3
Do you face the person you are talking to?	1 2 3 4 5	1 2 3
Do you start conversations with people?	1 2 3 4 5	1 2 3
Do you only talk about topics that interest you?	1 2 3 4 5	1 2 3
Are you able to ask questions and respond in order to carry on a conversation?	1 2 3 4 5	1 2 3
Do you get into fights when things do not go your way?	1 2 3 4 5	1 2 3
Do you engage in social activities with other people?	1 2 3 4 5	1 2 3
Do you use online dating websites?	1 2 3 4 5	1 2 3
Do you meet people in person that you have met online?	1 2 3 4 5	1 2 3
Do you have people close to you besides family?	1 2 3 4 5	1 2 3

Dating Plan
What are you looking to gain from the relationship? (physically, emotionally, intellectually, and spiritually)
What are you willing to give to the relationship? (physically, emotionally, intellectually, and spiritually)
What are you looking for in a partner? (physically, emotionally, intellectually, and spiritually)

Note: Adapted from Ramey, E. M., & Ramey, J. J. (2008). *Autistics' guide to dating: A book by autistic's, for autistics and those who love them or who are in love with them.* Philadelphia, PA:. Jessica Kingsley Publishers.

Week 2

Week 2

Name: Group Rapport Building

Session objectives and purpose. The purpose of this group is to build rapport and become comfortable with one another as a group.
    a. Participants will engage in activities in order to get to know one another.
    b. Participants will engage in conversation in order to develop comfort level with one another.

Supplies:
- Handouts
- Scratch paper
- Pens

1. Introduction. Leader states, "Welcome to the first session as a group. Today our activity is to get familiar with each other in order to feel more comfortable around one another. Similarly to when thinking about dating an individual, it is important to feel comfortable around that person."
    Warm up.
    Leader states, "For the warm up activity, each of you will tell the group your first name and what you like to do for fun."
    Setting the Mood. Leader should display a welcoming facial expression, such as a smile and open body language when setting the mood of this session. Tone of voice should be calm and clear.
    Expectation of participation: Leader states, "All participants are expected to engage in group discussion and activities, actively listen when an individual is talking, and ask clarifying questions when they arise."
    Session objectives and purpose. Leader states, "The purpose of this group is to build rapport and become comfortable with one another as a group."
        a. Participants will engage in activities in order to get to know one another.
        b. Participants will engage in conversation in order to develop comfort level with one another.
    Brief outline of the session. Leader states, "The session will last approximately 90 minutes. A hand out will be provided for participants to write down their thoughts, questions, and things they have learned. The session will provide the opportunity for participants to get to know one another to facilitate trust and comfort within a group setting."

2. Activity.
The participants will be put into pairs. Partners will interview each other with the questions provided and write down the two most interesting things about their partner on a piece of paper(See handout *Getting to Know the Group*). After approximately 10 minutes, each partner will briefly describe the other individual. After all participants have shared, the pieces of paper with interesting facts about their partner will be put into a hat

or bucket. The leader will draw one piece of paper out at a time and read it to the group. The group must decide which participant the information describes.

3. Sharing.
Have the participants share information that was learned about their partners.

4. Processing.
Leader asks, "How comfortable are you with one another? Is there anything else you feel you should know about other participants?"

5. Generalization.
Leader summarizes the main themes of the group and may ask for additional main themes from the participants.

6. Application.
Leader states, "Today you had the experience of meeting new people. What could you take from this experience today and apply to dating in the future?"

7. Summary.
    a. Review the main points from the group.
    b. Ask if there are additional questions regarding today's session or up coming sessions.
    c. Discuss next week's topic: Sensory Experiences and Social Participation
    d. Homework: Encourage participants to ask the questions from handout *Getting to Know the Group*, to someone they know in order to practice conversational skills.
    e. Mention that the treats and refreshments are available for the participants to continue getting to know one another in a casual gathering.
    f. Thank them for coming.

Take turns interviewing your partner and ask the following questions. Write down the two most interesting things about your partner on a piece of scratch paper.

-What is your favorite food?

-What is your favorite place you have traveled to?

-What do you like to do in your free time?

-What do you hope to accomplish from this group?

Week 3

Week 3

Name of Group: Sensory Experiences and Social Participation

Session objectives and purpose. The purpose of this session is to help individuals understand their own sensory needs and issues and what may be encountered in a social setting, such as dating.
   a. Participants will identify sensory experiences that cause anxiety.
   b. Participant will identify appropriate ways to handle sensory issues when in a social setting.

Supplies/Materials:
- Bring summary of each participant's sensory profile to be given to the participant
- Sensory modulation strategies for the four quadrants.
- Sensory Scenarios
- Music player with headphones
- Strobe light/disco ball/or some sort of bring flashing light like in a club or bar
- 3-4 different scented candles
- Gum
- Pitcher of ice water
- Cups
- Rubber bands

1. Introduction. Leader states, "Hello welcome to group. Today we will be discussing and leaning about sensory issues that may come up while dating. Social gatherings such as dating often take place in environments that have many sensory components to them and this may cause anxiety for some of you. So today we are going to talk about what we can do to decrease or increase the effects of sensory stimuli."

   Warm up.
   Mingling: To get clients thinking about social gatherings, have them engage in a quick warm up activity. The moderator shouts out a category such as "favorite restaurant" and participants find and make groups of people who share the same answer.
   Possible categories:

   - Favorite restaurant
   - Favorite movie
   - Favorite season
   - Favorite animal
   - Favorite color
   - Favorite texture

   Setting the Mood. Leader should display a welcoming facial expression and open body language when setting the mood of this session. Tone of voice should be clear, and upbeat.

Expectation of participation: Leader states, "All participants are expected to engage in group discussion and activities, actively listen when an individual is talking, and ask clarifying questions when they arise."

Session objectives and purpose. Leader states, "The purpose of this session is to help you understand your own sensory needs and issues and what may be encountered in a social setting such as dating."

    a. Participants will identify sensory experiences that cause anxiety.

    b. Participant will identify appropriate ways to handle sensory issues when in a social setting.

Brief outline of the session. Leader states "This session will last approximately 90 minutes. I have a handout for you so that you can write down any thoughts or questions if you want. Today's session is going to focus on the sensory components of dating and ways to handle sensory issues. We will start by going over your sensory profiles that you completed in the first session. You will then be able to go to different sensory stations and practice sensory modulation strategies. After that, we will come back together as a large group and discuss what strategies worked for you."

2. Activity.

Summary of Sensory Profile: The leader will give each participant a handout with the summary of the results of their sensory profile and explain what each quadrant means. Using the *Sensory Quadrant Definitions* handout the leader will explain what each quadrant means.

> After reading through the definitions, the leader states, "It is important to remember that everyone has unique sensory needs and what one person may avoid another may seek. Also, as we break into groups to try some of the sensory modulation techniques, it is important to remember that what works for someone else may not work for you."

Prior to going to the sensory stations, explain and have the participants practice the sensory coping strategies on the *Sensory Coping Strategies* handout.

Sensory Modulation Stations: Leader states, "Around the room there are four different stations. Using your Adolescent and Adult Sensory Profile results, determine what sensory coping strategies work best for you by practicing the strategies during the sensory experience. Write down which coping strategies work the best for you on your handout labeled *Effective Sensory Coping Strategies.* You will have about 10 minutes at each station. I will let you know when to switch."

> At this point the large group breaks into groups and go to the different stations. The leader should walk around and make sure everyone knows what to do and needs to be available for questions.

> Directions for setting up the stations can be found in the *Sensory Stations* handout.

After every participant has had a chance to visit each station, bring the group back together for sharing.

3. Sharing.
Leader asks, "What strategies did you find helpful? Do you have a strategy that was not mentioned that you find works well for you?"

4. Processing.
Leader asks, "Are there any sensory experiences that would keep you from dating? Do you feel like you have the tools to better cope with some of these sensory experiences?"
> If the answer is "no," the leader should ask, "what do you feel that you need to be able to cope?"

5. Generalization
Leader summarizes the main themes of the group and may ask for additional main themes from the participants.

6. Application
Leader asks, "Tell me what you learned about your sensory self today that you might be able to apply to dating."

7. Summary.
   a. Review the main points from the group.
   b. Ask if there are additional questions regarding today's session or upcoming sessions.
   c. Discuss next week's topic: Non-Verbal Communication
   d. Homework: Encourage participants to practice strategies learned and complete the *Sensory Strategies Journal* over the next following days.
   e. Thank them for coming.

Low Registration

Leader states, "If you have an area that is in the low registration quadrant you may miss sensory input that others take in. For example, you may not notice right away when someone is talking to you or you may not notice some visual cues. Although this may allow you to be bothered by some sensory stimuli in distracting environments, it may cause problems when others try to talk to you or get your attention when in social settings."

Sensation Seeking

Leader states, "If you have an area that is in the sensory seeking quadrant you may crave or seek out certain sensory experiences. For those of you who are sensory seekers, you may become bored or frustrated in environments that do not provide the sensory stimulation. In social settings, if your sensory needs are not met by the environment, you may seek the stimulation in inappropriate ways."

Sensory Sensitivity

Leader states, "If you have an area in the sensory sensitivity quadrant, you may be more alert to certain sensory stimuli. You may notice things that others do not. Being sensitive to sensory stimuli may cause you to be easily distracted when in busy social settings."

Sensation Avoiding

Leader states, "If you have an area in the sensation avoiding quadrant, you may try to avoid certain sensory experiences. Those of you who are sensation avoiding may try to cope by being very controlling of your environment. When you are unable to control the environment, this may cause anxiety. You may have difficulties in social settings, because you are worried about the possibilities of certain sensory experiences which can be distracting and anxiety producing."

(Brown & Nicholson, 2011)

Sensory Stations

There will be four different stations. Stations should be set up in the back of the room to decrease distractions during discussion. Stations should also be spaced as far apart as possible so that no one station is too overwhelming at the time. The participants need to be able to practice, but they also need to feel safe in the environment.

Station one: Auditory stimuli

Supplies: CD player, headphones, gum, pitcher of ice water, cups, and rubber bands
> At the auditory station, have a CD player with headphones set up. Instruct the participants to read the scenario at the station, then put on the headphones, and turn up the music. This is to simulate the noise environment of a bar, busy restaurant, or noise public place. Have the participants practice some of the strategies from their work sheet.

Station two: Visual stimuli

Supplies: disco ball/strobe light, gum, pitcher of ice water, cups, and rubber bands
> At the visual station, have a disco ball or strobe light set up. This is to simulate the visual environment of a club, bar, or other busy environment. Instruct the participants to read the scenario at the station and practice strategies form their work sheet.

