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Introduction

Career decision-making is a complex process that often times is accompanied by mental health concerns (Betz & Corning, 1993; Krumboltz, 1993; Walker & Peterson, 2012; Zunker 2008). For example, long-term unemployment is often accompanied by depression (Rottinghaus, Jenkins, & Jantzer, 2009; Saunders et al. 2000; Walker III, & Peterson, 2012), and anxiety (Gati, Asulin-Peretz, & Fisher, 2012; Nauta, 2012; Saka & Gati, 2007). In addition, negative or dysfunctional career thinking has repeatedly been shown to predict career indecision (Bullock-Yowell, Peterson, Reardon, Leierer, & Reed, 2011; Saunders, Peterson, Sampson, & Reardon, 2000). Interventions to address these concerns often involves cognitive restructuring (Sampson, Peterson, Lenz, Reardon, & Saunders, 1996), which often occurs within face-to-face sessions with a client. However, today's technologies offer career practitioners unique tools to address these concerns both within and outside of the traditional office setting. In the sections that follow, we offer practical suggestions on how to transform traditional tools via technology, using apps to strengthen the link between career and mental health, and how to take advantage of social media to highlight this connection.

Transforming Traditional Tools

The fields of mental health and career counseling are constantly changing with the additions and innovations regarding technological advancements (Osborn, Dikel, & Sampson,

2011). A decade earlier, the National Career Development Association (NCDA) and the Association for Counselor Educators and Supervision (ACES) emphasized the need for counseling students to know not only about existing technologies, but how to integrate them into career service delivery (2000). As such, career practitioners are being required to attain competence with the new technologies available to them while also being able to display their competence in a counseling setting. Although much of the focus resides on new technological advancements, it is of the authors' opinions that career practitioners should strike a balance with regards to incorporating technology into their practice. While maintaining an open mind towards new technologies is recommended, it is also essential for practitioners to consider more traditional technologies and their practical capabilities for counseling purposes.

Utilizing traditional tools such as a video camera can be truly beneficial in a counseling setting. Video cameras are now readily available in many formats such as phones, tablets, and traditional video recorders, and as such are commonly accessible by a wide audience. Transforming the traditional tool of a video camera to be utilized towards video diaries has seen success when attempting to discover more of a client's life outside the counseling session and identifying a client's thoughts, feelings, and personal experiences (Iivari, Kinnula, Kuure, & Molin-Juustila, 2014). Utilizing an even simpler tool, an ordinary camera, could also provide alternative methods to traditional counseling interventions. A counselor often provides homework or activities in session which involve creating art of some kind, whether it is a collage, a genogram, or even a drawing. Encouraging a client to create the assignment and capturing that product with a camera's photograph creates a visual that can be referred to in later sessions.

Utilizing the simple tool of a camera or video camera can revolutionize, expand and enhance the clinical benefits of completing diaries in a career counseling setting. A traditional career counseling role-play could include performing a mock interview or elevator speech, with the counselor providing a situation in which the client and counselor will role-play together. Afterwards the counselor and client will review their thoughts and feelings on their memories of the role-play. By using a video camera to record the session, counselors and clients can instantly review the video recorded role-play in session, even stopping it at certain points, and identify positives as well as areas for improvement. A career counselor can now focus more attention on the role play itself and be “more in the moment” and spend less time making mental notes of points to discuss after the role play. Video cameras can also provide opportunities for clients to record video statements for themselves, such as positive statements about themselves (such as, "I can make effective decisions.") or remind themselves of previous commitments ("I can do this. I told myself to apply to three jobs today."). These in session experiences can then be shared with the client electronically for review and further practice. These are a few of the many ways to utilize a technology tool that is now more commonplace for many.

