Unemployment continues to be a growing concern among both civilian and veteran populations. As 14% of the veteran population currently identify as disabled because of service, this population’s need for specialized vocational rehabilitation is increasing. Specifically in Veterans Affairs (VA) Blind Rehabilitation Centers (BRC) where holistic treatment is used in treatment and rehabilitation, career services may be useful in improving quality of life for visually impaired veterans. A group approach to career counseling with visually impaired veterans is discussed using the principles and theory of the cognitive information processing (CIP) approach. This approach emphasizes metacognitions, self-knowledge, occupations knowledge, and the use of a decision-making cycle to improve career decision states and decrease negative career thinking. A group outline is provided and discussion of special considerations and limitations are included.

**Keywords:** veterans, cognitive information processing, group, career counseling, visually impaired

As of August 2014, the Bureau of Labor and Statistics (BLS) reports the unemployment rate for all veterans as 6.0% (U.S. Bureau of Labor Statistics, 2014b). For men and women who once held steady employment as part of the armed services, this lack of security can prove stressful. All branches of the military are required to provide some sort of preseparation counseling to service members and offer workshops aimed at providing assistance for veteran transitions out of the military. There is limited data on the effectiveness of these programs (Clemens & Milsom, 2008), and it has been estimated that only one out of five veterans is aware of vocational services provided by the U.S. Department of Veterans Affairs (VA; Ottomanelli, Bradshaw, & Cipher, 2009). As troops continue to withdraw from current operations and unemployment remains high among all Americans, the outlook for postmilitary careers can seem bleak to transitioning veterans and veterans who have been out of service for longer periods of time.

While many transition variables may affect employment opportunities, veterans with disabilities are particularly vulnerable to unemployment and to the perception that employment is not possible (Mpofu & Harley, 2006). The BLS estimates that as of March 2014, approximately 15% of all veterans reported having service-related disabilities (U.S. Bureau of Labor Statistics, 2014a). Bullock, Braud, Andrews, and Phillips (2009) found that 15% of veterans reported that they viewed their physical disability as an obstacle to gaining employment. Of the many types of disabilities reported by veterans, it is estimated that more than one million of these are low vision, with likely over 45,000 veterans having been diagnosed as legally blind (Williams, 2007). In recent years, the VA has put forth a substantial amount of effort to establish a system of inpatient Blind Rehabilitation Centers (BRC) that are designed to improve overall quality of life to veterans with visual impairment (Williams, 2007). As part of this care, a team of rehabilitation and counseling specialists attend to patients and assist veterans in building strength, skills and confidence in the face of their disability (Williams, 2007). One inadequate
aspect of the VA’s attempts to increase these individuals’ quality of life is providing quality interventions aimed at improving veterans’ views of employment opportunities as well as their ability to acquire employment.

**Current Use of Evidence-Based Interventions**

Approximately 67% of veterans attended at least one counseling session in 2006 and of these, 24.1% attended at least one group therapy session with the average number of group visits being approximately 15.9 (Hunt & Rosenheck, 2011). Veterans with service-connected disabilities are more likely than those without disabilities to engage in counseling, and typically the number of sessions veterans may make is unlimited (Hunt & Rosenheck, 2011). Most group intervention research regarding veterans incorporates a combination of cognitive behavioral therapy (CBT), trauma-focused therapy, interpersonal problem solving, and relapse prevention, and focuses on treatment of mental health diagnoses like post-traumatic stress disorder (PTSD) and depression (Ready et al., 2012). These approaches have been found effective in relieving symptoms of such diagnoses through implementation of theory- and evidence-based techniques (Ready et al., 2012).

Holistic approaches to treating the overall wellness of veterans is a growing trend in research. The use of a combination of interpersonal strategies and cognitive behavioral techniques such as behavioral activation also has been found to improve overall wellness in veterans, even as physical functioning is diminished because of chronic illness (Perlman et al., 2010). Across treatment approaches, a common finding is that veterans perceive the use of groups positively. In one study using interpersonal and cognitive-based approaches to aid transitioning veterans, the researchers found that the group-based format was the key factor in positive outcomes (Westwood, McLean, Cave, Borgen, & Slakov, 2010). Likewise, Ready et al. (2012) attributed low dropout rates to strong group cohesion and resulting positive peer pressure. Hunt and Rosenheck (2011) noted that veterans are likely to prefer group therapy because of reduced perceived stigma and increased cost effectiveness for all involved.