Station three: Tactile stimuli

Supplies: gum, pitcher of ice water, cups, and rubber bands
> At the tactile station, instruct participants to read the scenario. Then have them stand close together, walk closely by each other, and or lightly bump into one another as if in a crowded place. This is to stimulate an environment where there are many people in which these interactions may occur. Have the participants practice some of the strategies from their work sheet.

Station four: Olfactory stimuli

Supplies: candles, gum, pitcher of ice water, cups, and rubber bands
> At the olfactory station, have four different scented candles, preferably food scented to simulate the smells of a restaurant, coffee shop, bar, or other public place. Instruct the participants to read the scenario and practice some of the strategies from the work sheet.

Sensory Coping Strategies

Coping Strategy Categories	Strategies to Use

Calming
These strategies can be used when you feel anxious.
	• Deep pressure activities
	  Heavy Jumps: Jump up in the air and come down as hard as you can
	  Standard Push Ups
	  Wall Push Ups: Place both hands on the wall, shoulder width apart. Stand back a little shorter than arm's length. Lean in to the wall and push yourself back to upright.
	  Wall Pushes: Place both hands on the wall shoulder width apart and stand back at arm's length. Push into the wall as hard as you can, like you are trying to push the wall over.
	• Chew gum
	• Rock back and forth slowly on your feet or in a chair

Alerting These can be used when you have a hard time noticing sensory experiences.	• Order something cold to drink to alert your system • Eat something spicy • Get on the dance floor and try some spinning dance moves. The movement of spinning helps to alert your body.
Increase Sensory Input These can be used when the environment does not provide enough input.	• Wear a rubber band around your wrist and when you find yourself seeking tactile input snap the rubber band against your wrist. • The deep pressure activities from above will also work here as well.

Note: Adapted from Schoo-OT.com. (*n.d.*). Sensory diet "menu" activities and strategies to try. Retrieved from http://school-ot.com/Sensory%20Strategies.html

Effective Sensory Coping Strategies

Write down the sensory coping strategies that you tried at each station. Then, rate how effective the strategy was for you by circling the corresponding number.
1 –Not effective
5 –Most effective

	Strategy Tried	**Effectiveness**				
Station 1 **Auditory Stimuli**	•	1	2	3	4	5
	•	1	2	3	4	5
	•	1	2	3	4	5
	•	1	2	3	4	5
Station 2 **Visual Stimuli**	•	1	2	3	4	5
	•	1	2	3	4	5
	•	1	2	3	4	5
	•	1	2	3	4	5
Station 3 **Tactile Stimuli**	•	1	2	3	4	5
	•	1	2	3	4	5
	•	1	2	3	4	5
	•	1	2	3	4	5
Station 4 **Olfactory Stimuli**	•	1	2	3	4	5
	•	1	2	3	4	5
	•	1	2	3	4	5
	•	1	2	3	4	5

Sensory Strategies Journal

What caused the negative sensory experience?	What strategies did you use to overcome the anxiety?	Did it work or not?

Week 4

Week 4

Name of Group: Non-Verbal Communication

Session objectives and purpose. The purpose of this group is to help you understand and interpret non-verbal cues in social situations. These skills are important for dating and developing relationships, because they help individuals understand how another person is feeling.
    a. Participants will identify and demonstrate various non-verbal communication skills.
    b. Participants will discuss the importance of eye contact and interpersonal space.
    c. Participants will identify how non-verbal communication impacts social participation.

Supplies/Materials:
- Emotion Charades (cut out)
- Bucket/hat
- Handouts
- Pens

1. Introduction. Therapist states, "Welcome to session four of the dating group. This session is focused on helping you understand and interpret non-verbal cues in social situations. As you may know, individuals with autism spectrum disorders may have difficulty with reading facial expressions and maintaining eye contact. These skills are important for dating and developing relationships, because they help you understand how another person is feeling."
    Warm up.
    Emotion Charades
    Cut out the emotion cards (see handout *Emotion Charades*). Take turns picking a slip of paper and then acting out the word written on it. Mention that the participants may use their facial expression and body language to describe the emotion. The participants in the audience will guess what the actor is acting out.
    Setting the Mood. Leader should display a welcoming facial expression and open body language when setting the mood of this session. Tone of voice should be calm and clear.
    Expectation of participation: Leader states, "All participants are expected to engage in group discussion and activities, actively listen when an individual is talking, and ask clarifying questions when they arise."
    Session objectives and purpose. Leader states, "The purpose of this group is to help you understand and interpret non-verbal cues in social situations. These skills are important for dating and developing relationships, because they help you understand how another person is feeling."
        a. Participants will identify and demonstrate various non-verbal communication skills.
        b. Participants will discuss the importance of eye contact and interpersonal space.

      c.   Participants will identify how non-verbal communication impacts social participation.

      Brief outline of the session. Leader states, "The session will last approximately 90 minutes. A hand out will be provided for participants to write down their thoughts, questions, and things they have learned. The importance of non-verbal communication will be discussed and the topics of maintaining eye contact and appropriate interpersonal space will be covered. A discussion will be had regarding how non-verbal communication impacts social participation."

2. Activity.

Leader discusses the importance of eye contact and interpersonal space and how non-verbal communication impacts social participation. Demonstrate and have the participants do the following non-verbal skills (see handouts titled *Facial Expressions, Body Language, Eye Contact, and Appropriate Interpersonal Space*).

Discuss which expressions should be used in various contexts.
For example:
    When a person says something sad, such as their pet died or lost their job, you should frown instead of smile.
    When a person says they have family coming to visit, and they are really excited to see them, you should smile.

3. Sharing.

Have participants share their reactions and experiences to the topics discussed above.

4. Processing.

Leader asks, "Which is most difficult for you to understand? Which is the easiest?"

5. Generalization.

Leader summarizes the main themes of the group and may ask for additional main themes from the participants.

6. Application.

Leader asks, "How will you use this information and apply it in daily life?"

7. Summary.

    a.   Review how group members felt about the activity and what occurred.
    b.   Ask participants what they have learned.
    c.   Discuss next week's topic: Verbal Communication
    d.   Homework: Encourage participants to complete the *Body Language Analysis* (see handout *Body Language Analysis)*
    e.   Ask if there are additional questions regarding today's session or up coming sessions.
    f.   Thank them for coming.

Emotion Charades

Discuss, demonstrate, and practice these skills.

Angry	Sad	Surprised
Frustrated	Anxious	Proud
Scared	Guilty	Calm
Happy	Embarrassed	Joyful
Relieved	Ashamed	Love

Facial Expressions

The following websites may be used as a reference to demonstrate facial expressions:

Vanger, Hoenlinger, & Haken (1998) retrieved from:
http://www.dgps.de/fachgruppen/methoden/mpr-online/issue4/art3/node9.html

Reference Chart (*n.d.*) retrieved from:
http://www.referencechart.net/2011/09/facial-expresssions-body-language.html

Ritts & Stein (*n.d.*) retrieved from:
http://www.tlsig.cba.neu.edu/?page_id=184

Wall (*n.d.*) retrieved form:
http://computingforpsychologists.wordpress.com/tag/emotion/

How to Tell What Someone Feels About You: Reading Body Language

Reading Body Language of Others

Emotion: Anxiety/Dislike

Body language

- Looking away
- Fidgeting
- Pulling on ear
- Adjusting clothing
- Rubbing the neck and head
- Playing with things in pockets
- Looking at windows/doorways
- Leaning away from you
- Looking at the ground
- Clearing the throat

Emotion: Thoughtful/undecided

Body language

- Hand to face
- Chin stroking
- Frowning
- Squinting
- Body turned partly away
- Occasional quick smiles
- Looking down

Emotion: Interest/trust/like

Body language

- Body facing you
- Leaning in relaxed
- Making eye contact
- Smiling
- Playing with hair/clothing
- Head tilting
- Laughing
- Making physical contact

Correct Response to Body Language

Anxiety/dislike

Your reaction

- The person feels uncomfortable.
- Help them feel at ease by opening your body posture-uncross your arms and legs
- Face them and lean forward and in to show you are interested and focusing on them
- Maintain eye contact
- Smile and be friendly

Thoughtful/undecided

Your reaction

- This person has not made up their mind about how they feel about you
- Keep an open posture
- Mirror their positive body language

Interest/trust/like

Your reaction

- This person likes you
- This person feel comfortable around you
- Whatever you are doing, keep doing it

Body Language Continued

The following websites can be used as a reference for additional strategies and photos to demonstrate how to engage in approachable body language:

Shaundrie Jones (n.d.) retrieved from:
http://maravillosomagazine.weebly.com/body-language.html

Susanta (November 12, 2010) retrieved from:
http://takeyourtips.com/6-tips-on-how-to-presenting-the-best-body-language/

Eye Contact

Strategies to improve your eye contact skills

1. **Talking to a group.** It is great to have direct contact with your listeners. Look at a different member of the group with every new sentence. This way you are talking to the entire group and keeping them all interested.

2. **Talking/Listening to an individual.** It is great to maintain eye contact when talking to a person; however, it can become a bit creepy and uncomfortable if you stare intensely at them. To avoid this, break eye contact every 5 seconds or so. Look up or to the side as if you are remembering something, so when your listener sees this, they will think you are trying to remember something and keep on listening to you.

   Another strategy is "The Triangle." Look at one eye for about 5 seconds, look at the other eye for 5 seconds and then look at the mouth for 5 seconds and keep on rotating in this way. This technique coupled with other listening skills such as nodding, occasional agreement words such as 'yes', 'Uh –huh' 'mm' etc is a great way to keep the talker talking and to show them you are interested in what they are saying.

Appropriate Interpersonal Space

Anthropologist Edward T. Hall (1982) described four levels of social distance that occur in different situations:

- **Intimate distance - 6 to 18 inches**
  This level of physical distance often indicates a closer relationship or greater comfort between individuals. It often occurs during intimate contact such as hugging, whispering, or touching.

- **Personal distance - 1.5 to 4 feet**
  Physical distance at this level usually occurs between people who are family members or close friends. The closer the people can comfortably stand while interacting can be an indicator of the intimacy of the relationship.

- **Social distance - 4 to 12 feet**
  This level of physical distance is often used with individuals who are acquaintances. With someone you know fairly well, such as a co-worker you see several times a week, you might feel more comfortable interacting at a closer distance. In cases where you do not know the other person well, such as a postal delivery driver you only see once a month, a distance of 10 to 12 feet may feel more comfortable.

- **Public distance - 12 to 25 feet**
  Physical distance at this level is often used in public speaking situations. Talking in front of a class full of students or giving a presentation at work are good examples of such situations.

It is also important to note that the level of personal distance that individuals need to feel comfortable can vary from culture to culture. One oft-cited example is the different between people from Latin cultures and those from North America. People from Latin countries tend to feel more comfortable standing closer to one another as they interact, while those from North America need more personal distance

Body Language Analysis

       This week you will analyze the body language of someone you know and feel comfortable with. Please, answer the following questions about what you saw this person do/look like. You may answer in writing, by taking pictures of the individual, or draw what you see. Be prepared to discuss what you saw next week.

