# REFLECTION: PSYCHOLOGICAL FLOW FOR JOB-SEEKING ADULTS WITH AUTISM

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## **ABSTRACT**

Challenges faced by people with autism often present complications with finding success across multiple settings, which can include the workplace. As three counselor educators who have worked with individuals with Autism Spectrum Disorder (ASD), we have identified this as a common issue for ASD individuals seeking employment. This can involve numerous difficulties, including the maintaining of a form of work, which can be experienced successfully by the individual over time. Recently, it has been identified that utilization of Vocational Rehabilitation services has a significantly positive impact on employability of ASD youth at various levels of development. As with most supportive services, Vocational Rehabilitation (VR) approaches dramatically benefit from strength-based strategies for securing the forms of situational improvements ideally suited for the individual being served. People with autism present an additional challenge in the limited scope of activities, which are interesting enough to form a reasonable expectation that repetition will occur in a manner required by many entry-level jobs. It is beneficial for such individuals to participate in a supportive environment, with a set of task expectations that fall in range of their specific skillset. Achieving a balance between an individual's skillset and the presented challenge leads to a phenomenon of the person becoming captivated by a given activity during a subconscious connection called "psychological flow." This reflection explores the potential efficacy of using the principle of psychological flow development within the workplace and other related life areas typically encountered by those seeking to overcome interpersonal obstacles while improving task-related skillsets.

# STATEMENT OF PURPOSE

Adults with disabilities often access Vocational Rehabilitation programs to help them in obtaining and maintaining competitive employment. Adults with Autism Spectrum Disorder (ASD) access Vocational Rehabilitation (VR) services regularly, but research has indicated that only 38% of adults with ASD have a successful employment

outcome (Alverson & Yamamoto, 2016). The low employment success rates of adults with ASD who access VR indicates a need to review the current approach to providing VR services for adults with ASD. We believe this problem can be alleviated through placement, which purposefully matches the client's ability to maintain their flow to the work environment's ability to allow the client to

maintain that flow.

Based on our clinical experiences we believe VR training programs and VR agencies would benefit from including career counseling considerations and extending their network of employment resources in an effort to engage the unique needs and interests of adults with ASD who are seeking competitive employment. Individuals with ASD often have rigid and limited interests and creating a way to optimize these limited interests in finding employment would potentially increase the number of successful VR outcomes.

The American Psychiatric Association (APA) (2013) noted, "Special interests may be a source of pleasure and motivation and provide avenues for education and employment later in life" (p. 54). If this is so, positive employment outcomes may increase if clients are allowed to capitalize on those special interests. In instances where the workplace utilizes hired ASD individuals without making consideration of potential special interests, the term of employment may be more likely to dissolve. By contrast, workplaces that create a constant feedback system and present tasks that have a quality of significance to the individual completing them would be expected to have higher employee retention.

While these statements certainly appeal to individuals not suffering from a disability, it matters even more so for adults with disabilities and ASD. We believe one possible reason for this contrast comes from the understanding a person has for the style of work they are asked to complete (Csikszentmihalyi, 1975). Some forms of leisure activity even require a high degree of difficulty from an individual as a barrier to their utilization of the behavior. Yet, if something is deemed fun (or even important) for the person, they may overcome this barrier and engage the expectation directly. Forms of work the individual partakes in, over time, can grow into activities that generate a sense of pride and personal interest from the participant. When a task is the sole focus of a participant, and their full stream of consciousness becomes the participation in the activity itself, we can call this state "flow." Although many people do not relate this experience to work, it can be achieved with the correct pairings of the individual to the conveyed task. Reflecting on potential flow-enacting tasks and why they work would create a structure for improving employee interest, which can improve VR rates of retention for ASD individuals.

#### STATEMENT OF PROBLEM

Adults with ASD struggle to integrate into the workplace and exit VR services without a successful employment outcome. VR consumers experience many barriers to finding and maintaining Such employment employment. competitive struggles often include social barriers, difficulty communicating, negative interactions colleagues, customers, supervisors, and concerns while interviewing for a job (Lorenz, Frischling, Cuyadros, & Heinitz, 2016). Adults with ASD often have numerous difficulties with the formalities associated with finding and keeping a job. These can include completion of the application process, adapting to the work environment, learning the work routine, and a lack of support in the workplace (Lorenz et al., 2016). VR agencies attempt to aid consumers in overcoming these barriers through employment training and supported employment. However, the VR agencies generally use the same approach with each person regardless of specific disability, and research has indicated these methods are ineffective for adults with ASD (Wehman et al., 2016).

Those with autism often have low levels of self-efficacy and experience many commonplace situations to be confusing and frustrating (Vermeulen, 2014). Other common characteristics of those with ASD could include naivety, organizational deficits, and symptoms commonly associated with depression and anxiety. The experience of these symptoms can often lead to a person ceasing work on a task, feeling too overwhelmed to generate a competent effort towards their present goal. Over time, such a person can become afflicted by a myriad of negative self-perceptions, including such as ideas as the individual being inadequate and the challenge being unreasonably difficult.

In researching attention capture in children and adolescents with ASD, Keehn, Nair, Lincoln, Townsend, & Müller (2016) found that individuals with ASD may under-react to behaviorally-relevant stimuli, leading to an inability to filter irrelevant information they encounter. However, the integration of the individual into a workplace with low awareness of ASD considerations can be equally problematic to these altered reaction states.