In the arena of vocational psychology, a substantial amount of research exists regarding career decision making, specifically using the cognitive information processing (CIP) approach developed by Sampson, Reardon, Peterson, and Lenz (2004) to conceptualize employment concerns. One of the largest components of the research here focuses on dysfunctional career thoughts and their ability to hinder effective career decision making. Bullock et al. (2009) specifically found that dysfunctional career thoughts can stunt readiness for career choices. Furthering this assertion, Bullock-Yowell, Peterson, Reardon, Leierer, and Reed (2011) found that negative career thoughts in fact mediate the relationship between life stress and career decision states. A CIP approach to career counseling with veterans has only been applied in individual cases in the research, and in such applications, significant progress toward making career decisions and improving satisfaction with current career situations has been reported (Clemens & Milsom, 2008).

Components of a CIP approach to career counseling such as homework assignments, providing resources, and empowering clients to complete research have been found to contribute to positive career outcomes (Ryder, 2003). Similarly, a de-emphasis on pathology and a shift in focus toward coping skills and concrete goals have been found to play a part in veterans’ commitment to group therapy (Perlman et al., 2010). Veterans with increased awareness of available vocational services and opportunities have been shown to be five times more likely to return to work after service-related injuries than those without knowledge of available resources (Ottomanelli et al., 2009). Evaluations of veterans’ interests, skills and abilities according to John Holland’s RIA-SEC (realistic, investigative, artistic, social, enterprising, conventional) theory have found that veterans endorse a wide range of Holland interest codes, which can characterize both people and career choices (Bullock et al., 2009). That is, when reporting aspects of career development according to the six areas delineated by Holland (listed above), veterans report a wide range of career-related interests, skills and abilities (Bullock et al., 2009). Through education regarding these factors and the variability among both employees and employers, further
options for employment may be considered that were not considered before engaging in career counseling. Because Bullock et al. (2009) did not find significant differences between veterans and the general adult population regarding their skills, abilities and interests, this article asserts that counselors can readily apply the evidence-based CIP approach to veterans’ career issues without great concern that dramatic differences may hinder effectiveness of the approach.

Using CIP Groups as Career Interventions for Veterans

The CIP Model: Theoretical Framework

The CIP approach to counseling as developed by Sampson et al. (2004) is based on two core concepts: (1) the pyramid of information-processing domains, and (2) the CASVE cycle of decision making. This approach focuses on the holistic nature of careers, the process of choosing a career path and the generalizability of the decision-making process to areas beyond occupations (Bullock-Yowell et al., 2011). The CASVE cycle refers to a decision-making process that involves five steps to make up the acronym, which are communication, analysis, synthesis, valuing and execution. The first step is communication, which entails identifying what decision needs to be made or “identifying the gap” between where one is and where he or she wants to be following implementation of a decision (Sampson et al., 2004). The following step, analysis, involves one identifying his or her own value as an employee and what he or she wants to receive from a career or job (Sampson et al., 2004). Following this, during synthesis, one elaborates and crystallizes the occupational options available depending on the self-knowledge gained (Sampson et al., 2004). After identifying top choices, the next step is valuing, in which the individual engages a cost-and-benefit analysis of the options available, and using the self-knowledge gained during analysis, ranks the options that have been identified (Sampson et al., 2004). The final stage of the CASVE cycle is execution, in which the decider puts his or her action plan into place and carries out the choice or decision made through the process (Sampson et al., 2004).

The four assumptions underlying the process and theory of CIP are the following: (1) emotions and cognitions can influence career problem solving and decision making; (2) effective problem solving requires both gaining knowledge and thinking about the knowledge gained; (3) what is known about the self and the environment is constantly interacting and evolving, and organization of this information occurs in complex ways; and (4) career problem solving and career decision making are skills that can be improved through learning and practice (Sampson et al., 2004). CIP-focused career counseling uses cognitive behavioral-based techniques such as cognitive restructuring, behavioral activation, and homework to facilitate the basic aims of the counseling process (Bullock-Yowell et al., 2011).