What do they look like when telling an exciting story?

What do their facial features and body language look like when they are upset about something?

How do they act when they talk to someone they know versus someone they are unfamiliar with?
       How far away are they standing?

Week 5

Week 5

Name of Group: Verbal Communication

Session objectives and purpose. The purpose of this group is to build verbal communication skills in order to help with developing social connections which may lead to dating.
  a. Participants will initiate, sustain, and terminate a conversation.
  b. Participants will identify what personal information is appropriate to disclose.
  c. Participants will determine, at what point in the relationship, when it is appropriate to disclose certain personal information.

Supplies/Materials:
  - Note cards
  - Pens/pencils

1. Introduction. Therapist states, "Welcome to group. Today we are going to be discussing verbal communication. Being able to initiate, sustain and terminate conversations is an important aspect of building relationships, because it allows you get to know the other person.
  Warm up
  Who Done It?
  Each individual writes something on a note card that makes them unique that they have done in the past. Ex. Skydiving ate a bug, lived in seven different states. The leader collects the cards, shuffle the cards, and passes them back out to group members. Each person takes turns reading aloud their card and has to guess which card he/she is reading. The guessed person replies yes/no. When they guess correctly, the individual whom the card belongs to briefly describes the experience.
  Setting the Mood. Leader should display a welcoming facial expression and open body language when setting the mood of this session. Tone of voice should be calm and clear.
  Expectation of participation: Leader states, "All participants are expected to engage in group discussion and activities, actively listen when an individual is talking, and ask clarifying questions when they arise."
  Session objectives and purpose. Leader states, "The purpose of this group is to build verbal communication skills in order to help with developing social relationships which may lead to dating."
      a. Participants will initiate, sustain, and terminate a conversation.
      b. Participants will identify what personal information is appropriate to disclose.
      c. Participants will determine, at what point in the relationship, when it is appropriate to disclose certain personal information.
  Brief outline of the session. Leader states "today's session will last approximately 90 minutes. We will start by discussing some dos and don'ts of verbal communication then you will have the chance to practice your skills though role

playing. Following the role playing we will have a discussion on how the session went."

2. Activity.
Verbal communication Dos and Don'ts tip sheet: The leader will pass out the *Verbal Communication Tip Sheet: Dos and Don'ts* handout to participants. Together the group will go through the tip sheet. The leader will then ask,

> "What verbal communication Do's are you already completing?"
> "What are some of the Don'ts that you find yourself doing?"

Social Stories: The leader will than pass out the *Social Stories: Verbal Communication Sharing Information* handout to participants. The leader will give the group the following instructions:

> "We will read one of the scenarios, answer the discussion questions as a group and then we will have two group members come up and role play how the scenario would look if they used the *Verbal Communication Tip Sheet: Dos and Don'ts* to guide their conversation."
>
>> When group members are role playing it is important for the leader to provide encouragement and let them know that you are there to help them if they need it.

3. Sharing
Leader asks, "What did you learn about verbal communication?"

4. Processing
Leader asks, "How did you feel introducing yourself? How do you think you will use the tip sheet? Why is it important to not share too much information right away?"

5. Generalization
Leader summarizes the main themes of the group and may ask for additional main themes from the participants.

6. Application
Leader asks, "How can you use this information in dating? Pick one thing you can practice over this next week."

7. Summary
    a. Review how group members felt about the activity and what occurred.
    b. Ask participants what they have learned.
    c. Discuss next week's topic: Conflict Resolution and Compromise
    d. Homework: Encourage the participants to review what they agreed to do and report back to the group next week.
    e. Ask if there are additional questions regarding today's session or upcoming sessions.
    f. Thank them for coming.

Verbal Communication Tip Sheet: Dos and Don'ts

Dos	Don'ts
• Introduce yourself when meeting someone new. • Use open ended questions. • Make eye contact. • Pay attention to the tone and volume of your voice make sure it matches the emotion you want to convey. • Be clear in your communication and ask for clarification when needed. • Be an active listener. Pay attention to what the other person is saying and ask them questions about what they have said.	• Don't talk over people. Instead wait until the other person has said what they want and then reply. • Don't dominate the conversation by only talking about what you want to talk about. Instead let others share their opinions and knowledge and be flexible to change topics that others what to talk about. • Don't share to much personal information one first meeting someone. • Don't ignore a question, if you wish to not answer a question politely decline by saying, "I'm sorry, but I would rather not talk about that right now."

Sharing too much personal information with a stranger
      Harry is at a baseball game and sits next to Sally. Throughout the game, they share comments about the players and game action. Sally smiles at Harry. Harry starts to tell Sally about how he played little league when he was eight, and about the time he got a black eye catching a fly ball. He then proceeds to tell about all of the other times he was injured, and about his recent colonoscopy.

- What do you think about this scenario?

- What recommendations can you make to Harry?

Fixating on a topic and dominating the conversation
      Stacy and Megan have some classes together at school. They have worked on a few projects together and have become friends. They share an interest in art and are going to an art gallery to look at a new exhibit. At the art exhibit, Megan starts to tell Stacy all about the artist and how each piece was made. She goes into great detail about how the materials were found or made. Megan become so fixated on subject that Stacy doesn't get a chance to talk.

- What do you think about this scenario?

- What recommendations can you make to Megan?

Not wanting to share information/ pushing for information
      Bob and Mary have been dating for three months. They are enjoying a picnic in the park and Bob wants to learn more about Mary's family. When Bob asks questions, Mary responds with very little information. Bob wants to know more, so he keeps asking questions. Mary's answers get shorter and soon she is angry with Bob and gets up and walks away.

- What do you think of this scenario?

- What recommendations can you make for Bob?

- What recommendations can you make for Mary?

- What could Mary have done instead of walking away?

Week 6

Week 6

Name of Group: Conflict Resolution and Compromise

Session objectives and purpose. The purpose of this group is to provide the participants with effective strategies to handle conflict and learn how to compromise when there is a disagreement.
  a. Participants will identify positive strategies to use in time of conflict.
  b. Participants will identify coping strategies when feeling angry during conflict.
  c. Participants will describe the importance of conflict resolution and compromise when in a friendships/relationship.

Supplies/Materials:
  - Handouts
  - blank paper
  - pens

1. Introduction. Leader states, "Welcome to the sixth session on dating. Today we will focus on strategies to handle conflict and learn how to compromise when there is a disagreement. When dating someone, conflicts will occur. For example, a conflict you may encounter is deciding on a moving to see. It is important to handle conflicts effectively so that you do not hurt their feelings or get into a fight."

   Warm up.
   I Represent Conflict
   The leader stands in the middle of the room and says, "Imagine that I represent conflict. Think about how you usually react when you experience a conflict personally or witness a conflict happening nearby. Then place yourself, in relation to me, somewhere in the room in a way that indicates your first response to conflict or disagreement. Think about your body position, the direction that you're facing, and the distance from conflict."
      Once participants have found a position relative to you in the room, ask individuals to explain why they are standing where they are.
   Setting the Mood. Leader should display a welcoming facial expression and open body language when setting the mood of this session. Tone of voice should be calm and clear. This is more of a serious topic, so be sure to compliment that feeling.
   Expectation of participation: Leader states, "All participants are expected to engage in group discussion and activities, actively listen when an individual is talking, and ask clarifying questions when they arise."
   Session objectives and purpose. Leader states, "The purpose of this group is to provide you with effective strategies to handle conflict and learn how to compromise when there is a disagreement. When dating someone, conflicts will occur. It is important to handle them effectively so that you do not hurt their feelings or get into a fight."
      a. Participants will identify positive strategies to use in time of conflict.
      b. Participants will identify coping strategies when feeling angry during conflict.

     c.   Participants will describe the importance of conflict resolution and compromise when in a friendships/relationship.

Brief outline of the session. Leader states, "The session will last approximately 90 minutes. A hand out will be provided for participants to write down their thoughts, questions, and things they have learned. The importance of conflict resolution and compromise will be discussed, and the strategies to use during conflict will be covered."

2. Activity.

Leader states, "In everyone's life there are some challenges. These challenges can be both positive and negative. Some challenges may be with other people, and you will need to look for solutions. There are a number of different ways of looking at finding solutions to these challenges."

Go over the problem solving strategy (see handout *Problem Solving Strategies*). Leader states, "When trying to resolve conflict, it helps to have a way to think about the problem and to attempt to solve it."

    Write the following steps on the board:
        1. Define the problem.
        2. Brainstorm solutions.
        3. Choose a solution and act on it.

    Go over each step with the group

1. Therapist states, "In step one, it is important to define the problem. Before the problem solving begins, the people in the conflict have to agree to work it out. In order for problem solving to work, they have to agree to really try to work it out, and to not yell or call names. They want to DE-escalate the conflict, not escalate it."

2. Therapist states, "In step two, it is important to come up with as many possible solutions as you can."

3. Therapist states, "In step three, you want to choose a solution(s) that is win-win."
    Read the example of resolving conflict and ending in *win-win*.
    Discuss the win-win scenario and why it is the best outcome of a conflict.

Go over and practice coping strategies.

Have participants get into pairs and discuss the following with their partner:
Leader states, "Discuss a time when someone has had different opinions and interests than you. For example, when you wanted to see a different movie or eat at a difference restaurant than someone. What happened when you wanted to do something different from the other person?"

3. Sharing.

Have the pairs share their conflict and problem solving method with the rest of the group.

4. Processing.
Leader asks, "If you did not reach a win-win outcome during your conflict, how might you use the steps to have reached win-win? Why might it be important for the outcome to be win-win versus win-lose?"

5. Generalization.
Leader summarizes the main themes of the group and may ask for additional main themes from the participants.

6. Application.
Leader asks, "What other scenarios might you come across that conflict may occur? How might you apply the strategy learned today?"

7. Summary.
    a. Review how group members felt about the activity and what occurred.
    b. Ask participants what they have learned.
    c. Discuss next week's topic: Leisure
    d. Homework: Encourage participants to fill out the *Conflict Journal* handout. Also have participants locate and complete the *Model of Human Occupation Leisure Interest Checklist* for week seven. The checklist can be found at http://www.uic.edu/depts/moho/mohorelatedrsrcs.html#OtherInstrumentsBasedon MOHO
    e. Ask if there are additional questions regarding today's session or upcoming sessions.
    f. Thank them for coming.

Problem Solving Method

1. Define the problem.
2. Brainstorm solutions.
3. Choose a solution and act on it.

Example of problem solving:
1. Define the problem: You want to go to a different movie than your friend.
2. Brainstorm solutions: Look at all of the other movie options/ discuss other activities you both enjoy doing/ discuss the option of seeing your movie tonight and your friend's favorite movie another night.
3. Choose a solution and act on it: Choose a different movie you both enjoy.