Note-taking during sessions is a common practice of career practitioners. These notes may be of words that a counselor hears the client repeating, a resource that the counselor thinks of while the client is sharing, follow up questions the counselor may want to ask, or specific questions a client wants addressed. Applying note-taking technology, such as Livescribe Smartpens, can significantly impact a practitioner’s counseling. The use of a Smartpen allows a counselor to automatically and wirelessly transfer notes written in a session to a device such as a tablet or computer, thus collecting notes electronically. This allows session notes to be included in the modern process of maintaining electronic medical records. In addition to taking client

notes, a practitioner could use this when co-creating an intervention plan with a client. Livescribe Smartpens can also record the audio of a counseling session and synchronize the notes with the audio of the session. Career and mental health practitioners no longer need to hurriedly write notes in a session, but instead write a single word during the session and replay the audio at a later time. Clients can also utilize these tools in or out of session, as they can write their goals or ideas along with their own voice recordings.

Hipaachat is another tool which transforms the constant need for co-worker communication into a modern technological success. This tool utilizes basic messaging and video-communicating technology but provides safe, secure, and confidential protection. Hippachat is a mobile tool that allows practitioners to send typed or audio recorded messages, and also allows the practitioner to send attachments (such as photos and videos), thus providing a simpler and safer method of communicating confidential information. This software can assist with providing mobile consults, supervisions, and group communicating, all while maintaining the federal Health Insurance Portability and Accountability Act (HIPPA) compliance. VSee is a similar online chat tool that claims HIPPA compliancy.

Career practitioners might also use automatic reminder systems to inform clients of upcoming sessions, relevant workshops, unexpected cancellations, and so forth. As email becomes less popular with the current generation, finding a non-intrusive way to share these reminders that works with the technology of today's client is necessary. Secure text messaging is one such means. TigerText is an example of such a system, in which the sender's phone number is obscured and a return option is not allowed (i.e., individuals cannot reply to the text that is sent). In addition, it is possible to restrict the message from being copied and forwarded. The messages are encrypted and will disappear or "self-destruct" after a period of time sent by the

sender. Another example used by teachers to reach a group of students at one time is remind101. Any type of reminder is possible, including an encouragement to keep working on goals, or a client-developed mantra for the week such as “I can make effective career decisions” or “I am a worthwhile person.” The career practitioner should consult with the client on if and how often they would like to receive such messages.

Technology also provides organizational options for client information. Over the course of a few sessions, a career practitioner may have provided multiple resources such as decision-making guides, career information, resume critique, a plan for addressing multiple questions, stress-busters, links and contact information specific to a clients’ needs. If hard copies are given out at each session, there is the risk of that information being lost. Similarly, if information is sent via email, a client might need to search through several emails to access the desired information. Traditionally, client information would be stored in a folder that is accessed during each session. Technology provides options for shared electronic folders or files between the client and the practitioner that can be accessed by both during and between sessions. Evernote, Dropbox and Google Drive are examples of such sharing programs.

Whiteboards are a tool that career practitioners might use during session as a brainstorming activity. For example, a client in the job search process might want to identify possible places of employment and relevant job titles. On a whiteboard, they might create a mindmap by listing out various settings, and within those settings, expand out to list job titles and even potential contacts within those settings. Another example might be brainstorming stress management techniques a client might employ when preparing for an interview. A picture could be taken to capture the whiteboard image. Or, a counselor might use a virtual whiteboard or mindmapping tool such as spiderscribe.com or padlet.com, or even online stickies such as

stickr.com or onlinestickies.com. While using these virtual tools can be at times cumbersome, especially when two (or more) people are working on it at the same time, there is an added benefit in that links can be included and easily accessed, which isn't the case with a picture.