Application of CIP Model to Veteran Interventions

As stated previously, approximately 15% of the veteran population report having service-related disabilities and of this group, more than one million suffer from service-related visual impairment (U.S. Bureau of Labor Statistics, 2014a; Williams, 2007). The purpose of a group-based approach to vocational intervention is to further the current goals set forth by existing VA BRC: of enhancing and improving quality of life for these disabled individuals (Williams, 2007). In addition to medical rehabilitation activities such as mobility training and orientation, veterans deemed likely to benefit from mental health treatment should also engage in individual and/or group counseling (Kuyk et al., 2004). The purpose of rehabilitation activities is to increase veterans’ independence through improving their self-efficacy toward tasks that become extremely difficult for visually impaired individuals (Kuyk et al., 2004). Offering vocational counseling in addition to these skill-building activities is meant to further enhance this purpose by providing insight and progress toward satisfying independence for these individuals in vocational domains. The group format would best be served in conjunction with current treatment offered to veterans in established VA BRC.
The CIP approach aims to assist people in making appropriate career choices through education and practice of problem-solving and decision-making skills (Sampson et al., 2004). As the world of work continues to evolve, even for civilians who have been a part of it for decades, teaching disabled veterans how to approach this new world is extremely relevant to helping them further adapt to this dynamic environment (Sampson et al., 2004). Career counseling in general has this goal of assisting clients in recognizing and resolving issues (McAliff et al., 2006), and the CIP approach provides a standardized outline to address this need. In the case of visually impaired veterans, as with most disabilities, the need for advocacy also plays a part in approaching career counseling (Bullock et al., 2009). It will be important for counselors to continue monitoring perceived barriers and assessing how veteran participants may be able to overcome these independently, while also recognizing when advocacy may be appropriate (Clemens & Milsom, 2008).

**Group Goals Using the CIP Model**

The group’s goals are in line with the majority of research regarding veteran transitions and career counseling for individuals with disabilities (Clemens & Milsom, 2008; Perlman et al., 2010; Westwood et al, 2010). However, the goals of the CIP approach to career counseling (Sampson et al., 2004) should be noted and incorporated according to established veteran goals regarding employment and careers. Goals include the following: (1) decreasing negative career thoughts and increasing confidence in one’s ability to make career decisions, (2) increasing knowledge of an effective career decision-making process and how to apply it to decisions outside occupational domains, (3) increasing self-knowledge regarding skills, abilities and interests in relation to decision making, (4) increasing independence through education and practice of completing work outside group sessions, and (5) creating a cohesive and safe environment for participants to feel comfortable to make both mistakes and progress.

**Individual Factors to Consider**

**Suggested Inclusion and Exclusion Criteria**

In attempt to achieve the aforementioned goals, prescreening for inclusion in the suggested group should occur in individual settings with the group leader. The group is formatted such that it is a closed group, but because of the nature of most treatment facilities, staggered start and end dates may allow for continuous enrollment in the protocol. Optimally, groups will be composed of five to eight patients and meet once a week for an hour over the course of 7 weeks. Suggested prescreening should include evaluation of eligibility as well as completion of assessments to aid in achieving group goals. Some assessments may be used as outcome measures to assess effectiveness, while some serve informative purposes for the group participants.

Inclusion criteria that should be considered are an individual diagnosis of visual impairment, current receipt of treatment at a VA BRC where groups may be conducted, and ability to articulate a career-related gap that can benefit from the CIP approach. Exclusion criteria to consider include current clinically significant substance abuse or dependence, unwillingness to engage in group work or work outside group, and extreme distress as assessed by the Depression Anxiety Stress Scale (DASS) or other assessments used by the rehabilitation center to assess psychopathology. Extreme distress may be characterized by “severe” classifications according to scores on any scales or “moderate” classification of scores on the depression scale of the DASS. Further, individuals who are only able to identify a single question that needs to be addressed or noncareer-related goals would likely not benefit from the group as outlined. Additionally, individuals with complete blindness may be excluded from the group-based CIP treatment, as they are likely to need more focused treatment. These individuals should be offered the option of engaging in the protocol on an individual basis, because of the need for additional augmentation and specialized attention with regard to completing and interpreting assessments, as well as adapting homework assignments.
Suggested Assessments to Include

The outlined assessments are suggested for use in evaluating eligibility of participants, measuring outcomes, and as informative tools for participants to use in sessions:

**Career Thoughts Inventory (CTI).** The CTI (Sampson, Peterson, Lenz, Reardon, & Saunders, 1996) is a measure of negative or dysfunctional career thoughts that interfere with career decision making. It is a 48-item self-report inventory that uses a 4-point Likert scale ranging from 0=strongly disagree to 3=strongly agree. This inventory includes items such as “I’m so confused, I’ll never be able to choose a field of study or occupation,” and “I’m afraid that if I try out my chosen occupation I won’t be successful.” The CTI has three subscales—decision-making confusion, commitment anxiety, and external conflict—which are used to measure negative career thoughts.