Covey's Win-Win Method
(Covey, 2004)

<p align="center">**Win–Lose**</p>

This mind set means that you always have your way, despite other's thoughts. Your actions could hurt people's feelings and they may become upset with you. Healthy relationships take all of the person's needs and feelings into account and usually involve both give and take.

<p align="center">**Lose–Win**</p>

Lose-Win is a situation where you give in and let someone else make all the decisions. Facing challenges in this way may make you feel bad and it is not healthy. When an issue is not important to you and no one is going to be hurt by the decision, it is okay to let another win. Just make sure you take a stand when you feel strongly or the decision is harmful to you or another person.

<p align="center">**Lose-Lose**</p>

Lose-lose is a situation where no one comes out with what they need or want. Fighting is a great example of a lose–lose situation. Revenge is another example of a lose-lose situation. By getting revenge, you may think you are getting even and thus winning, but really you are hurting yourself just as much.

<p align="center">**Win-Win**</p>

Win-win is the belief that everyone can win in a situation. It is attitude that involves caring about both the other person and about yourself. It tries to balance things so everyone gets at least some of what they want or need. **Of the four ways of solving problems, it is the only one in which both side end up feeling good** (Covey, 2004).

During conflict, sometimes people begin to feel angry or frustrated and want to yell or throw things. These are strategies that you can use to cope with stress.

- Deep breaths
- Squeeze fists
- Count backwards from 10-1
- Give yourself a big hug

Conflict Journal

What was your conflict?	
How did you handle it?	
Did you reach win-win? Explain.	

Week 7

Week 7

Name of Group: Leisure

Session objectives and purpose. The purpose of this group is to explore leisure and how leisure activities can be used to enhance relationships and the dating experience.
   a. Participants will identify leisure interests.
   b. Participants will explore community activities and events available.
   c. Participants will identify how sensory can impact leisure.

Supplies/Materials:
   - Computer
   - Community event calendars
   - Flyers for local venues
   - Handout: *Reference Book: Things to Do on Dates*
   - Stapler
   - Pens/pencils/markers

1. Introduction. Therapist states, "Welcome to group, today we are going to explore leisure activities. Identifying leisure activities that you enjoy and can enjoy with others is an important aspect of dating. Leisure activities are a great way to meet new people and to get to know and spend time with the person you are dating."
   Warm up.
   Sorts: The leader yells out two contrasting choices in the leisure category. The group participants must move opposite sides of the room. The moderator then yells out two more choices, and the participants move to corresponding spots. Continue through the following choices.
   - Reading vs. Watching a movie
   - Walking vs. Running
   - Video games vs. Computer games
   - Rollerblading vs. Riding a bike
   - Skiing vs. Snowboarding
   - Basketball vs. Baseball
   - Painting & Drawing vs. Singing
   - Writing vs. Story telling
   - Ballroom dancing vs. Contemporary dancing
   - Spending time alone vs. Spending time with people
   - Feel free to add more leisure activities or allow group members to decide on topics

   Setting the Mood. Leader should display welcoming facial expression and open body language when setting the mood of this session. Tone of voice should be calm and clear. The leader should be upbeat and encourage participation by asking questions and providing praise.

Expectation of participation: Leader states, "All participants are expected to engage in group discussion and activities, actively listen when an individual is talking, and ask clarifying questions when they arise."

Session objectives and purpose. Leader states, "The purpose of this group is to explore leisure and how leisure activities can be used to enhance relationships and the dating experience."

   a. Participants will identify leisure interests.
   b. Participants will explore community activities and events available**.**
   c. Participants will identify how sensory can impact leisure.

Brief outline of the session. The leader states, "The session will last approximately 90 minutes. We will start by discussing the *Model of Human Occupation Leisure Interest Checklist* that you have already completed. After that we will make a reference book of things to do on dates by using the computer and community event calendars. Finally we will have a discussion on the activity."

2. Activity.

Model of Human Occupation Leisure Interest Checklist: The group will discuss the interest checklist the leader will ask, "Where there any activities on the list that you have not thought of but think you might enjoy? How willing are you to try new leisure activities?"

After discussing the interest checklist participants will be asked to make a reference book of activities they can do on dates. Participants should use the *Reference Book: Things to Do on Dates* handout to assist them with this activity.

The leader states:

   "Today we are going to make a reference book on activities you can for dates. You can use your interest checklists, the computer, community event calendars, and event flyers to make a list of activities that you would be interested in doing. I encourage you to identify activities that are within your budget so that you can actually participate in the   activities that you choose. When looking at the activities I want you to identify what the activity is, dates and times of the activity, where it is located, contact information, and the cost of the activity.

3. Sharing.

The leader asks, "What activity do you think you are most likely to try?"

4. Processing

The leader asks, "What are some of the sensory issues that may come up during one of your leisure activities? How will you handle that?"

5. Generalization

Leader summarizes the main themes of the group and may ask for additional main themes from the participants.

6. Application

The leader asks, "How can you use this in your everyday life? How will this help you meet people? How can this help you build a relationship?"

7. Summary

    a.   Review how group members felt about the activity and what occurred.

    b.   Ask participants what they have learned.

    c.   Discuss next week's topic: Skill Building with a Peer

    d.   Homework: Encourage participants to choose an activity to complete from their *Model of Human Occupation Leisure Interest Checklist.*

    e.   Ask if there are additional questions regarding today's session or upcoming sessions.

    f.   Thank them for coming.

To make the booklet copy the worksheet and cut out the activity/event charts. Stack 10 activity/event charts and staple them to make a booklet. Participants will then have an easy to flip though reference of local activities they can do on dates.

Activity/Event:	
Date	
Time	
Location	
Cost	
Contact Information	

Activity/Event:	
Date	
Time	
Location	
Cost	
Contact Information	

Week 8

Week 8

Name of Group: Skill Building with a Peer

Session objectives and purpose. The purpose of this group is to integrate previously learned social skills that will assist in building relationships and dating.
   a. Participants will implement previously learned social skills including: problem solving skills, coping strategies, verbal communication, and non-verbal communication, rapport building, and identifying social events.

Supplies/Materials:
   - Handout
   - Pens
   - Scratch paper
   - Supplies for making invitations
   - Computer/printer
   - Telephone

1. Introduction. Therapist states, "Today we have peer mentors from the community joining us to assist with planning a social event that will be held during the session of the thirteenth week. During this session, you will be partnering up with a peer and plan on going on an outing that was identified in your *Reference Book: Things to Do on Dates.*
   Warm up.
   Reflection
   Have each group member describe their leisure outing with a friend over the week. What did you chose to do? What went well? Were there any conflicts?

   Get to know your peer
   One to two participants will be paired with a peer mentor and complete a one minute interview with the mentor. A topic that may be discussed is what they enjoy doing for social participation and why. The participants will then report to the group what they found out about the student.

   Setting the Mood. Leader should display a welcoming facial expression and open body language when setting the mood of this session. Tone of voice should be calm and clear.
   Expectation of participation: Leader states, "All participants are expected to engage in group discussion and activities, actively listen when an individual is talking, and ask clarifying questions when they arise."
   Session objectives and purpose. Leader states, "The purpose of this group is to integrate previously learned social skills that will assist in building relationships and dating."
      a. Participants will implement previously learned social skills including: problem solving skills, coping strategies, verbal communication, and non-verbal communication, rapport building, and identifying social events.

Brief outline of the session. Leader states, "Today we will plan the social event that will be held during the thirteenth week. You will be getting into committees and working together as well as working with the peers. When the social event is planned, you will then collaborate with your peer partner to choose an activity to participate in from your *Reference Book: Things to Do on Dates.*

2. Activity.

Prior to the session, the leader will have reserved a gathering room at a community facility. The leader will have notified the business that the participants will be calling to obtain more information on and reserve the room.

Participants and students will split into the following committees to help distribute the tasks of planning a social event. Committees may include: Decoration, food/treats/drinks, invitation, and activity group. Each committee may discuss ideas with the others if they have questions or concerns. An example of an event that might be planned is a potluck.

The decoration committee will be in charge of calling the facility to reserve a room and find out the cost of renting it. The food committee will decide who brings what or where the treats will be coming from. The invitation group will be in charge of designing invitations to give to friends and family that would like to attend. The activity group may plan what the guests will do at the gathering to facilitate social interaction among one another, for example play games or engage in ice breakers.

At the end of each subgroup's task, members will be asked to give each other feedback regarding the goal areas (problem solving, coping strategies, verbal communication, non-verbal communication, rapport building, and identifying social events).

3. Sharing.

At the end of the session, each committee will report to the group what they have been working on for the social event. Participant will also instruct the group to bring what is needed to the social event on the designated day.

4. Processing.

Each member will share feedback they received regarding the objectives (problem solving, coping strategies, verbal communication, non-verbal communication, rapport building, and identifying social events). Potential questions the leader could use in this discussion of skills include: **"**What conflicts arose during event planning? How did you handle them? What social participation skills did you work on?"

5. Generalization.

Leader summarizes the main themes of the group and may ask for additional main themes from the participants.

6. Application.

Leader asks, "How will you be able to use the collaboration and event planning skills in daily life? How does this relate to building relationships and dating?" Now we would

like you to plan a less formal get together to occur sometime during this next week, so you can practice skills again.

Instruct the participants to partner up with their peer mentor. Together they will look through their *Reference Book: Things to Do on Dates,* and plan a time and day within the next week to engage in one of the activities.

7. Summary.
    a. Review how group members felt about the activity and what occurred.
    b. Ask participants what they have learned.
    c. Discuss next week's topic: Interacting in an Online/Virtual Environment
    d. Homework: Remind the participants to participate in their designated social outing with their peer before the next session.
    e. Ask if there are additional questions regarding today's session or up coming sessions.
    f. Thank them for coming.

Week 9

Week 9

Name of Group: Interacting in an Online/Virtual Environment

Session objectives and purpose. The purpose of this group is to become more aware of the dos and don'ts of interacting in an online/virtual environment. Individuals on the autism spectrum utilize the online environment and dating websites at a higher percentage than typically developing individuals. Because of this, it is important to emphasize safety when interacting with others online whether it is for friendship or dating.
   a. Participants will describe the importance of online safety.
   b. Participants will identify what personal information that should be/ should not be shared over a virtual environment.

Supplies/Materials:
- Hand outs
- Pens
- Computer
- Scratch paper

1. Introduction. Therapist states, "Welcome to week nine of the dating group. Today we will be focusing on interacting in the virtual environment, specifically the internet. Online chat rooms and dating websites are becoming more popular, and it is important to recognize what should/should not be shared over the internet to ensure your safety."
   Warm up.
   Discuss how the social outing with their peer mentor went.
   Leader asks, "How did you feel when on the social outing? What did you learn? What feedback did you receive from your peers?"

