

**RESEARCH ARTICLE**

**Screening, Brief Intervention, Referral to Treatment: An Interventional Approach for Campus Counselors**

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**Abstract**

Screening, Brief Intervention, Referral to Treatment (SBIRT) is an evidence-based, harm reduction approach for identifying and treating at-risk substance use behaviors. This prescriptive, 3-step process was originally created by The World Health Organization in 1982 and further developed by the Substance Abuse and Mental Health Services Administration in 2003. By providing a systematic assessment of tobacco, alcohol, and drugs, as measured by the clinically-validated *Alcohol, Smoking, and Substance Involvement Screening Test-Frequencies and Concerns (ASSIST-FC)*, college counselors can become more adept at providing at-risk students with early assessment of problematic substance use, through motivational interviewing, and customized treatment planning. SBIRT has been successfully implemented by numerous healthcare practitioners in a variety of clinical settings, including primary care clinics, emergency departments, behavioral health services, and colleges/universities, resulting in varying degrees of success in reducing tobacco, alcohol and drug use, and improving the overall quality of life for affected individuals. Change project research indicates statistical significance in counselor confidence in assessing at-risk students' readiness to change addictive behaviors and counselor recognition of the importance of referral to formal treatment for positively screened individuals. SBIRT on college campuses can pro-actively reduce adverse academic and health consequences for students at-risk, while increasing assessment and treatment competency of mental health counselors.

**Key words:** *Screening, Brief Intervention, Referral to Treatment; SBIRT; ASSIST-FC; campus counselors; at-risk students*

## 1. Introduction

Tobacco, alcohol, and illicit drug use on college campuses continues to be highly problematic in an environment that prides itself on fostering hope and garnishing promise for society's future leaders. For many students who have never been away from home or faced sole responsibility for their actions, substance use is often considered a right to passage from adolescence to young adulthood. Undiagnosed substance use/misuse by under-trained healthcare and counseling personnel may lead to adverse academic and health consequences for at-risk students, resulting in poor academic performance, discontinued school attendance, increased morbidity and mortality complications, and derailed career aspirations (Mekonen, Fekadu, Mekonnen, & Workie, 2017; The National Highway Traffic Safety Administration [NHTSA], 2007).

On an annual basis, alcohol use on college campuses results in "more than 1519 student deaths due to alcohol poisoning and alcohol-related injuries," "696,000 assaults by intoxicated classmates," and "97,000 sexual assaults" (NIAAA, 2019). Over 25 percent of all college students who admit to alcohol use alone report lower test scores, missed assignments, and greater absenteeism (Kapner/HECAODAVP, 2008). Moderate to high drug use has also been found to adversely affect school performance and discontinued school attendance (Arria, Caldeira, Bugbee, Vincent, & O'Grady, 2013).

Substance use/misuse on college campuses can also result in other high-risk behaviors, such as, unprotected sex, vandalism, property damage, legal violations, and domestic violence (Denering & Spear, 2012). These adverse incidents

and negative consequences are juxtaposed to the fundamental goals of academic achievement, self-transformation, and personal safety as promised by all institutions of higher learning. Engaging in social drinking and drug experimentation can quickly blossom from occasional use to physiological addiction due to the numerous internal and external stressors that often accompany college life. Life goals can quickly become thwarted, leading to an array of increased social pressures and further deterioration of the young adult's self-identity. At-risk students may lose their sense of direction and purpose in life leading to fear, confusion, disappointment, and impaired family dynamics; often leading to perilous life choices and unhealthy coping mechanisms.

The purpose of this paper is to explore Screening, Brief Intervention, and Referral to Treatment (SBIRT), as a three-step systematic approach administered by college counselors for early identification and treatment of at-risk college students who may be living with or developing a substance use disorder (Substance Abuse and Mental Health Services Administration [SAMHSA], 2017).

## 2. SBIRT Background

SBIRT, as an effective harm reduction and public health initiative, was developed by The World Health Organization (WHO) in 1982 when work was started on an international screening test for problem drinking designed for use by primary care practitioners (Babor, Del Boca, & Bray, 2017). The screening test became known as the Alcohol Use Disorders Identification Test (AUDIT), the most widely-accepted alcohol screening test in the world (Babor, Del Boca, & Bray, 2017).

Using a ‘Prevention As Intervention’ practice ideology, The WHO (1997) expanded use of the AUDIT as a viable assessment tool to include tobacco and illicit drug use, in addition to alcohol use (Agerwala & McCance-Katz, 2012; WHO ASSIST Working Group, 2002). In 2003, SAMHSA became involved in supporting research studies aimed at examining Brief Intervention (BI) effectiveness in various healthcare settings and patient populations from among a ten nation systematic analysis (Agerwala & McCance-Katz, 2012; Babor, Del Boca, & Bray, 2017). Among all studies, research findings suggested that other members of the healthcare team, such as nurses, counselors, and healthcare educators, may be more appropriate clinicians rather than general practitioners for providing proactive intervention with at-risk drinkers. In Latin America, large-scale SBI training programs, utilized in conjunction with clinical and healthcare policy standards, demonstrated successful outcomes through early detection initiatives, resulting in changes in perception among healthcare providers about the benefits of using a screening/brief intervention approach as a harm reduction modality (Babor, Del Boca, & Bray, 2017).