While the VR workers who provide support for the ASD individual can be educated on flow states and styles of experiencing work, if the individual becomes reliant on those surrounding them to understand these principles in order to create an optimal workplace environment, the needed change could move toward an unrealistic ideal. It then becomes important for workers in the vicinity of the ASD individual to understand how important this "locked-in" style of focus is for the individual maintaining their positive work experience. Even in the presence of frustrated appearance, the person could be engaged in the flow state, which will be more thoroughly described in a later section of this article.

Essentially, top-down and bottom-up attention networks function atypically in a wide range of scenarios. This poses a challenge in relation to employability, in that what keeps the attention of typically developing (TD) individuals does not keep the attention of those with ASD, and what does not typically catch the attention of TD individuals, can become a fixation point for those with ASD. Finally, we know from previous study of the Amygdala Theory of Autism, there is less functional connectivity between the amygdala and subcortical regions of the autistic brain (Guo et al., 2016).

What we have seen in the practice is that the placement of individuals with ASD can be detrimental to the client's well-being. If psychological flow cannot be maintained during the majority of their working hours, they become frustrated and begin to withdraw, which can be harmful to the client. Ultimately, we believe this problem can be alleviated through placement, which purposefully matches the client's ability to maintain their psychological flow and the work environment's ability to allow the client to maintain that psychological flow.

#### THEORETICAL ORIENTATION

This reflection comes from the perspective of three counselor educators, all of whom have spent significant time assisting ASD individuals and their families in the typical range of goals involved in psychotherapeutic services for family systems impacted by the presence of a loved one with autism spectrum concerns. Through research and our own personal observations, we have taken

note that it can feel difficult, even insurmountable at times, to help ASD family members achieve employability, and even grasp elements of autonomy their family members are longing for them to reach. In many cases, supportive services such as those achieved through VR are consulted to help support the individual beyond what is possible during the therapy session. Even with the best of intentions, ASD individuals may find an employer willing to give them the responsibility of work, but for whatever reason, the employment term will result in a short-lived experience. The obsessive traits of the unemployed ASD person can lead to a shutting down period where the person will not allow themselves to try again. They will view this unsuccessful attempt as a total failure and avoid opportunities in the future to connect with a more suitable opportunity, even when they may present themselves.

Doue and Manning (2006), in their review of John Dewey and the Art of Teaching: Toward Reflective and Imaginative Practice, identify reflective practice as being a way to teach creatively and imaginatively, not being restricted by an unfeeling process of ready-made synthesis where the learner responds only through what has been dogmatically taught as "the known." If an endless sea of facts is sent crashing towards the learner, depriving them of the opportunity to synthesize and derive the answer to the question, "Why?", then what inevitably happens is we will have a world full of learners (or teachers) who do not have the sense to know the reason their knowledge can exist, and in appropriate situations, be true. As seasoned mental health professionals and educators of counselors across all levels of higher education, we contend that Dewey allows a path of engagement in the form of conversation involved in this reflection. Additionally, as it is already indicated in research that VR services can stand to yield improved practice for ASD individuals, we contend it is worth the effort to engage in such creative thinking, and integrate the available knowledge and experiences acquired through those who work with this population, to find the points of dissemination between what occasionally works, and what often does not.

#### **CLINICAL EXPERIENCES**

Workplace Integration

Over the years, we have observed a consistent theme that it is hard for mental health counselors to provide the optimal path for ASD individuals engaged in therapeutic services to acquire employment. In fact, a collective theme in our experience is that counselors may struggle to identify readily available supports for such clients to find work but will more quickly consult careeroriented services (such as VR) to bridge the gap in our competencies as counseling professionals. Unfortunately, it is also observed that adults with ASD struggle to integrate into the workplace, and even with the use of such career and employment supports, will exit VR services without attaining a successful employment outcome. Since individuals with ASD have the internal contrast of having a limited range of interests while also being highly intelligent, the employment relationships VR agencies have developed are often inadequate. In many cases, VR agencies have relationships with employers that offer entry level, minimum wage jobs such as bagging groceries. While these resources are appropriate for many of the individuals who access VR services, they are often not challenging enough to engage and hold the interest of an individual with high functioning ASD. Therefore, VR consumers with ASD would benefit from a customized approach focused on identifying and engaging the interests of individuals with ASD.

According the DSM-5 (American to Psychiatric Association [APA], 2013), autism is a neurodevelopmental disorder characterized by deficits in social communication and social interaction. In most instances, the DSM-5 would be a place of first resort for counseling professionals to read on issues that do not form the focus of their practice. Pertaining to the autism spectrum, common deficits include difficulties in developing, maintaining, and understanding relationships. The frustrations we observe in treatment of people within this diagnostic category comes from the disconnect between their performance, the lack of awareness of their difficulties in these relational interactions, and the fixation on the elements of their work tasks, which have become quickly ungratifying. Autism diagnoses are followed by levels of severity from Level 1, requiring support, to Level 3, requiring very substantial support.

While the most severe cases may need more support than those identified in this reflection, we contend simple strategic shifts in both the ASD worker and the employer can lead to an increase in successful outcomes for the person, employer, and the utility of VR as a viable referral for supporting ASD persons. As Kirchner, Ruch, and Dziobk (2016) pointed out, and as our experience suggests, those with ASD may have a variety of strengths not under the emotional or interpersonal umbrellas. Paradoxically, those with ASD find interpersonal and emotional aspects of their lives to be most satisfying. We all have experienced conversations with our ASD clients where the desire to connect in these ways are present. So then, why is it often so difficult to acquire the desired success? Perhaps the problem is the kind of work being offered, or either the frequency or intensity in which it is engaged in a typical work day.