**Career Planning Confidence Scale (CPCS).** The CPCS (McAuliffe et al., 2006) is a 39-item measure of career planning confidence. It uses a 5-point Likert Scale ranging from 1=no confidence to 5=completely confident with items such as “ready to invest time and energy necessary to make a career decision” and confidence in “finding general career information.” The CPCS has six subscales: readiness to make a career decision, self-assessment confidence, generating options, information-seeking confidence, deciding confidence, and confidence in implementing one’s decision.

**Depression Anxiety Stress Scale (DASS).** The DASS (Lovibond & Lovibond, 1995) is a 42-item self-report measure of depression, anxiety and stress. It consists of three subscales using a 4-point Likert scale that ranges from 0=did not apply to me at all to 3=applied to me very much, or most of the time. Scales are measured using items such as “I couldn’t seem to experience any positive feeling at all” and “I felt sad and depressed,” and the three subscales are depression, anxiety and stress.

**Self-Directed Search (SDS).** The SDS (Holland, Fritzsche, & Powell, 1994) is an interest inventory based on Holland’s RIASEC theory, which yields a three-letter code to classify individual interests. The assessment requests that test takers rate their preferences or perceptions of tasks, capabilities, occupations and self-estimates. Items on the SDS require yes or no responses in each RIASEC area and scale. Users can enter codes yielded from this assessment on the O*NET website, which will generate occupational options in line with their codes and information regarding individual occupations. The recently developed fifth edition of this measure added to the resources available for veterans with the development of a Military Occupations Finder. This resource allows veterans and active-duty military to link military occupation titles with civilian titles that can aid in transferring skills and experiences to civilian employment.

All measures except for the SDS are recommended to be administered at completion of the group protocol to assess treatment outcomes. After initial screening and assessment, all participants will engage in a pregrou meeting as well as six sessions outlined according to recommendations by Sampson et al. (2004) regarding applications of CIP theory to career counseling (refer to Appendix for session outlines).

Special Considerations

There are several considerations to be made for use of a CIP group with the intended population. If used with groups of veterans as discussed, individuals will likely maintain interactions in other areas of their lives, which constitute increased contact outside group settings. Because of the nature of veteran groups and rehabilitation centers such as VA BRC, group members are also likely to engage in other treatment and social settings together, and thus, group leaders should carefully discuss confidentiality with all group members. Likewise, group treatment as part of a holistic approach by a treatment team is often the case at veteran treatment centers,
so issues regarding expectations of confidentiality should be addressed. Because of the hierarchical nature of the group content, consistent attendance is necessary, and group facilitators should explain this to participants and have a discussion regarding consequences for missing sessions, as a part of the initial group rules.

Group facilitators should pay attention to the intended participant pool and the potential for complicated interactions between disability, racial and other identities and worldviews that may influence perceptions and engagement in the group process (Mpofu & Harley, 2006). As career intervention research provides no evidence for specifically engaging in career counseling among blind veterans, it is critical to continually consider the nature of this disability as well as individual differences. The disability status of the veterans is likely not the only influential factor on career decisions and possibly not the primary lens through which participants may perceive career options and identities (Mpofu & Harley, 2006). As such, it is crucial that providers not make assumptions regarding their perceptions, and that each individual receives the opportunity to respectfully voice opinions and points of view.

For these visually impaired individuals, there will still be many barriers regarding implementing homework, completing assessments and carrying out career goals. The counselor must expect that there will be a need for both advocacy and additional individual assistance to members for them to complete the career group. Throughout sessions, continual assessment of perceived barriers by participants may aid in improving the decision-making process for veterans, especially as related to gaining employment. Patients at VA BRC may have access to state-of-the-art equipment that allows them to conduct online research and carry out tasks on their own, so with this in mind, clinical judgment will be critical in deciding when to step in and when to promote autonomy. In particular, administration of assessments must be adapted to accommodate visual disabilities. In treatment settings where this level of technology is not available, counselors should make special considerations for completion of homework. Specifically, finding the resources for group members should be a priority to allow for optimal retention of concepts.

Limitations to Consider

One significant limitation in conducting this group among visually impaired veterans is the emphasis placed on participants completing work outside sessions, as the participant pool will likely vary in level of visual impairment. The use of handouts will be limited unless the group leader adapts their formatting according to individual participants’ visual needs. Another limitation is that the VA’s individual treatment facilities may have policies and procedures that require altering some aspects of this proposal. Without previous research backing the use of this or any other vocational protocol for blind veterans, this approach may provide a promising avenue for future interventions; but because of stringent policies, counselors may not be allowed to create this group. Another possible limitation of group work with veterans is the use of a leader without service history. On one hand, the group members might view a civilian leader with respect for his or her experience in the civilian workforce; on the other, the group members might distrust a leader who lacks affiliation with military service and experiences. If this question is deemed significant, the use of a co-leader with military background may be beneficial to the group’s success.