In 2003, SAMHSA financed multi-state grant funding to investigate SBIRT effectiveness in urban and rural medical settings. Grant program goals were “to expand the continuum of care for all substance use disorders, not just alcohol disorders, and to integrate substance abuse treatment and early intervention into the traditional medical care system” (Babor, Del Boca, & Bray, 2017, p. 111). In addition to Screening and Brief Intervention, SAMHSA mandated Brief Treatment (BT) as a customized-care option in the continuum of SBIRT services in addition to referrals to more intensive specialty substance abuse facilities as warranted. SAMHSA also

provided funding aimed at cross-site analysis of its programs so that SBIRT implementation, outcomes, and sustainability could be evaluated among diverse patient populations. SBIRT was also examined from a cost-benefit analysis. Additionally, a system-wide overview examined SBIRT effectiveness from a treatment system outlook (Babor, Del Boca, & Bray, 2017, p. 111).

Based on SBIRT success, SAMHSA continued to provide national grant funding to numerous healthcare institutions, gaining continued support and advocacy from pillars of healthcare excellence such as the WHO and the Institute of Medicine (IOM). SBIRT is now recognized as a best practice intervention among a variety of healthcare settings, including college communities (NHTSA, 2007; National Institute Drug Abuse [NIDA], 2017; ‘*Screening, Brief Intervention...*’ [SAMHSA], 2017).

### 3. Nomenclature

At-risk” or “risky” substance use is defined by the National Institute on Alcohol Abuse and Alcoholism (NIAAA, 2017) as tobacco and drug use of any kind, as well as alcohol consumption, that exceeds recommended maximum daily or weekly amounts of 5 or more alcoholic drinks for males or 4 or more alcoholic drinks for females on the same occasion, also referred to as binge-drinking (NIAAA, 2017). The Substance Administration and Mental Health Services Administration (SAMHSA, 2015) defines a substance use disorder as “the recurrent use of alcohol and/or [tobacco] and drugs which causes clinically and functionally significant impairment, such as health problems, disability, and failure to meet major responsibilities at work, school, or home” (p. 1). Substance use (SU) can vary from ‘once per lifetime’ to ‘daily use’. Common among all misused

substances is functional impairment which overrides other life responsibilities, such that the substance user may experience psychological and/or physiological symptoms when usage is decreased or eliminated (*'Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)*', 2013).

#### 4. Literature Review

In a seminal study by Madras et al. (2009), approximately 459,000 participants from a combination of six site locations across the U.S., including emergency rooms and inpatient medical units, between the years of 2003 to 2007, were assessed for alcohol and drug use using the *ASSIST* screening tool. SBIRT effectiveness was examined for evidence-based outcomes related to Brief Intervention (BI) and Brief Therapy (BT) for participants who scored positive on the *ASSIST* at the initial visit and six-month follow-up. The initial sample group was reduced to 104,193 (n=22.7%) after scoring positive for substance use on the *ASSIST*. Of this smaller study group, 15.9% received Brief Intervention, 3.2% received Brief Therapy, and 3.7% were referred to specialty treatment. At six-month follow-up, self-reported baseline drug use rates lowered by 67.7% and heavy alcohol use decreased by 38.6%. Patients who scored positive on the initial visit *ASSIST* and were referred to specialty treatment reported improvement in mental health, employment, housing, criminal behavior, and overall general health. Results were attributed to SBIRT intervention among study sites, specialties, and healthcare settings. This study was instrumental in establishing SBIRT as an evidence-based healthcare initiative and encouraging additional SBIRT testing in various healthcare settings (Aldridge, Linford, & Bray, 2017).

In another study, Aldridge et al. (2017) performed a systematic, quasi-experimental analysis of 32 randomly controlled tests (RCTs) targeting problematic drinkers who received SBIRT using a pre-post intervention design and performance monitoring model examining substance use behaviors of patients in a variety of medical settings between January 2004 to March 2010 as part of a large SAMHSA SBIRT grant program. Cumulative initial sample size started at 754,525 screened patients, resulting in 17,575 participants who screened positive for alcohol and/or drug use through AUDIT and DAST screening tools. The most common characteristics of positively screened individuals included: male more than female, mean age of 37.5, white ethnicity, and approximately 60% listed as high school graduates. Positively screened participants then received Brief Intervention by medical providers using motivational interviewing techniques to foster self-efficacy and enhanced optimism in substance use self-determination. Participants referred to treatment received Brief Therapy either at the time of referral or by telephonic support. Follow-up interviews occurred between 150 and 240 days after baseline screenings either by phone or in-person by the research teams. The overall follow-up response rate was 47.5 % with considerable variance among the many RCTs. Systematic analysis of the cumulative data indicated results of decreased alcohol use by 35.6 percent, a reduction in heavy drinking by 43.4 percent, and diminished drug use by 75.8 percent. The research team found a correlational relationship between Brief Intervention (BI) and Brief Therapy (BT) of up to ten brief sessions, such that the greater the volume of BI and BT provided, the larger the decrease in substance use observed. The researchers attributed cumulative diminished substance use

findings as continued justification supporting SBIRT as an evidence-based, harm reduction program, worthy of continued research and funding support (Aldridge, Linford, & Bray, 2017).