As a general rule, those with ASD will not prefer jobs with duties requiring much social interaction, despite the desire to improve or excel in this area. However, although they may not be able to communicate these basic human needs, those with ASD may feel more satisfied, and ultimately, remain at their job longer if they are engaged in meaningful and positive interactions. For this reason, we have made it a common approach to work with our clients on engaging in activities with a mind-oriented process that allows for the person to blend together with the experience of working on a task. The fixation can become a strength rather than a liability. We believe this plays into the strengths of our ASD clients when they find themselves in situations with ample opportunity to approach a task in these ways. Our hope is that VR centers and employers of ASD youth or adults can take the time to consider the types of tasks best suited for their employees to thrive and become the best asset possible to their workplace.

# Psychological Flow

Concerns with task-completion are presented in the treatment of more wide-ranging mental health issues than just those related to the autism spectrum. These can include the efforts taken to overcome ADHD, anxiety and avoidance, procrastination, and academic difficulties, along with many others. We are certain this is a theme many counselors and counselor educators can agree with. Many counseling theories orient themselves around the idea of converting the inner experience into a tangible change to the person's experience of their day, and even their overall lives. Upon reflecting on our work with ASD clients, we identified that psychological flow is a critical piece in the contrast between clients who find success in their identified goals, and those who struggle to get started toward such tangible changes. Before exploring diagnostic considerations, it is important to establish what psychological flow is, and how people can harness it to take increased pride in the interaction with their selected activities across various life areas.

Most commonly, flow activities are based in the enjoyment of what can be termed an "optimal experience" of life, or alternatively, happiness (Csikszentmihalyi, 2008). Common activities that can provide this experience would be chess, dancing, creating music or other arts, acting, and other activities involving skill and reliable feedback. In present times, we have also observed the experience in people playing video games, scrolling through social media on their cell phones, and even during the process of contributing paragraphs to this piece of academic writing. Most of these activities are designed to be an enjoyable experience for the participant, while also giving the participant the opportunity to be aware of their performance. Over time, their contribution to the challenge at hand is shaped to become more competent while also experiencing the aforementioned enjoyment.

Flow is not a sensation experienced easily in many common situations. It requires the person be placed in a setting with a variety of strong and consistent attributes (Csikszentmihalyi, 1975). These attributes include (a) a goal, (b) rules impacting how to accomplish the goal, (c) a feedback system, and (d) consideration of the type of participation, whether voluntary or involuntary. Voluntary tasks can more easily become internally rewarding for the participant. This is not to suggest involuntary tasks cannot become a source of personal flow. When a person feels required to participate, the strength of their focus and ability to mentally meld with the task they are completing can still utilize the paths of rules, goal, and feedback to achieve this mental state. We have seen numerous instances in our clients and ourselves as counselors instinctually moving from question to question during therapeutic activities in a manner that could be considered psychological flow. This distinction revolves around the premise of

perfect balance between the focus points and action of the activity participant.

The primary balance point comes from the contrast between challenge and skill. As can be viewed in Figure 1, when a person has a higher level of skill than the task being presented, a common expectation for what this person would experience would be the sensation of boredom. Accordingly, if the person is placed in too challenging of a circumstance for their level of developed skill, they can be overrun by anxiety. Boredom often results in a person ending their engagement in a task because it is not gratifying to succeed, even though they surely will. The anxiety experienced with too high of a challenge will also lead the person to make the decision to guit an assigned task. However, this is more because they stop believing they are capable of completing the task, and so it is a different kind of wasting time.

In order to stay engaged in an activity, the person has a few options to prevent both boredom and anxiety. For those who find themselves bored, they can increase the challenge to something more personally suitable for their tastes. For those who are anxious, they can lower the tension they experience by decreasing the difficulty (when possible). However, the better outcome would be for them to increase their skill at the given task so they are moving forward in their personal progress. Through this conflict of experiences, the flow channel becomes possible.

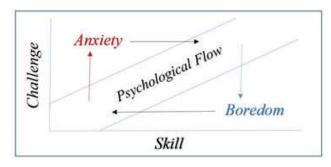


Figure 1. Psychological flow channel. Reprinted from Beyond Boredom and Anxiety (p. 1), by M. Csikszentmihalyi, 1975, San Francisco, CA: Jossey-Bass Publishing. Copyright 1975 by Jossey-Bass Publishing. Adapted with permission.

For those who have experienced it, the flow channel is the optimal balance point a person can feel in the interplay between their skills flowing through the core of their being and into the present challenge. The person's consciousness fades away, becoming one with the activity. There is limitedto-none in terms of conscious decision making. The responses are instinctual in nature. There is an innate merging of action and awareness when a person is operating from within the flow channel. This is the "zone" expressed for those who may be playing a sport, an instrument, expressing an art, or even a person who is at work and suddenly the clock indicates the last five minutes was actually three hours. We feel it is essential for the employee of nearly any kind of workplace to experience this feeling from time to time, and as often as possible. The benefits we have observed in work with our clients, both ASD and not, have included a sense of achievement, improved confidence, a sense of purpose in their work, and a belief that they have made a difference during their shift. When boredom and resignation inhabit the forefront of an employee's mind, the results are that those experiences are absent and replaced with a much more negative impression of why they work. The views of what work a person is doing are key to the possibility of the flow channel being initiated.