Conflict of Interest and Funding Disclosure

The author reported no conflict of interest or funding contributions for the development of this manuscript.
References


Appendix

Session Outlines

Pregroup Meeting
Discussion regarding the nature of the group.
- Note differences between this and other groups they may engage in as part of rehabilitation treatment.
- Discuss expectations of the group (for both members and leaders).
- Outline overall goals and structure of sessions and importance of attendance.
- Discuss confidentiality limits.

Session 1
- Review expectations regarding group and confidentiality.
- Set group rules through discussion and agreement of group members.
- Conduct group member introductions and begin discussion regarding expected gains from group.
- Introduce CIP Pyramid and discuss Metacognitions domain.
- Return CTI and CPCS results and provide broad interpretation of scores.
  - Encourage discussion regarding reactions and thoughts about results.
- Introduce individual learning plan.
  - Homework: outlining specific goals for group process.
  - Discuss different types of goals: increasing confidence, outlining concrete career plans, find a new career path, and so on.

Session 2
- Review previous session: Metacognitions, assessment results, CIP Pyramid.
- Review homework. Allow for discussion regarding goals and process of writing them.
  - Discuss possible activities to be filled in, and allow for group member interaction and feedback.
- Introduce Self-Knowledge: link to homework and interests.
  - Introduce Holland’s RIASEC model and theory, and allow for discussion of members’ expected codes.
  - Discuss SDS results: reactions and thoughts.
  - Discuss how current knowledge, skills and abilities from military may fall in or out of this code.
  - Introduce Military Occupations Finder.
- Homework: Look up occupations related to Holland code on O*NET and finalize activities for Individual Learning Plan.

Session 3
- Review metacognitions and self-knowledge pieces of CIP pyramid.
- Review Individual Learning Plans and discuss difficulties regarding outlining activities.
  - Allow for discussion among group members regarding feedback or discussion about possible activities.
- Introduce options knowledge and review O*NET experience and feedback regarding information found or not found.
  - Discuss perceived barriers to employment in occupations of interest.
- Introduce CASVE cycle.
  - Allow for discussion of how decisions are currently carried out by participants.
  - Explain CASVE cycle and provide example regarding decision of when to disclose disability and disability needs to future employers.
  - Encourage participants to suggest new examples regarding their current state of decision making and where they may be in the cycle.
- Homework: Complete at least one activity on Individual Learning Plan and narrow down possible occupations to 3-5.
  - Discuss possible barriers to completing activities.
Session 4
- Review last session: CASVE cycle, options knowledge and self-knowledge.
- Review homework: experiences of completing activities, discuss what helped or hindered the process.
- Members will further discuss current individual positions in CASVE cycle.
  - Discuss process of synthesizing and valuing choices, and expand on purpose of homework to complete this process.
  - Ask for examples from participants regarding weighing costs and benefits of options.
  - Discuss perception of current confidence levels in making decisions.
- Homework: Complete two activities on Individual Learning Plan.
  - Discuss perceived barriers to completing these.

Session 5
- Review last session: CASVE cycle, synthesis and valuing.
- Review homework: Outcomes of completing activities, what helped or hindered the process? What is the next activity that should be completed?
- Conduct pretermination discussion regarding current status of participants in the CASVE cycle.
  - Where do you see yourself, and how much further do you need to go to execute your goals?
  - What would help you to further close your identified gap? Discussion regarding previously anticipated barriers and current perceived barriers.
- Homework: Develop a plan for execution of action needed to close gap.
- Administer post-CTI and CPCS.

Session 6
- Review homework: What are plans for closing gaps?
- Discussion regarding returning to Communication phase of CASVE cycle.
  - What will your life look like when gap is closed?
  - What other steps will be taken to close this gap?
  - How can you apply this decision-making process to other decisions outside careers?
- Discuss post-CTI and CPCS results and broad interpretation.
  - Encourage participants to share their reactions to changes in scores.
  - Discuss plans to continue to increase career planning confidence and decrease negative thoughts.
- Termination.
  - Discuss content: What has changed, what did you learn about decision making and career choices?
  - Discuss process: What did you learn from engaging in this process? About yourself, from others?
  - Provide further options for career counseling at the Rehabilitation Center, Veteran Centers and VA Hospitals. Administer post-DASS.