   Two truths and a lie
      Participants will write down two truths about their lives/personality and one lie. Participants take turns sharing their truths and lies with the group. The other group members guess what the truths are and what the lie is.
   Setting the Mood. Leader should display a welcoming facial expression and open body language when setting the mood of this session. Tone of voice should be calm and clear.
   Expectation of participation: Leader states, "All participants are expected to engage in group discussion and activities, actively listen when an individual is talking, and ask clarifying questions when they arise."
   Session objectives and purpose. Leader states, "The purpose of this group is to help you become more aware of what information to share online to ensure your safety as well as provide you with some popular online dating websites that you may look into when looking to meet people."
      a. Participants will describe the importance of online safety.
      b. Participants will identify what personal information that should/ should not be shared over a virtual environment.

Brief outline of the session. Leader states, "The session will last approximately 90 minutes. A hand out will be provided for participants to write down their thoughts, questions, and things they have learned. A discussion will be held about online safety."

2. Activity.
Begin by discussing the warm-up activity.

Leader states, "How difficult was it to tell which are the truths and lies about group members in person. Imagine how difficult it is deciphering lies versus truths online. It is important to keep in mind that the person talking to you online may not be who they say they are. Because of this, we are going to be talking about some strategies to keep you safe when talking to someone online."

Discuss the online safety strategies (see handout *Online Safety*).

Examples for instant message conversations: Have the participants rate if they are SAFE or NOT SAFE (see handout *Safe or Not Safe*).

Write if the online interaction is *safe* or not *safe* (Key)

	You: Hi, I am Abby. What is your name?
	Individual online: Hi, Abby. My name is Jeff. Where are you from?
	You: Nice to meet you. I'm from the Midwest. How about you?
Safe	Individual online: Hey, me too!
	You: Hi, my name is Abby Peterson. What is your name?
	Individual online: Hi, my name is Jeff Smith. Where are you from?
	You: Nice to me you. I live in Grand Forks, ND in an apartment downtown.
Not safe	Individual online: That must be fun living in a big city. I live in Pembina, ND.
	You: What do you like to do for fun?
	Individual online: I like to play sports and go to museums. What about you?
Safe	You: I like to read, play with my pet, go to movies, and dance.
	You: What do you like to do for fun?
	Individual online: I like to go hunting and fishing. Sometimes I like to race cars on gravel roads. You should ride with me sometime. Are you available this weekend?
	You: That sounds like fun! Will you come pick me up at 435 4th Street?
Not Safe	Individual online: Sure! See you soon.

	Individual online: You sound like a really cool person. Can we meet in person?
Safe_____	You: No, I would like to get to know you better.
	Individual online: OK. Where do you work?
	You: I am a biologist and I work with plants. Where do you work?
	Individual online: I work at a department store as a cashier. You must make a lot of money being a biologist.
Safe_____	You: I would rather not discuss my finances with you at this time.

Discuss the *Online Dating Websites.*

Apply new information to scenarios and role play how to handle situations.
Have the participants choose a partner and role play in front of the group what a safe and unsafe online scenario might look like. Have the rest of the group discuss whether it is safe or unsafe. If it is unsafe, how do we make it safe?

3. Sharing.
Have the participants share their scenarios with the group.

4. Processing.
Leader asks, "What are your thoughts about online dating? Have you done this before? How did it go? Why is online safety important?"

5. Generalization
Leader summarizes the main themes of the group and may ask for additional main themes from the participants.

6. Application.
Leader asks, "How might you use this information regarding online safety in real life?"

7. Summary.
  a. Review how group members felt about the activity and what occurred.
  b. Ask participants what they have learned.
  c. Discuss next week's topic: Safety: Meeting People for the First Time in Person
  d. Homework: Encourage participants to explore the online dating websites or instant message chat rooms. Ask them to look at the message boards and identify if they used online safety communication.
  e. Ask if there are additional questions regarding today's session or up coming sessions.
  f. Thank them for coming.

Online safety

- Do not give out personal information, such as address, telephone number, or name and location of place of employment.
- You do not have to respond to people that say mean things to you or make you feel uncomfortable.
- Only post photos of yourself that you would feel comfortable showing your family members. For example, always be wearing clothes in your photos and avoid showing photos of you drinking alcohol.
- Do not give out your passwords to anyone, even best friends and family.
- Do not give out your financial information or social security number.

Online Dating Websites/ Online Chat Rooms
Match.com
Eharmony.com
Christianmingle.com
Others:

Write if the online interaction is *safe* or *not safe*.

_____

You: Hi, I am Abby. What is your name?
Individual online: Hi, Abby. My name is Jeff. Where are you from?
You: Nice to meet you. I'm from the Midwest. How about you?
Individual online: Hey, me too!

_____

You: Hi, my name is Abby Peterson. What is your name?
Individual online: Hi, my name is Jeff Smith. Where are you from?
You: Nice to me you. I live in Grand Forks, ND in an apartment downtown.
Individual online: That must be fun living in a big city. I live in Pembina, ND.

_____

You: What do you like to do for fun?
Individual online: I like to play sports and go to museums. What about you?
You: I like to read, play with my pet, go to movies, and dance.

_____

You: What do you like to do for fun?
Individual online: I like to go hunting and fishing. Sometimes I like to race cars on gravel roads. You should ride with me sometime. Are you available this weekend?
You: That sounds like fun! Will you come pick me up at 435 4th Street?
Individual online: Sure! See you soon.

_____

Individual online: You sound like a really cool person. Can we meet in person?
You: No, I would like to get to know you better.

_____

Individual online: OK. Where do you work?
You: I am a biologist and I work with plants. Where do you work?
Individual online: I work at a department store as a cashier. You must make a lot of money being a biologist.
You: I would rather not discuss my finances with you at this time.

Week 10

Week 10

Name of Group: Safety: Meeting People for the First Time in Person

Session objectives and purpose: The purpose of this session is to increase awareness and safety when meeting someone for the first time in person. When people meet online or through a mutual friend, they may decide to move the relationship forward and meet in person. It is important that your safety is a priority, especially when you have not met this person before.

    a. Participants will identify the importance of taking safety precautions when meeting someone for the first time.

    b. Participants will identify strategies to stay safe during their first encounter with someone.

Supplies/Materials:
- Hand outs
- Pens
- Computer
- Scratch paper
- Things to do on dates activity book

1. Introduction. Therapist states, "Welcome to week ten of the dating group. Today we will be focusing on safety strategies when meeting someone in person for the first time."

> **Warm up**. Have the participants share their experience with their homework of exploring the online dating websites or instant message chat rooms. Ask them if they saw people use online safety communication or if it was not safe.
>
> **Setting the Mood.** Leader should display a welcoming facial expression and open body language when setting the mood of this session. Tone of voice should be calm and clear. This topic may have a more serious undertone, so be sure your tone of voice reflects this.
>
> **Expectation of participation:** Leader states, "All participants are expected to engage in group discussion and activities, actively listen when an individual is talking, and ask clarifying questions when they arise."
>
> **Session objectives and purpose.** Leader states, "The purpose of this session is to increase awareness and safety when meeting someone for the first time in person. When people meet on line or through a mutual friend, they may decide to move the relationship forward and meet in person. It is always important that your safety is a priority, especially when you have not met this person before."
>
>   a. Participants will identify the importance of taking safety precautions when meeting someone for the first time.
>
>   b. Participants will identify strategies to stay safe during their first encounter with someone.
>
> **Brief outline of the session.** Leader states, "The session will last approximately 90 minutes. A hand out will be provided for participants to write down their thoughts, questions, and things they have learned. An activity and discussion will be held about strategies to keep you safe when meeting someone for the first time."

2. Activity.
Discuss strategies for meeting someone for the first time (see handout *Meeting Someone for the First Time*).
Encourage participants to get into groups of two or three and brain storm 3-5 public places in which they could possibly meet someone for the first time. They may use their *Reference Book: Things to Do on Dates*, the phone book, and computers as resources.

After they have identified these places, come back together as a large group.
The leader should write down the names of the safe, public places to meet as well as the address and phone number. Encourage the participants to write down this information in their binders for safe keeping.

3. Sharing.
Have the participants share their identified places that are public and safe to meet someone for the first time.

4. Processing.
Leader asks, "Which of these places are safe to meet someone for the first time? Which are not? Why?"

5. Generalization
Leader summarizes the main themes of the group and may ask for additional main themes from the participants.

6. Application.
Leader asks, "How will you use these strategies in the upcoming weeks?"

7. Summary.
    a. Review how group members felt about the activity and what occurred.
    b. Ask participants what they have learned.
    c. Discuss next week's topic: Progressing from Friends to Something More / Healthy vs Unhealthy Relationships
    d. Homework: Encourage the participants to develop a safety plan when meeting someone for the first time. Participants should identify one person they trust to tell where they will be and who they are meeting. Participants should narrow down the choices in the *Safe, Public Places to Meet Someone for the First Time* activity to three they might actually use.
    e. Ask if there are additional questions regarding today's session or upcoming sessions.
    f. Thank them for coming.

Meeting Someone for the First Time

- Meet in a public place and stay in a public place

- Tell a friend where you are going, who you are meeting, and when you will be home

- Stay sober, do not drink heavily or use drugs

- Be in charge of your transportation to and from the meeting. Do not let the other individual pick you up or bring you home

- Keep your personal items will you at all times to avoid them being stolen

- Keep your beverages near you to avoid them being tampered with

- Another option is to utilize a buddy system
  - Have a friend go with you to meet this person, but have them sit in a different area, but still within eye sight of one another

- If traveling a long distance to meet someone:
  - Stay in a hotel and keep the location and name confidential
  - Use a taxi, rental car, or other public transportation
  - Remember to keep your family and friends involved

Safe, Public Places to Meet Someone for the First Time

Name of Venue:
Address:

Telephone number:

Name of Venue:
Address:

Telephone number:

Name of Venue:
Address:

Telephone number:

Name of Venue:
Address:

Telephone number:

Name of Venue:
Address:

Telephone number:

Name of Venue:
Address:

Telephone number:

Name of Venue:
Address:

Telephone number:

Name of Venue:
Address:

Telephone number:

Name of Venue:
Address:

Telephone number:

Name of Venue:
Address:

Telephone number:

Name of Venue:
Address:

Telephone number:

Name of Venue:
Address:

Telephone number:

Name of Venue:
Address:

Telephone number:

Name of Venue:
Address:

Telephone number:

Week 11

Week 11

Name of Group: Progressing from Friends to Something More / Healthy vs Unhealthy Relationships

Session objectives and purpose. The purpose of this group is to identify when it is appropriate to progress the relationship and how you might do that as well as when it may be time to end the relationship.
   a. Participants will identify methods to progress or terminate a relationship.
   b. Participants will identify aspects of health and unhealthy relationships.