# Types of Work Tasks

When work has an air of internal reward, it can become what Csikszentmihalvi (1975) calls an autotelic task. This can be considered the overarching goal of understanding psychological flow; to convert tasks into a self-oriented goal, rather than one that is externally driven with little meaning to the participant. The key difficulty in this endeavor is the distinction a person has between leisure and and work. For example, we have observed multiple instances of people in therapy (not necessarily ASD clients) who struggle with task interaction and task completion, and this difficulty is derived from an overruling preference for selecting a leisure activity (e.g., video games) over the work activity (e.g., schoolwork, reporting to work on time).

With this distinction in mind, the flow channel exists in a way that may feel elusive to some and is yet still possible. We agree with Csikszentmihalyi and other flow researchers in stating that everyone has the capacity to improve their attempts at experiencing flow, even in such instances as their mind either (a) feels too busy to mentally blend

in with the given task, or (b) lacks the ability to experience the joy which is a seeming requisite of the flow experience. Coming back to the plight of ASD individuals in new workplaces, we believe the decisions of the managerial staff within the work environment are key to helping their staff potentially experience flow, and remain satisfied with their employment.

Table 1. Types of fun during activity engagement

Type of Engagement	Description	Examples	
Agon	Activities oriented around competition	Races, sports, performance comparison, employee of the month	
Alea	Games containing an element of chance	Raffles, Bingo, lottery games	
Ilinx/Vertigo	Activities which alter consciousness	Riding in a car, amusement park rides, skydiving, skateboarding	
Mimicry	Alternate realities are created in these tasks	Stage plays, acting, dance, theater activities, painting, the arts in general	
Fiero	Feeling of complete satisfaction when achieving a positive outcome.	Any activity that shows high accomplishment; for example, hands over head and yelling: "I did it!"	

Note. Data for types of fun during activity engagement from M. Csikszentmihalyi (2008), and J. McGonigal (2011).

To add to this discussion, it can be useful to understand how tasks work toward the experience of flow, breaking this experience down to its base components. In his book entitled Flow: The Psychology of Optimal Experience, Csikszentmihalyi (2008) uses the framework of games as a way to most easly understand how work tasks can be experienced. Since games are designed to give the player a sensation of "fun," these are effective examples for how to help the ASD individual and TD employees alike have the opportunity of becoming synchronized with work duties in a way that can enhance the employee experience. As can be viewed in Table I, many

tasks we all complete every day contain these base components. By understanding how each of these activities are designed to impact the mind of the participant, it can be readily understood that certain types of activites give the participant greater opportunity to use their strengths for positive experience than would others. As we implied earlier, it is important to match the needs of individuals with ASD to supervisor qualities. Supervisors appropriate for individuals with ASD will have characteristics such as empathy, flexibility, and patience. People will more readily engage their flow state if they feel safe. It is necessary to find or create the right mix of environmental and interpersonal factors if VR counselors hope to help them gain and maintain employment. APA (2013) stated, "Only a minority of individuals with autism spectrum disorder live and work independently in adulthood; those who do tend to have superior language and intellectual abilities and are able to find a niche that matches their special interest and skills" (p. 56). Considering this point, along with the types of engagement previously discussed, it is important for work supervisors to provide a good balance between accurate and consistent interaction but allowing the ASD worker the opportunity to work out their experience of tasks with elements of each type of engagement unhindered. For example, when an ASD individual expresses a frustration beyond the type of dissatisfaction commonly observed in a TD worker, this could be a manifestation of their flow state (McDonnell & Milton, 2014). The supervisor may feel a need to jump in and short-circuit this feedback loop between the worker and their experience to preserve a workplace appearance. However, this response disrupts the ability of the ASD individual to stay within their flow state based on the task and style of engagement. Since it is established in research that ASD individuals who would be suitable for the workforce likely possess highly developed language and intellectual capacity, we posit the notion that the supervisor could consider letting the ASD worker move through their flow of this dissatisfaction before jumping to the conclusion that some form of behavioral or emotional redirect is necessary.

Vocational Rehab Impacts

The Center for Disease Control (2012) indicates the rate of ASD diagnosis is 1 in 68 in the United

States. This CDC statistic indicates nearly 1.2 million people in the United States are diagnosed with ASD (Center for Disease Control, 2012). Research suggests better employment outcomes and retention rates are possible for individuals who received supported employment services, which includes on-site training and ongoing support (Wehman et al., 2016). We have observed more positive employment results when clients are employed at jobs that engage their interests by optimizing psychological flow. We believe part of this process comes from including training and support that specifically engages the psychological flow of the person with ASD. In addition, we have found altering the schedules of individuals with ASD to be task-completion oriented rather than timed leads to higher levels of job satisfaction and better long-term employment outcomes. This would require an adjustment to the scheduling styles of many workplaces, which commonly opt to schedule based on shift/time-based systems. This accommodation could provide significant improvement in productivity return among ASD workers. We believe this is because the client with ASD is in an optimum state of psychological flow while completing tasks, rather than fixating on the dragging of time or the eventuality of release from work responsibilities. Finally, just as with everyone, individuals with ASD are more likely to be successful in a job that engages their interests (Lawer, Brusilovskiy, Salzer, & Mandell, 2008). Therefore, we believe it would be prudent for VR agencies and Rehabilitation Counselor training programs to integrate the concept of psychological flow in rehabilitation plans for adults with ASD.