Virtual Reality (VR) technology is also a topic of great interest to career and mental health counselors, as well as the general public, including current and potential clients. Virtual realities expand roleplaying by immersing individuals into an environment, rather than just asking them to imagine that they are in a given environment. The new advancements with VR technology have allowed companies such as Oculus to develop programs that allow individuals to visually immerse themselves in a pre-determined and artificial environment. These environments could include stimulation such as roller coasters, tall buildings, airplanes, or even worlds populated with dinosaurs! Counselors could utilize this technology to allow individuals to transform the traditional role-play and systematic desensitization techniques. By using VR technology, a counselor could create a virtual situation where a client could practice public speaking to a virtual audience, or become desensitized to their fear of spiders by watching a virtual spider crawl in front of them. One example of a company creating and providing virtual reality therapy can be found at virtuallybetter.com, who offer virtual reality experiences in a clinical setting to address issues such as anxiety and depression. Many people express stress over making a public presentation or giving a speech, and often times, individuals are asked to do this as part of a job search interview. Having a virtual environment in which avatars are the audience allows a client to experience the anxiety, and try different approaches, where the cost and practicality of creating a similar experience in real life would be prohibitive.

The Power of Apps

The wide range of computer and smartphone applications made readily available today offer ample opportunities for practitioners to connect with clients, and enhance service delivery beyond the office setting (Osborn, Kronholz, Finklea, & Cantonis, 2014). According to Bloomberg Business (2014), individuals in the United States with access to a smartphone or tablet spend an average of two hours and fifty-seven minutes on them daily, surpassing the average time spent watching television. Given the amount of time spent on mobile devices and tablets, and the popularity of these products, practitioners might examine how to ethically and responsibly incorporate the use of relevant applications as part of the counseling process. Researchers (Gati & Austin-Peretz, 2011; Osborn, Dikel, & Sampson, 2011) have shown that technology is a useful tool in assisting clients with the career-decision making process. As mentioned in the opening paragraphs, negative or dysfunctional career thinking has repeatedly been shown to predict career indecision (Bullock-Yowell, Peterson, Reardon, Leierer, & Reed, 2011; Saunders, Peterson, Sampson, & Reardon, 2000). In the field of career counseling, there are many apps that can be used to explore and address negative thinking and improve decision-making skills in regards to making a career choice. Negative metacognitions can influence a client's outlook on his or her self-knowledge, career options, and career-decision making skills (Peterson, Sampson, Reardon, & Lenz, 2002). Additionally, the process of decision-making may be confusing or overwhelming for some clients. The following discussion will include examples of applications that can be used to assist clients in these two areas of concern.

Negative emotions and maladaptive thoughts, such as those that occur when a client feels depressed, anxious, or heavily stressed, can delay or block the career decision-making process (Osborn et al., 2014). Apps such as Headspace, FlipHead Thought-Stopping, and Moodkit – Mood Improvement Tools, can be useful in helping clients to understand and combat negative

thinking. Headspace is a mindfulness app that provides a series of guided meditations ranging in time from 10-20 minutes. The FlipHead Thought Stopping app offers users insight into the effects of negative thoughts, and thought-replacement functions based on cognitive reframing strategies that can help individuals incorporate more positive language into their thinking, such as using positive affirmations (Osborn et al., 2014). Additionally, Moodkit – Mood Improvement Tools takes this a step further by having clients check and record their moods and thoughts throughout the day, helping clients and practitioners to see and discuss negative thinking patterns that could be impacting the career-decision making process.

When clients are feeling puzzled or distraught by the decision-making component of a career issue, apps like Unstuck ®, iThoughts, and Sheepadvisor Decision Maker may be useful (Osborn et al., 2014). Unstuck ® is a decision-making app that guides users through questions created to help individuals identify factors that influence the problem, such as other people, feelings regarding the decision, and what kind of decision the user is making. iThoughts may be useful in helping clients and practitioners to illustrate and conceptualize the decision at hand by creating decision trees. The Sheepadvisor Decision Maker app expands on the decision tree technique by providing a series of questions related to the decision, and producing a percentile breakdown of the options (Osborn et al., 2014).