Supplies/Materials:
   - Pens
   - Scratch paper
   - handouts

1. Introduction. Therapist states, "Welcome to group, today we are going to discuss when and why you might want to progress or end a relationship. The relationship you form with someone when dating can be a healthy or unhealthy relationship. It is important to be able to identify aspects of both when deciding if you want to move forward with the relationship."

   Warm up.
   What is your prior experience with relationships? Ask participants what their prior positive and negative experiences with relationships-friendships, and romantic relationships.
   Setting the Mood. Leader should display a welcoming facial expression and open body language when setting the mood of this session. Tone of voice should be calm and clear. This is a serious topic and may be emotional for some be sure available to those who appear to be struggle with the topic.
   Expectation of participation: Leader states, "All participants are expected to engage in group discussion and activities, actively listen when an individual is talking, and ask clarifying questions when they arise."
   Session objectives and purpose. Leader states, "The purpose of this group is to identify when it is appropriate to progress the relationship and how you might do that as well as when it may be time to end the relationship."
      a. Participants will identify methods to progress or terminate a relationship.
      b. Participants will identify aspects of health and unhealthy relationships.
   Brief outline of the session. The leader states "The session will last approximately 90 minutes. We will start by discussing health and unhealthy relationships and learning what those look and sounds like. We will then role play scenarios on healthy/unhealthy relationships. Following that we discuss how to move a relationship forward or end it and will practice the conversation skills needed to progress or end the relationship."

2. Activity.
Healthy vs. unhealthy relationships*:* The leader will ask the participants, "What do you think makes a good relationship? What do you think makes a bad relationship?"

The leader will write down the response of the participants for all to see. The leader will then hand out the *Healthy/Unhealthy Relationships References* to the participants. The group will discuss the differences and similarities of their answers and the relationship wheels.

The leader will then have participants break into small groups to read through the *Healthy/Unhealthy Relationship Scenarios* handout and begin to answer the discussion questions. The leader will bring the group back together and go through the scenario discussion questions.

When discussing progressing or terminating a relationship, the leader asks, "What difficulties have you experienced when trying to move a relationship to the next step? How do you know when to move forward?"

Have the participants review their dating plan. The leader asks, "What qualities do you feel you would want met be for taking a relationship to the next level?"

The leader then states "Moving a relationship forward often requires having a discussion with your partner to identifying the feelings each of you has for one another, and what you want the next step to be."

Using the *Progressing Forward or Ending Relationships* handout, instruct the pairs role play having the conversations to progress and end the relationship. After they have had time practicing the skill, bring the group back together for the closing discussion.

3. Sharing.
The leader asks, "What did you learn from this session?"

4. Processing.
The leader asks, "What are aspects of a healthy relationship? How about unhealthy? How do you know when to move a relationship forward? How about end a relationship?"

5. Generalization.
Leader summarizes the main themes of the group and may ask for additional main themes from the participants.

6. Application.
The leader asks, "How can you use this information in your current or future relationships?"

7. Summary.
   a. Review how group members felt about the activity and what occurred.
   b. Ask participants what they have learned.
   c. Discuss next week's topic: Next week's topic is intimacy. This is a sensitive topic and may be comfortable for some so please prepare yourselves for this topic.
   d. Homework: Homework: Encourage the participants to watch one of their favorite movies. Have them complete the *Healthy/Unhealthy Relationships* handout to determine the relationships the main characters are in. Ask if there are additional questions regarding today's session or upcoming sessions.
   e. Thank them for coming.

Healthy/Unhealthy Relationships References

The following websites may be used as a reference to demonstrate healthy/unhealthy relationships:

University of Wisconsin Oshkosh (May 12, 2011) retrieved from: http://www.uwosh.edu/cvpp/dating-domestic-violence/healthy-vs.-unhealthy-relationships

Lindsey Ann Burke Memorial Fund (2013) retrieved from: http://labmf.org/facts/relationships

Bluegrass Rape Crisis Center (2011) retrieved from: http://www.bluegrassrapecrisis.org/education/relationships/wheels.html

Healthy vs. Unhealthy Relationship Scenarios

Gary and Melissa have been seeing each other for six months. Gary says he really cares about Melissa, but he often lies to her about where he is and what he is doing. He often questions Melissa about where she is and who she is with. Melissa always tells him the truth, but she feels like he does not believe her. It is difficult for Melissa to communicate with Gary. Whenever Gary thinks Melissa might end the relationship, he takes her out to a nice restaurant, buys her flowers, and tells her how much he cares about her.

Is this relationship healthy or unhealthy? Explain.	
Where do they fall on the violence wheel?	
What do you think Melissa should do?	

Tina and Jake just started dating. Jake has been spending so much time focusing on Tine that he has neglected taking care of himself. Tina enjoys the attention and doesn't want Jake to stop. They have been spending a lot of time with Tina's friends and Jake is starting to miss his friends.

Is this relationship healthy or unhealthy? Explain.	
Where do they fall on the violence wheel?	
What do you think Jake should do?	
What do you think Tina should do?	

Adam and Jill have been best friends for over a year. They enjoy doing things together but also have independent activities that they like. They often have very different opinions on topics but still respect the others opinion. Over the year they have grown very fond of each other and have discussed being more than just friends. As their relationship grew each was considerate of the others intimate/sexual boundaries.

Is the relationship healthy or unhealthy? Explain.	
Where do they fall on the non-violence wheel?	

Linda and Sam have been friends for two years. In generally they get along really well. They have activities that they participate together in and individually. About a year into their relationship they got into a heated argument and Sam slapped Linda. After it happened he apologized and bought Linda a new video game. Linda forgave him and things went back to normal for the most part. They participated in activities together and would spend hours talking to each other. Two months ago Sam pushed Linda into a wall during a disagreement, and again apologized and bought her a new video game.

Is the relationship healthy or unhealthy? Explain.	
Where do they fall on the non-violence wheel?	
What would you recommend Linda do? What about Sam?	

How do you know when to progress the relationship forward?
Before you have the conversation with your partner, you will want to think about a few things.
Ask yourself:
☐ Do I want to move the relationship forward?

☐ Is the relationship a healthy relationship?

☐ Have I spent a considerable amount of time getting to know my partner?

☐ Does the relationship meet or has the potential to meet any of the things I am looking

   for in a relationship? (review dating plan)

If the answer is **yes** to all the above, then it may be time to discuss **progressing** the relationship.

Moving the relationship forward script
You: I really enjoy spending time with you. I especially like (a specific activity). When I am with you, I feel (specific emotion). Do you feel the same way?
Partner: (Let your partner respond with how they feel)
You: How would you feel about taking our relationship to the next step (dating/dating exclusively/ boyfriend and girlfriend/ intimacy/)?

How do you know when to end the relationship?
Ending a relationship may be just as hard as moving forward. Before you have the conversation to end the relationship, be sure you think about the following
Ask yourself:
☐ Am I happy in the relationship?

☐ Is my partner happy in the relationship?

☐ Is the relationship healthy?

☐ Does the relationship require me to give more of myself more than I am capable of?

☐ Does my partner have some of the qualities I am looking for? (review dating plan)

If the answer is **no**, then it may be time to **end** the relationship.

Ending the relationship script
You: I would really like to talk to you about our relationship. I feel (specific emotions). How do you feel?
Partner: (Allow your partner to respond on how they feel)
You: I feel like it might be best to take some time apart. How do you feel about that?

Note: If the relationship has become violent, a conversation like this may not work. If you feel you are not safe in the relationship, but do not know how to get, out please utilize services such as your local Community Violence Intervention Center for help.

Healthy/Unhealthy Relationships

In the movie, what aspects of a **healthy** relationship were present?	In the movie, what aspects of an **unhealthy** relationship were present?

Week 12

Week 12

Name of Group: Intimacy in Relationships

Session objectives and purpose. The purpose of this group is to learn about what types of intimacy are appropriate at different stages in a relationship and how to address intimacy in relationships.
   a. Identifying what is appropriate touch at different stages of a relationship.
   b. Identify how sensory needs can be addressed in a relationship.
   c. Identify facts and myths on sex.

Supplies/Materials:
- Note cards
- Pens/pencils/markers
- *Stages of Relationships and Appropriate Touch*
- *Appropriate Touch Social Stories*

1. Introduction. Leader states, "Welcome to group, today we are going to discuss intimacy in relationships. There are many different ways to express intimacy in a relationship when dating and it is important to know what is appropriate at different stages of a relationship."
   Warm up.
   Question cards. Participants will be provided note card that they can write questions/concerns about intimacy. Reassure participants that their questions are confidential and they can ask anything they want on the topic. Throughout the session questions on the cards will be addressed and answered.
   Setting the Mood. Leader should display a welcoming facial expression and open body language when setting the mood of this session. Tone of voice should be calm and clear.
   This is a serious topic and some participants may feel uncomfortable talking about sex and intimacy. Assure participants that anything said in group will be confidential and remain within the group and encourage them to ask questions.
   Expectation of participation: Leader states, "All participants are expected to engage in group discussion and activities, actively listen when an individual is talking, and ask clarifying questions when they arise."
   Session objectives and purpose. Leader states, "The purpose of this group is to learn about what types of intimacy are appropriate at different stages in a relationship and how to address intimacy in relationships."
      a. Identifying what is appropriate touch at different stages of a relationship.
      b. Identify how sensory needs can be addressed in a relationship.
      c. Identify facts and myths on sex.
   Brief outline of the session. The leader states, "The session will last approximately 90 minutes. We will start by discussing what appropriate touch is for different stages of the relationship. We will then read through some social stories and have a discussion. I will also be answering any questions you may have on sex and intimacy throughout the session.

2. Activity.
Appropriate touch: The leader will give the participants the *Stages of Relationships and Appropriate Touch* handout. The group will go over the handout. After going through the handout the leader will state,

> "All relationships are different as each person is unique. It is important to remember that your physical relationship may move faster or slower depending on you and your partner's comfort level. It is important to be respectful of each other. If you or your partner wants to take things slow, then you each need to be respectful of that and not pressure the other into something they do not want to do. No means no, and you both have the right to say that."

Next the leader will pass out the *Appropriate Touch Social Stories* handout to the participants. The group will go over the social stories and answer the discussion questions.

3. Sharing.
The leader asks, "What is one thing you learned today?"

4. Processing.
The leader asks, "What is appropriate touch when meeting someone for the first time? Once dating? How can you address your sensory needs in a relationship?"

5. Generalization
Leader summarizes the main themes of the group and may ask for additional main themes from the participants.