Those with autism often have low levels of self-efficacy. We feel that a noticeable improvement to self-efficacy can be observed through the use of supervisory skills such as scaffolding, praise, repeated affirmations, and support. If VR counselors are able to increase efficacy levels in clients, the likelihood of sustained employment naturally increases. Short computer assessments may be a starting point for some individuals with high-functioning autism but would likely prove to be overwhelming for the majority. VR counselors should engage ASD clients in normal, open-ended questioning (if appropriate) to help them discover their as of yet undiscovered areas of interest. Finding activities in the workplace that produce

psychological flow may be difficult as clients may not be aware of their availability across the needs of the workplace. Perhaps they have not yet engaged in a behavior which will produce sustained interest. Appropriate levels of exploration may be appropriate. For example, perhaps the local newspaper company can provide the VR counselor with stacks of coupon or ad inserts. In the office, the individual with ASD may have an opportunity to practice inserting the advertisements into the papers repetitively. If sustained behavior and interest seem possible, this could be an area for further employment exploration. Unfortunately, VR counselors are often looking for skills and abilities that have already been exhibited by the client, but oftentimes the client needs help finding what behaviors they can sustain. Ultimately, many of these clients hope they are capable of being useful and productive but need more support than typically developed (TD) individuals.

## PROPOSED REASONS FOR THE PROBLEM

As stated previously, adults with ASD have low employment success rates with state run VR agencies. Several reasons exist for this low successful VR closure rate. Perhaps we overlook some of the characteristic strengths and areas for growth of those with ASD. Individuals with ASD may have more intellectual strengths such as openmindedness, creativity, and love of learning over other strengths more commonly found in TD individuals (i.e., emotional and interpersonal skills) (Kirchner et al., 2016). Interestingly, the study also found that the highest positive associations with lifesatisfaction for those with ASD were interpersonal and emotional strengths. Meiller et al. (2015) found that individuals with ASD frequently have special isolated skills (SIS) and perceptual peaks (PP), which increased with age and intelligence. These positive increases in performance and focus are equated with the presence of interest and flow. The absence of an ASD individual's perception of flow may indicate the person, performance expectations, and assigned task are incompatible.

One reason for these distinctions comes from VR agencies only having a limited range of modalities from which to provide services. While VR counselors attempt to use the modality that is most appropriate for each client, these services are often designed to service all clients from a similar

perspective. There is rarely a sufficient amount of time working with ASD adults to identify their limited interests and then determine how those can be incorporated into a job or career that appropriately challenges them while keeping them engaged.

Another reason VR success rates are low is because of the types of employers with whom VR employment specialists have been able to develop relationships. During some of our experiences working with VR agencies, it became apparent that the majority of businesses hiring VR consumers were putting them in remedial positions such as grocery bagging, custodians, and so forth. For many consumers, these jobs are appropriate. However, for adults with ASD, specifically high functioning ASD, these types of jobs become boring and do not engage the higher intellectual levels of these consumers. Third, VR counselors are not appropriately trained in career counseling. VR counselors are often limited by the types of employers with whom the agency has an established relationship. This limits counselors from matching clients based on their interests. In addition, VR counselor training has a limited focus on career counseling and focuses more on identifying accommodations. Finally, VR counselors are overwhelmed with high caseloads. In our combined experiences working across a large VR system, it was not uncommon for counselors to have 250 or more consumers on their caseload. High caseloads certainly impact the VR counselor's ability to give adults with ASD the individualized attention they need. VR agencies can remedy these problems by providing individualized and strength-based service to engage adults with ASD, but this will require several systemic changes, including the development of employer relations with a more diversified group of employers, the reduction of caseload numbers for VR counselors, and better training to help match adults with ASD with jobs that engage their limited interests.

# EVALUATION OF PROPOSED REASONS FOR THE PROBLEM

In an ideal system, VR agencies would have the ability to provide individual strength-based services for adults with ASD seeking employment. However, because of funding limitations and constant budget cuts to the Department of Education, VR agencies

are unable to employ more counselors. VR agencies are encouraged to help consumers, but it seems to be a "one size fits all" approach. This appears to happen because VR counselors are overloaded. VR agencies do provide supported employment to consumers with severe disabilities, but these resources are limited as well. Therefore, adults with high functioning ASD are rarely offered these services even though these services could improve their integration into the workplace and result in more successful VR closures for adults across this category.

As stated, VR agencies generally create relationships with employers that hire individuals with disabilities for low-level jobs. For higher functioning adults with ASD, tasks assigned are mundane. These consumers often do not maintain their employment because they are not being appropriately intellectually challenged. VR agencies would likely see much higher success rates for adults with ASD if counselors were trained to identify the consumer's specific interests and the agency had relationships with employers with higher-level job opportunities that would more appropriately engage these consumers. We accept that many jobs may have limited opportunities to engage flow for entire work shifts. As an example, if a certain section of a store is of special interest to the ASD worker, it could be supportive of the worker for a manager to allow them time to do work that supports that section while also utilizing them to address other areas throughout the work shift. In this way, the supervisor is allowing the ASD worker a chance to engage their interests for periods of time during their work, and then allowing those to break up the monotonous experience of doing work less actualizing to the person. This strategy could be used to help the worker connect more directly with a purpose in their work, and cause minimal reduction in work output, save for the alteration in the order or organization of this worker compared to their colleagues.

Many changes could enhance this process from the vantage point of the VR counselor as well. VR counselors should help clients discover their challenging behaviors, triggers, and strengths. Collateral information can be gained through informal assessments or questionnaires from caretakers, parents, or other close family members. VR counselors will do well to measure character traits and strengths through a variety of methods, depending on the needs, preferences, and abilities of the client. Additionally, collaboration between the VR counselor and management in the newly acquired workplace could assist the worker, as both branches of their employment support would be communicating observations and needs of their mutual client/employee. This potential change aids the education of both professionals through the gaining of valuable data in the form of the resulting observations and advocacy for the needs of both the ASD worker and the workplace in question.