The apps discussed above are just a few of the many applications that may be helpful when incorporated into the career counseling process. Practitioners are encouraged to explore the “world of apps” to see which might best fit their practice as well as their individual client’s needs and preferences. As with all interventions involving the use of technology, practitioners should keep in mind the client’s level of competency, access to devices with apps, and the cost (if any)

to purchase the apps. If a client is paying for sessions, the practitioner needs to consider the time it takes to orient the client to an app and whether that time should be billable.

Taking Advantage of Social Media

Career counseling offers clients technological resources that can be utilized during the career decision-making process (Osborn, Dikel, & Sampson, 2011). Specifically, social media sites afford clients a means of exploring and addressing negative career thought processes in addition to forms of depression and anxiety that often accompany it. With the surge of technology in the past decade, many clients have easy access to social media sites such as Pinterest, Facebook, Twitter, and Instagram. As a result, clients are able to peruse thousands of inspirational posts, quotes, photographs, and memes, reposting those they deem to be helpful in combating negative thoughts associated with career decision-making.

Online support groups also offer clients a way of gaining peer support from those who are experiencing similar issues during the career decision-making process (Shepherd, Sanders, Doyle, & Shaw, 2015). Some companies are combining the idea of social media with the concept of traditional support groups. For example, an individual battling depression attributed to negative thought patterns may benefit from sites such as Panopoly designed by Robert Morris. The premise of Panopoly is multifaceted in that it provides clients an opportunity to develop a network of support that, in addition to regular counseling services, can aid the client in dealing with depression and other mental diagnoses. Emerging social media sites such as Panopoly are focused on providing individuals with tools to help in cognitive restructuring. Pinterest offers clients access to numerous cognitive restructuring tools including: journal templates to encourage clients to write positively about themselves and their experiences, index card projects that help clients create reminders of positive attributes they possess, and memes that are focused

on helping clients develop positive patterns of thinking. However, social media sites dedicated to mental health are in their infancy, and thus, additional research is needed in determining how these resources may be used in an effective and ethical manner.

With the emergence of online support groups and mental health social media sites, researchers are beginning to examine how human communicational exchange via the Internet is able to involve human communicational characteristics such as empathy. Siriaraya et al., (2011) conducted a study on the expression of empathy through communication exchange in online discussion forums. The study found that empathy was expressed in great detail in online communication, among young people in particular, as compared to older generations. Therefore, it seems that a shift in communication styles with younger generations is setting the scene for social media sites such as Panopoly to become a mainstay in the field of mental health and career counseling.

Sites that offer mental health resources and networking should make it clear to their users that their services are not to take the place of professional mental health services, but rather to supplement traditional counseling and mental health treatments. As a cautionary procedure, users should always check the validity of the social media site and/or support group to ensure safety. Unfortunately, it should be noted that mainstream social media sites are sometimes used to promote unhealthy alternatives for mental health issues. For example, sites that promote anorexia, bulimia, and other dangerous lifestyles or lifestyle choices should be avoided. Practitioners should alert clients to such sites and alert them to the dangers of using such sites as a means of dealing with mental health concerns. Still, closed online group options, such as those offered by Facebook, can provide an option for individuals who cannot or do not wish to meet face-to-face. With any social media, career practitioners should ensure that their own privacy

settings are appropriate, and encourage the same of all group members, and remind group members that all information and conversations that take place in the online setting are considered confidential. Other ethical standards such as group screening, personal disclosure, and boundaries also apply in these online environments.

Summary

Recently, practitioners and researchers have been highlighting the connection between career and mental health concerns (Zunker, 2008). Previously, technology provided tools to address career and mental health concerns individually. Websites, apps and social media provided options for making career decisions and job searching, or managing depression and anxiety. As career practitioners become more comfortable with addressing mental health issues, and mental health counselors increase their comfort in discussing career-related concerns, likely there will be a demand for technological tools that address both simultaneously. In this paper, we identified several tools that, while may not have been specifically designed to do both, have the capability to do so. Ultimately, a career practitioner considering integrating technology into practice must consider their own competence in using these tools balanced with the client's comfort and appropriateness of the tool for the need at hand.

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