6. Application.
The leader asks, "How will you use this in your everyday life?"

7. Summary.
   a. Review how group members felt about the activity and what occurred.
   b. Ask participants what they have learned.
   c. Discuss next week's topic: Participate in a Social Event
   d. Homework: Encourage participants to look over their Adolescent and Adult Sensory Profile. Have them reflect on the challenges they may face during intimacy due to their sensory needs. Participants will then develop a social script describing how to tell their significant other about their sensory needs and how it may impact their relationship
   e. Ask if there are additional questions regarding today's session or upcoming sessions.
   f. Thank them for coming.

Stages of Relationships and Appropriate Touch

Stage of Relationship	Appropriate Touch
First Meeting	Handshake and hug good bye
Acquaintance	Handshake, hug goodbye, and pat on the arm or back
Friends	Handshake, hugs hello or goodbye, and pat on the arm or back
Dating	Handshake, hugs hello or goodbye, pat on the arm or back, kiss on the cheek, kiss on the lips, and holding hands Be sure to have open communication with your partner about what each of you is comfortable with at this point.
Exclusive	At this point, you and your partner may decide to sex. When you reach this point, you and your partner need to discuss what you are comfortable with and how you are going to be safe.
Long Term	At this stage of the relationship, you and your partner should be able to communicate with one another about what each of you feels comfortable with. You can decide on what is appropriate for you as a couple.

Note: Developed by Laura Hennes, MOTS

Answer the discussion questions on each of the scenarios below.

Bill is being introduced to Maggie at a party, it is loud and crowed. He comes up and gives her a big hug and kisses her on the lips. Maggie is surprised by this and tries to avoid Bill the rest of the evening.

What stage was the relationship in?	
Was the touch appropriate for the relationship stage?	
What sensory issue may the individual have?	
How could the sensory issues be addressed?	

Bill is being introduced to Maggie at a party. When shaking her hand he takes her hand and kisses the top of it. Maggie is surprised, but smiles at Bill and states she has never had that happen before.

What stage was the relationship in?	
Was the touch appropriate for the relationship stage?	
What sensory issue may the individual have?	
How could the sensory issues be addressed?	

Jon and Betty are on their second date. They are sitting in a movie theater watching a scary movie. Betty reaches for Jon's hand and holds his hand for the rest of the movie.

What stage was the relationship in?	
Was the touch appropriate for the relationship stage?	
What sensory issue may the individual have?	
How could the sensory issues be addressed?	

Jon and Betty are celebrating their one year anniversary of dating. They want to make the evening special and have talked about what they could intimately to do that. They go out to eat, and when they get home, Jon kisses Betty and puts his hands under her shirt.

What stage was the relationship in?	
Was the touch appropriate for the relationship stage?	
What sensory issue may the individual have?	
How could the sensory issues be addressed?	

Mark is spending time with Jill in a group of friends. They are sitting in a booth at a restaurant. Mark puts his arm around Jill's shoulder and lets his hand rest on Jill's chest. She keeps moving his hand up to her should, but Mark moves it down again. Jill gets up to go to the bathroom, and when she came back, she sits on the opposite side of the table from Mark.

What stage was the relationship in?	
Was the touch appropriate for the relationship stage?	
What sensory issue may the individual have?	
How could the sensory issues be addressed?	

Mark and his family watched a football game over the weekend. He noticed that the players patted each other on the butt at times. On Monday, Mark went up to his friend and patted him on the butt when saying hello. His friend got mad and yelled at him.

What stage was the relationship in?	
Was the touch appropriate for the relationship stage?	
What sensory issue may the individual have?	
How could the sensory issues be addressed?	

Week 13

Week 13

Name of Group: Participate in a Social Event

Session objectives and purpose. The purpose of this group is to combine and utilize all the social participation skills learned from previous weeks. Participants will participate in the social event that they planned previously with the peer mentors. Participants will have the opportunity to engage in social interactions with individuals in the group and outside of the group, including peer mentors, to increase their confidence and decrease anxiety when in social situations. The increase in confidence may lead to developing meaningful relationships and dating.
  a. Participants will implement and integrate all of the skills learned throughout the past groups.
  b. Participants will engage in a sustained, reciprocal conversation with an individual utilizing appropriate non-verbal communication.

Supplies/Materials:
  • Be sure participants know what to bring (food, decorations, etc.)

1. Introduction. Therapist states, "Today is our social event day. You all have worked well together to plan this event. Throughout the next couple hours, I want you to practice the remainder of the skills you still feel uncomfortable with as well as working towards mastering the skills you have already acquired. Today is meant to be a fun, enjoyable experience. Remember to smile and have open body language when talking to people."

  Warm up.
  Arrive at event location 30 minutes prior to guests showing up. Have participants share how they have grown and what they learned by attending this program. Also discuss something they are nervous about and confident about in regards to the event.

  Setting the Mood. Leader should display a welcoming facial expression and open body language when setting the mood of this session. Tone of voice should be calm and clear. This session should be exciting for the participants, because they planned it. Smiling and a positive, cheerful attitude may help lighten the mood.

  Expectation of participation: Leader states, "All participants are expected to engage in group discussion and activities, actively listen when an individual is talking, and ask clarifying questions when they arise."

  Session objectives and purpose. Leader states, "The purpose of this group is to combine and utilize all the social participation skills learned from previous weeks. You will have the opportunity to engage in social interactions with individuals in the group and outside of the group to increase their confidence and decrease anxiety when in social situations. The increase in confidence may lead to developing meaningful relationships and dating."
      a. Participants will implement and integrate all of the skills learned throughout the past   groups.
      b. Participants will engage in a sustained, reciprocal conversation with an individual utilizing appropriate non-verbal communication.

92

Brief outline of the session. Participants will actively participate in the social event they planned the previous week. Participants will have the opportunity to implement all of their social skills.

2. Activity.
Actively participate in the event and socialize among one another and guests.

The sharing, processing, generalization, application, and summary aspects will be discussed during the final, individual meetings.

Homework: Encourage participants to think of feedback to provide to leader during their final, individual closing session.

Week 14

Week 14

Name of Group: Conclusion

Session objectives and purpose. The purpose of this group is to reflect on personal growth throughout the past 14 weeks. It is a time to ask final questions and have them answered. This session is also used for closure of the dating program.
  a. Participants will have any final questions answered.
  b. Leader will evaluate the participants' perceived outcome of the group.
  c. Leader will provide closure to the participants.

Supplies/Materials:
  • Informal interview questions
  • Pens
  • Outcome measure

1. Introduction. Therapist states, "Welcome to the final session. Today we will reflect on your experiences from the past 14 weeks. Feel free to ask any questions you have."
  Warm up. Leader will propose the following questions: "Describe your experience at the final social event. What went well/ what did not go well? What do you learn from participating in this group?"
  Setting the Mood. Leader should display a welcoming facial expression and open body language when setting the mood of this session. Tone of voice should be calm and clear.
  Expectation of participation: Leader states, "All participants are expected to engage in group discussion and activities, actively listen when an individual is talking, and ask clarifying questions when they arise."
  Session objectives and purpose. Leader states, "The purpose of this group is to reflect on your personal growth throughout the past 14 weeks. We will explore whether or not the program has helped you feel more confident and comfortable with dating. It is a time to ask final questions and have them answered. This session is also used for closure of the dating program."
    a. Participants will have any final questions answered.
    b. Leader will evaluate the participants' perceived outcome of the group.
    c. Leader will provide closure to the participants.
  Brief outline of the session. Leader states, "This session will take approximately 90 minutes. We will be conducting an informal interview regarding your experiences with this dating program."

2. Activity.
In order to facilitate discussion regarding the participant's progress, the leader asks, "How do you feel about social participation now? What is your comfort level with relationships and dating? What skills do you still need to work on? How will you accomplish this? Would you recommend this program? Why/Why not?"

Complete the final outcome measure (see handout *Dating Skills Checklist)*.

3. Sharing:
The participant and leader will review the results of the outcome measure. On an individual basis, the participant and leader will discuss how their results compare to session one.

4. Processing.
Leader asks, "What are your thoughts regarding the scores? Do you have any questions?"

5. Generalization.
Leader summarizes the main themes of the group and may ask for additional main themes from the participants.

6. Application.
Leader asks, "Given what we have learned in the past 14 weeks, what about the program most benefited you as you seek dating experiences?"

7. Summary.
   a. Review how group members felt about the activity and what occurred.
   b. Ask if there are additional questions.
   c. Thank them for participating in the dating program.

Dating Skills Checklist

Name: Date Completed:

Rating Scale	
How often do you do this? 1 – Never 2 – Almost never 3 – Sometimes 4 – Almost always 5 – Always	How satisfied are you? 1 – Not at all 2 – A little bit 3 – Very satisfied

Dating Skills Checklist			
	How often do you do this?		How satisfied are you?
Do you notice the body language of others when you talk to them?	1 2 3 4 5		1 2 3
Do you face the person you are talking to?	1 2 3 4 5		1 2 3
Do you start conversations with people?	1 2 3 4 5		1 2 3
Do you only talk about topics that interest you?	1 2 3 4 5		1 2 3
Are you able to ask questions and respond in order to carry on a conversation?	1 2 3 4 5		1 2 3
Do you get into fights when things do not go your way?	1 2 3 4 5		1 2 3
Do you engage in social activities with other people?	1 2 3 4 5		1 2 3
Do you use online dating websites?	1 2 3 4 5		1 2 3
Do you meet people in person that you have met online?	1 2 3 4 5		1 2 3
Do you have people close to you besides family?	1 2 3 4 5		1 2 3

References

Alexander, K. (2011). Pervasive developmental disorders. In C. Brown & V. C. Stoffel
(Eds.), *Occupational therapy in mental health: A vision for participation* (83-97).
Philadelphia: F. A. Davis Company.

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental
disorders* (4th ed., text rev.). Washington, DC: American Psychiatric Association.

Bauminger, N., & Shulman, C. (2003). The development and maintenance of friendship
in high-functioning children with autism: Maternal perceptions. *Autism, 7*(1), 81-
97.

Bauminger, N., Solomon, M., Aviezer, A., Heung, K., Brown, J., & Rogers, S. J. (2008).
Friendship in high-functioning children with autism spectrum disorder: Mixed
and non-mixed dyads. *Journal of Autism and Developmental Disorders, 38*, 1211-
1229.

Ben-Sasson, A., Hen, L., Fluss, R., Cermak, S. A., Engel-Yeger, B., & Gal, E. (2008). A
meta-analysis of sensory modulation symptoms in individuals with autism
spectrum disorders. *Journal of Autism and Developmental Disorders, 39,* 1-11.

Bluegrass Rape Crisis Center. (2011). Relationship wheels. Retrieved from
http://www.bluegrassrapecrisis.org/education/relationships/wheels.html

Braungart, M., Braungart, R., & Gramet, P. (2011). Applying learning theories to
healthcare practice. In S. B. Bastable, P. Gramet, K. Jacobs, & D. L. Sopczyk
(Eds.). *Health professional as educator: Principles of teaching and learning* (pp.
55-101). Sudbury, MA: Jones & Bartlett Learning.