Based on work with individuals with ASD, we've noticed a difficult tug of war with commitment and withdrawal. VR counselors must be aware of the significance of failure in clients' lives. With already low self-efficacy and multiple perceived failures, it is absolutely necessary to use all possible resources and time to place clients where they are most likely to have a successful experience. Counselors are obligated to do no harm. This includes intentional or unintentional harm. VR counselors have a responsibility with ASD clients to be aware of their individual needs, find supervisors willing and able to work effectively with ASD employees, and monitor the pairing closely. Arbitrarily placing clients is not worth the risk in many cases, as the resulting withdrawal following yet another failure may result in isolation, counseling termination, and alarmingly lower self-efficacy coupled with higher levels of depression and isolation. If the supervisor encourages the client to find their flow and provides (emotional and physical) support and safety in the work environment, the chances of success increase exponentially. From this perspective, we believe the implications of VR work with ASD workers using collaboration and Flow-Oriented Support Planning is powerfully impactful one way or another.

#### **RESULTS**

Consumers with ASD would greatly benefit from an individualized, strength-based, flow-oriented VR service approach. Adults with ASD who are matched to a specific job based on their limited interests while also seeking to engage them in the optimal experience of psychological flow will find jobs more satisfying, and they will then be able to maintain those jobs more effectively.

Such a plan would begin with the VR counselor, career counselor, and any mental health-related

# **Support Plan**

Strengths: Rule-oriented, intellectual thought process, intelligent in specific areas

Limitations: Social skills, limited interests, flexibility

Support Entity	Objectives	Interventions	Expected Result
VR Counselor	Identify employment options with potential flow-inducing tasks across workplace duties.	Connect consumer with employers who are involved in areas of interest for the ASD worker.	Achieve positive employment outcome.
Manager/Supervisor	Improve employee engagement using flow- inducing tasks and deliberate utilization in workplace.	Share positive feedback with employee several times throughout shift.	Improve job-satisfaction and employee awareness relating to their positive performance.
	Maximize the potential for the employee through improved understanding of ASD principles during work utilization.	Schedule employee for flow- inducing tasks, and limit sudden changes to task-expectations to a minimum.	Enhance employee connection with given tasks, and reduce potential employee frustrations when they report for work.
New Employee	Expand personal understanding of interest areas and why they motivate the person to experience them.	Use these areas of focus throughout the work shift to achieve and experience flow states.	Improve job-satisfaction, connection with the workplace, and periods of employment for the ASD worker.
Supported Employment Specialist	Provide feedback and recommendations to management to aid employee in experiencing flow states across work tasks.	Conduct weekly 30-minute staffing with manager/supervisor to assist in workplace integration of new employee until worker is fully integrated into workplace processes.	Keep management aware of their ability to support the employee toward a successful term of employment.
	Guide the employee towards seeing work tasks as opportunities to initiate flow mentality while achieving expected performance.	Work one-on-one with employee during periods of work shifts to assess for flow opportunities and provide task-related feedback.	Assist the employee toward a successful integration into the workplace with an acquisition of high self-efficacy.

support the ASD person is currently in contact with throughout their support-system. As would stand to reason, a flow-oriented support plan would not be included in the assistance of any person unless the professionals providing the service have (at the very least) an academic understanding of psychological flow and the benefits of "optimized experience." While we have come to understand that flow is a common concept in our approach to

providing mental health services, we accept that it is possible to acquire outstanding credentials throughout the fields of career, vocation, and mental health counseling without exploring the benefits of this concept. Our plan begins with this element of expanding our professional concepts to develop the curiosity toward why people gravitate towards the activities they do, while concurrently shying away from those activities with a perceived lower value

to the person's self-concept.

proposed solution involves the Our construction of a Flow-Oriented Support Plan for ASD consumers involved with VR services for their employment endeavors. This plan synthesizes the common practice in VR services of using an objective-intervention-outcome approach to create a work placement for the consumer with a desire to begin utilizing flow-related ideals in placing the new employee with ASD characteristics. Our concept comes, in part, from Carter et al. (2015), who challenged the prevailing deficit-based views of those with ASD and offers an alternative in terms of strengths. In their study, they found that every person in the sample had at least one strength with wide variation across participants, and that, "Higher ratings of strengths were predicted by greater involvement in community activities" (Carter et al., 2015, abstract). When clients have the ability to name their strengths and acknowledge what leads them to experience psychological flow, they are then able to be placed into the workforce with the potential for greater effect. These are the traits a VR counselor and any other member of the support system, including the employee themselves, are able to use for the betterment of the employment experience.

Table 2 shows that a mindful approach to pursuing flow experiences from all angles of the employment experience is the intended approach of this intervention. The VR counselor has the key role in establishing this culture for the pursuit of the employment outcome. By presenting flow as the intent, it is our hope that more employers will learn of the importance of this principle in improving employee satisfaction both overall, at the macro and micro levels, and even across singular days of reporting to work and the hours spent completing work tasks. If it is judged by the VR counselor that certain workplaces would not possess tasks of a flow-related potential for an ASD individual, our perspective would be that this referral would not be suitable from the perspective of this article. As ASD individuals have been found in research to respond harshly to perceived failures, we recommend waiting to make a referral until an alternative option with affirmative flow characteristics is identified.

Achieving this level of referral appropriateness can involve expanding the referral pool and taking individualized interest in what the ASD consumer values in their personal life and finding connections in work sites. These interests can come from hobbies, leisure activities, past experiences, opinions on different stores or possible work locations, and other avenues in which we generate a sense of passion related to our subjective experience. For example, if an ASD consumer has a passion for comic books, placement at a setting that sells comics could be a wise starting point for a pursued employment arrangement. We believe these small connections give an ASD worker an optimized genesis to their work, but also give them a segment of their work where they can more readily appreciate the purpose of why they are organizing, stocking, or providing customer assistance. We accept that certain portions of work may not involve this limited segment of their interest, but that brings us to the next phases of the support plan.

Once work placement is achieved, the VR service has achieved a positive outcome provided the consumer stays active in their employment for the intended duration. Improved job-satisfaction plays an important role in determining whether this term of employment will continue or terminate. We recommend that a supervisor become a liaison of the support process, which involves undergoing a basic process of learning what exactly flow is from a lay perspective. Following this, they should engage in regular interactions with a VR counselor or a supported employment specialist connected with the consumer case to improve the likelihood of mindful utilization of this new employee. In order to create a bridge from this experience to the experience of the worker, the supervisor should maintain a policy of providing consistent positive feedback with the ASD worker. We believe this form of positive communication should occur multiple times each shift attended, with gaps of no more than 90 minutes for work done well. Since it is commonly understood that negative feedback will linger in the psyche longer than a comment of praise, it is important for the goal of generating flow that the systemic variables of the worker yield positive feedback for work done well. Without this critical piece, flow will become less likely. When workplaces become negatively focused, jobsatisfaction decreases, which for an ASD individual could lead to an unintended mental shutdown and desire to cease participation in the work experience.

Developing rapport with the supervisor, although appearing different through the social lens of a person with ASD traits, is still critical to both the potential to experience flow and enjoy coming to work. This praise is a vital step toward a person finding joy in the work they are doing.

We know there are limits to time and resources for both the VR counselor and the management staff in these prospective workplaces, and that adding these tasks will further tax those limited resources. For this reason, we recommend a mental health counselor be involved in some capacity for motivation and insight during the entire process, and a supported employment specialist be utilized for improved frequency of guidance and feedback for the ASD employee in real-time during involvement in the workplace. This allows for the system to create consistent feedback loops, training the individual toward activities that suit them, and helping them develop the requisite skills needed for excelling in the work environment. This person will also create a bridge between the employee's experience of their tasks and the awareness of their management, which has numerous benefits. This can lead to more mindful use of the employee from a strength-oriented perspective and ensure a reduced chance of the employee falling out of practice with situations they are proving they know how to manage in an optimal fashion. Through using this plan, every member of the system, from VR, to new employee, to the workplace, adjusts to generate a positive outcome for the entire system.

#### REFLECTIVE CRITIOUE

From our experiences, we have observed that VR counselors are critical as the starting point for adults with ASD in obtaining employment. This reflection highlights some of the adjustments that could be made in service delivery for adults with ASD in obtaining and maintaining employment. To this point, we have had positive experiences in working with individuals with ASD by incorporating flow-inducing tasks into their workday. Based on these personal experiences, there are several recommendations to improve employment outcomes for adults with ASD. This reflection can also inform changes to counselor education programs when preparing VR counselors.

The first recommendation is for VR agencies and VR counselor education programs to adopt a

modality for working with adults with ASD, which is based on consumer strengths, engagement, and psychological flow. In this discussion, we have developed examples for how a Flow-Oriented Support Plan (Table 2) would improve numerous areas of concern across the entire VR process. We recommend the implementation of this plan for all consumers with ASD. Incorporating this support plan will help assure the employee is in an optimal state of psychological flow during work at as regular a frequency as they can manage. While flow is subjectively different for every person, measures can be taken to practice the ability to work towards it in approach to a given task. By assuring the employee is able to enter this optimized state, we would expect the employee to experience higher levels of job satisfaction, and hence would be expected to result in longer periods of job retention.

One issue common to the experience of a person living with an ASD issue is the degree of social interaction in which the partner of the communication shows a disconnect in their knowledge of autism-related strengths limitations. This leads to confusing interactions, leaving both frustrated and feeling as if these forms of interaction are not likely to yield any positive outcomes in the future. This reinforces a seclusion in the ASD individual. We have observed the benefits of educating people in the microsystem of these individuals across different ages from childhood through adult ages. Our perspective on the benefits of improving the education on autism to the system of people who are there living sideby-side with the ASD individual cannot be fully expressed in an article of this kind. For this reason, our aim with the Flow-Oriented Support Plan is to bring these benefits to other elements of such systems to overcome another obstacle, which persists for so many ASD-affected people who desire to work.

For these reasons, we have described our plan to improve the knowledge of the work sub-system as well. This will help supervisors and managers to the new ASD employee understand the importance of all degrees of interaction similar to the kinds of education and training a counselor would pass on to family members. It takes a large effort to show a person with ASD that certain forms of communication can be experienced positively and can require even more effort to help them

develop the comfort to willingly enter into these engagements with others. We believe a culture of acknowledged success and enjoyable experience even during arduous forms of work can help the worker find the drive to notice their excellence in these areas. Given what we observe in systemic work with ASD individuals, we believe this approach will benefit the field of VR and career counseling, and this benefit can be passed down to workplaces willing to create an approachable workplace for potential ASD employees. It seems in good practice for a manager to know the optimal way to approach their employees and build positive motivations in them. The support plan described above as a starting point for helping the employer accomplish this with ASD and other special-needs employees.