Brock, M. E., Freuler, A., Baranek, G. T., Watson, L. R., Poe, M. D., & Sabatino, A.
(2012). Temperament and sensory features of children with autism. *Journal of
Autism and Developmental Disorders, 42*(11), 2271-2284. doi 10.1007/s10803-
012-1472-5

Brown, C., & Dunn, W. (2002). *Adolescent/ Adult Sensory Profile manual*. San Antonio,
TX: Psychological Corporation

Brown, C., & Nicholson, R. (2011). Sensory skills. In C. Brown, & V. Stoffel (eds).
Occupational therapy in mental health: A vision for participation. Philadelphia,
PA: F.A. Davis Company.

Centers for Disease Control and Prevention. (2012). Prevalence of autism spectrum
disorders. *MMWR*, *61*(3), 1-19.

Chung, K. M., Reavis, S., Mosconi, M., Drewry, J., Matthews, T., & Tasse, M. J. (2007).
Peer-mediated social skills training program for young children with high-
functioning autism. *Research in Developmental Disabilities, 28,* 423-436.

Cole, M. B. (2005). Group leadership: Cole's seven steps. In M. B. Cole (eds), *Group
Dynamics in occupational therapy* (3rd ed., pp. 3-23). Thorofare, NJ: SLACK
Incorporated.

Cole, M. B., & Tufano, R. (2008). *Applied theories in occupational therapy: A practical
approach*. Thorofare, NJ: SLACK Incorporated.

Cotugno, A. J. (2009). Social competence and social skills training and interventions for
children with autism spectrum disorders. *Journal of Autism and Developmental
Disorders, 39*, 1268-1277. doi 10.1007/s10803-009-0741-4

Covey, S. R. (2004). *The 7 habits of highly effective people*. New York, NY: Free Press

Dahle, B., & Hennes, L. (2013). *Community based program for young adults with high-functioning autism: Social participation and dating* (Unpublished master's scholarly project). University of North Dakota, Grand Forks, ND.

Dratsch, T., Schwartz, C., Yanev, K., Schilbach, L., Vogeley, K., & Bente, G. (2012). Getting a grip on social gaze: Control over other's gaze helps gaze detection in high-functioning autism. *Journal of Autism and Developmental Disorders,* 12(4). doi: 10.1007/s10803-012-1569-x

Dworzynski, K., Ronald, A., Bolton, P., & Happe, F. (2012). How different are girls and boys above and below the diagnostic threshold for autism spectrum disorders? *Journal of the American Academy of Child & Adolescent Psychiatry, 51*(8), 788-797.

Gillott, A., & Standen, P. J. (2007). Levels of anxiety and sources of stress in adults with autism. *Journal of Intellectual Disabilities, 11*(4), 359-370. doi: 10.1177/1744629507083585

Hall, E. T. (1982). *The hidden dimension*. New York, NY: Anchor Books.

Hellman, H., Colson, K., Verbraeken, C., Vermeiren, R., & Deboutt, D. (2007). Sexual behavior in high-functioning male adolescents and young adults with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders, 37.* 260-269. doi:10.1007/s10803-006-0159-1

Jones. S. (n.d.). Everything you didn't know about body language. Retrieved from http://maravillosomagazine.weebly.com/body-language.html

Kennedy, D. P., & Adolphs, R. (2012). Perception of emotions from facial expressions in high-functioning adults with autism. *Neuropsychologia*, *50*, 3313-3319.

Klin, A, Saulnier, C. A., Sparrow, S. S., Cicchetti, D. V., Volkmar, F. R., & Lord, C.

    (2007). Social and communication abilities and disabilities in higher functioning

    individuals with autism spectrum disorders: The Vineland and the ADOS. *Journal*

    of Autism and Developmental Disorders, 37, 748-759. doi 10.1007/s10803-006-

    0229-4

Law, M., Cooper, B., Strong, S., Stewart, D., Rigby, P., & Letts, L. (1996). The person-

    environment-occupation model: A transactive approach to occupational

    performance. *The Canadian Journal of Occupational Therapy, 63*(1), 9-23.

Lindsey Ann Burke Memorial Fund. (2013). Healthy/unhealthy relationships. Retrieved

    from http://labmf.org/facts/relationships

May-Benson, T. A., & Koomar, J. A. (2010). Systematic review of the research evidence

    examining the effectiveness of interventions using a sensory integrative approach

    for children. *American Journal of Occupational Therapy, 64*, 403–414. doi:

    10.5014/ajot.2010.09071

Mehzabin, P., & Stokes, M. A. (2011). Self-assessed sexuality in young adults with high-

    functioning Autism. *Research in Autism Spectrum Disorders, 5,* 614-621. doi:

    10.1016/j.rasd.2010.07.006

MOHO Clearinghouse. (*n.d.*). MOHO related resources. Retrieved from

    http://www.uic.edu/depts/moho/mohorelatedrsrcs.html#OtherInstrumentsBasedon

    MOHO

Muller, E., Schuler, A., & Yates, G. B. (2008). Social challenges and supports from

    perspective of individuals with Asperger syndrome and other autism spectrum

    disabilities. *Autism, 12*(2), 173-190. doi: 10.1177/1362361307086664

Orsmond, G., & Kuo, H. (2011). The daily lives of adolescents with an Autism Spectrum Disorder: Discretionary time use and activity partner. *Autism, 15*(5), 579-599. doi: 10.1177/1362362361310386503

Palmen, A., Didden, R., & Lang, R. (2012). A systematic Review of behavioral intervention research on adaptive skill building in high-functioning young adults with Autism Spectrum Disorder. *Research in Autism Spectrum Disorders, 6*, 602-617. doi:10.1016/j.rasd.2011.10.001

Pfeiffer, B. A. (2012). Sensory hypersensitivity and anxiety: The chicken or the egg? *Sensory Integration Special Interest Section Quarterly, 35*(2), 1–4.

Ramey, E. M., & Ramey, J. J. (2008). *Autistics' guide to dating: A book by autistics, for autistics and those who love them or who are in love with them*. Philadelphia, PA:. Jessica Kingsley Publishers.

Reference Chart. (*n.d.*). Facial expressions body language reference chart. Retrieved from: http://www.referencechart.net/2011/09/facial-expresssions-body-language.html

Reichow, B., & Volkmar, F. R. (2010). Social skills interventions for individuals with autism: Evaluation for evidence-based practices within a best evidence synthesis framework. *Journal of Autism and Developmental Disorders, 40*, 149-166. doi: 10.1007/s10803-009-0842-0

Reynolds, S., Bendixen, R. M., Lawrence, T., & Lane, S. (2011). A pilot study examining activity participation, sensory responsiveness, and competence in children with high function autism spectrum disorder. *Journal of Autism Development Disorders, 41*, 1496-1506. doi: 10.1007/s10803-010-1173-x

Ritts, V., & Stine, J. R. (*n.d.*) Six ways to improve your non-verbal communications.

    Retrieved from http://www.tlsig.cba.neu.edu/?page_id=184

Sadock, B. J., & Sadock, V. A. (2008). *Kaplan & Sadock's concise textbook of clinical*

    psychiatry (3rd ed.). Philadelphia, PA: Lippincott Williams & Wilkins.

Schoo-OT.com. (n.d.). Sensory diet "menu" activities and strategies to try. Retrieved

    from http://school-ot.com/Sensory%20Strategies.html

Shattuck, P. T., Wagner, M., Narendorf, S., Sterzinger, P. & Hansley, M. (2011). Post

    high school services use among young adults with Autism Spectrum Disorder.

    Archives of Pediatric and Adolescent Medicine, 165(2), 141-146. doi:

    10.1001/archpediatrics.2010.279

Smith, M. J. L., Montagne, B., Perrett, D. I., Gill, M., & Gallagher, L. (2010). Detecting

    subtle facial emotion recognition deficits in high-functioning autism using

    dynamic stimuli of varying intensities. *Neuropsychologia*, *48*(9), 2777-2781. doi:

    10.1016/j.neuropsychologia.2010.03.008

Spigel, S. (2007). *Medicaid autism waivers and state agencies serving people with autism*

    (Report No. 2007-R-0319). Medical Care: Welfare-Medical Assistance

    (Medicaid).

Stern, P. (2009). Principles of learning and behavior change. In E. B. Crepeau, E.S. Cohn,

    & B. A. B. Schell (Eds.). *Willard and Spackman's occupational therapy* (11th ed.,

    pp. 375-386). Philadelphia: Lippincott Williams & Wilkins.

Strong, S., & Gruhl, K. R. (2011). Person-environment-occupation model. In C. Brown &

    V. C. Stoffel (Eds.), *Occupational therapy in mental health: A vision for*

    participation (31-46). Philadelphia: F. A. Davis Company.

Susanta. (November 12, 2010). How to improve your body language. Retrieved from

    http://takeyourtips.com/6-tips-on-how-to-presenting-the-best-body-language/

Tumer-Brown, L. M., Perry, T. D., Dichter, G. S., Bodfish, J. W., & Penn, D. L. (2008).

    Brief report: Feasibility of social cognition and interaction training for adults with

    high functioning autism. *Journal of Autism and Developmental Disorders, 38*,

    1777-1784. doi: 10.1007/s10803-008-0545-y

Trembath, D., Germano, C., Johanson, G., & Dissanayake, C. (2012). The experience of

    anxiety in young adults with autism spectrum disorders. *Focus on Autism and*

    Other Developmental Disabilities, 27(4), 213-224. doi:

    10.1177/1088357612454916

Wade, H. A. (2002). Discrimination, sexuality and people with significant disabilities:

    Issues of access and the right to sexual expression in the United States. *Disability*

    Studies Quarterly, 22(4)*,* 9-27.

Wall, M. (n.d.). FaceGen-3D modeling software for faces. Retrieved from

    http://computingforpsychologists.wordpress.com/tag/emotion/

Watling, R., & Schwartz, I. S. (2004). Understanding and implementing positive

    reinforcement as an intervention strategy for children with disabilities. *American*

    Journal of Occupational Therapy, 58(1), 113-116.

University of Wisconsin Oshkosh. (May 12, 2011). Healthy versus unhealthy

    relationships. Retrieved from http://www.uwosh.edu/cvpp/dating-domestic-

    violence/healthy-vs.-unhealthy-relationships

Vanger, P., Hoenlinger, R., Haken, H. (1998). Computer aided generation of prototypical

    facial expressions of emotion. *Methods of Psychological Research, 3*(1).

Retrieved from http://www.dgps.de/fachgruppen/methoden/mpr-

online/issue4/art3/node9.html