Our efforts also seek to expand toward a level of support and insight beyond what can be accomplished by a single member of management receiving referrals for employees from VR agencies. To reach this expanded support, our second major recommendation is to offer adults with ASD supported employment services at the beginning of employment to help overcome any inherent barriers to working, specifically those associated with social interactions. These supports will help new ASD workers to increase their social abilities in the context of their job, also freeing their attentional focus up to the potential for flow states. In addition to providing supported employment to work with the consumer on the job site, supported employment specialists should be consistently involved in weekly meetings with the supervisor to assure both the employer and employee are receiving support. Supported employment should continue and taper down as appropriate to the client's needs based on performance and level of comfort in the workspace.

Our final recommendation involves changes to VR counselor education programs. VR counselor education programs do not include education on psychological flow or career counseling to identify strengths and interests. A large proportion of the preparation is focused on defining consumer deficits rather than strengths, so the VR counselor can then identify necessary accommodations. From our experience as strength-oriented counselors, we believe there is an inherent benefit to including education on positive psychology principles such

as those involved in the flow-channel, and that personalizing a Flow-Oriented Support Plan to the specific drives and motivation of each ASD individual as outlined in this reflection would lead to drastically improved employment outcomes for this population.

#### **FUTURE RESEARCH**

This reflection has laid the groundwork for implementing a new support plan for employment of adults with ASD. The authors have developed the Flow-Oriented Support Plan based on personal experiences working within the VR system and with adults with ASD. The next step would be to implement training in the field with VR counselors and have them include the Flow-Oriented Support Plan with individuals with ASD and compare their employment outcomes with a control group receiving standard VR employment services. If effective, the experimental group would be expected to maintain longer periods of employment and report higher job satisfaction. Some obstacles to achieving this aim would include financial limitations, attrition, professional training, and standardized use of the instrument. This research would provide the ability to quantify the benefits of including this plan in VR services.

The next step after conducting the study mentioned above with current VR counselors would be to solicit universities to include training for the Flow-Oriented Support Plan in their VR programs. Once data for viable outcomes are attained, it would also be prudent to present this to CACREP for inclusion in VR counselor education programs across the country. Including this training for VR counselors could potentially have a major positive impact on shifting some elements of VR work towards a strength-based perspective, while also creating more successful VR closure rates for adults with ASD.

#### **REFERENCES**

- Alverson, C. Y. & Yamamoto, S. H. (2017). Employment outcomes of vocational rehabilitation clients with autism spectrum disorders. Career Development and Transition for Exceptional Individuals, 40(3), 144-155.
- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Washington, DC: American Psychiatric Publishing.
- Carter, E. W., Boehm, T. L., Biggs, E. E., Annandale, N. H., Taylor, C. E., Loock, A. K., & Liu, R. Y. (2015). Known for my strengths: Positive traits of transition-age youth with intellectual disability and/or autism. Research and Practice for Persons with Severe Disabilities, 40(2), 101-119.
- Centers for Disease Control. (2012). Autism Spectrum Disorders:

  Data & statistics. Retrieved from https://www.cdc.gov/ncbddd/
  autism/data.html
- Csikszentmihalyi, M. (1975). Beyond boredom and anxiety. San Francisco, CA: Jossey-Bass Publishing.
- Csikszentmihalyi, M. (2008). Flow: The psychology of optimal experience. New York, NY: Harper Perennial Modern Classics.
- Doue, W., & Manning, D. K. (2006). John Dewey and the art of teaching: Toward reflective and imaginative practice. Educational Foundations, 20(3-4), 105-108.
- Guo, X., Duan, X., Long, Z., Chen, H., Wang, Y., Zheng, J., . . . Chen, H. (2016). Decreased amygdala functional connectivity in adolescents with autism: A resting-state fMRI study. Psychiatry Research: Neuroimaging, 257(Nov2016), 47-56.
- Keehn, B., Nair, A., Lincoln, A. J., Townsend, J., & Müller, R. (2016). Under-reactive but easily distracted: An fMRI investigation of attentional capture in autism spectrum disorder. Developmental Cognitive Neuroscience, 17(Special Section: The Developmental Neuroscience of Adolescence: Revisiting, Refining, and Extending Seminal Models), 46-56.
- Kirchner, J., Ruch, W., & Dziobek, I. (2016). Brief report: Character strengths in adults with autism spectrum disorder without intellectual impairment. 46(10), 3330-3337.
- Lawer, L., Brusilovskiy, E., Salzer, M. S., & Mandell, D. S. (2008). Use of vocational rehabilitation services among adults with autism. Journal of Autism and Developmental Disorders, 39(3), 487-494.
- Lorenz, T., Frischling, C., Cuardros, R., & Heinitz, K. (2016). Autism and overcoming job barriers: comparing job-related barriers and possible solutions in and outside of autism-specific employment. PLOS one, 11(1), 1-19.
- McDonnell, A., & Milton, D. (2014). Going with the flow: Reconsidering 'repetitive behaviour' through the concept of 'flow states.' In G. Jones & E. Hurley (Eds.), Good Autism

- Practice: Autism, Happiness and Wellbeing (pp. 38-47).
- McGonigal, J. (2011). Reality is broken: Why games make us better and how they can change the world. New York, NY: Penguin Group.
- Vermeulen, P. (2014). The practice of promoting happiness in autism. In G. Jones & E. Hurley (Eds.), Good Autism Practice: Autism, Happiness and Wellbeing (pp. 8-17).
- Wehman, P., Brooke, V., Brooke, A. M., Ham, W., Schall, C., McDonough, J., Lau, S., . . . Avellone, L. (2016). Employment for adults with autism spectrum disorders: A retrospective review of customized employment approach. Research in Developmental Disabilities, 53-54, 61-72.