In 2012, Denering and Spear explored SBIRT effectiveness when administered by mental health practitioners to college students seen in a university counseling center. The researchers' study lasted three years and consisted of 453 college students, between the ages of 18-24, who sought behavioral health services at a campus counseling center in California. Qualified students had to first be positive for at-risk drinking as indicated on the AUDIT screening tool. Students who screened positive were then rescreened using the *ASSIST* for multiple substances assessment. Study participants had to also agree to participate in brief intervention associated with *ASSIST* at-risk level scores. Results indicated alcohol consumption was the most used substance, followed by marijuana. At six-month rescreens, binge-drinking decreased minimally from 89.2% to 84.1% for all follow-up participants. Marijuana use decreased from 37.5% to 30.7% in women and 58.1% to 51.1% men. The research team recommended further studies have a true control group and a randomly assigned group for stronger statistical strength. Additionally, using screening instruments that capture frequency of use in determining if BI is warranted and include students' psycho-social determinants of health, such as living situation and criminal status, were also suggested. Furthermore, the researchers recommended more SBIRT studies involving campus mental health personnel are warranted.

From an addiction education perspective, Cooper (2018) provides expert opinion advocating for the need for campus counselors to be better-educated and more clinically competent when working with

students with substance use issues. Due to often being academically under-prepared concerning substance use disorders, many counselors may be missing diagnostic and referral opportunities when working with at-risk students. Cooper utilizes a single case study approach to SBIRT protocol, with emphasis on screening tool instrumentation, rather than subjective data gathering, to assess for substance usage of at-risk individuals. Cooper mentions several clinically validated screening tools, such as the AUDIT and DAST, in improving counselor assessment competency and treatment recommendations for affected clients. Cooper recommends when working with at-risk clients, counselors should focus less on dogmatic health education and abstinence expectations and more on rapport-building between counselor and client to customize treatment needs and optimize patient self-efficacy, supportive of the SBIRT 3-step approach.

Martin, Burrow-Sanchez, Iwamoto, Glidden-Tracey, and Vaughan (2016) also share their cumulative expert opinion on the need for all schools of psychology to include required coursework in addiction studies to meet the mental health needs of at-risk clients. The authors found that only 34% of all masters and doctoral-prepared therapists completed an addiction course during their academic studies. Findings indicated that due to a lack of adequate training in Substance Use Disorders (SUDs), therapists believed they were underprepared to diagnose, counsel, and refer SU clients for appropriate disposition services. Martin and colleagues (2016) strongly support the integration of addiction studies, including didactic training, practicum application, and research scholarship.

Freimuth (2008) supports pedagogical modification of counseling curricula to integrate substance use disorders as a result of the author's research involving

117 practicing therapists and two written case scenarios involving substance use. Participants were asked to read the two case vignettes then determine five possible diagnoses for each case. Participants were also encouraged to ask questions for diagnostic clarity concerning each case sample. Freimuth found that although 92.7% of participants reported asking about alcohol use in both vignettes, only 38.5% posed a substance use question and 23.9% never asked follow-up questions. The second vignette resulted in a higher proportion of questions about substance use, most likely due to intentional wording associated with 'seeing friends at a bar' as noted in the vignette (Freimuth, 2008). The author surmised a higher questioning rate of 2/3rd of participants due to completion of one or more graduate courses involving addiction disorders during their educational studies.

Results comparing both vignettes indicate a substance abuse diagnosis was made by 27.4% of study participants in Vignette One and by 47.8% in Vignette Two; a substance use question was asked by 52.1% of participants in Vignette One and by 65.2% in Vignette Two; 48.7% of participants made a depression diagnosis in Vignette One compared to 30.2% in Vignette Two. Most study participants felt better equipped to diagnose depression than substance use. Reported rationale for hesitancy in pursuing a substance abuse diagnosis included distrusting patients' responses when asked about substance usage, not wanting to be intrusive, and fear that substance use discussion would negatively impact the counselor-client relationship (Freimuth, 2008). These results indicate growth in counselor proficiency is necessary for addressing and treating substance use appropriately in all patients seen for services. Freimuth (2008) supports the integration of diagnostic training in

assessing and treating for substance use disorders as a foundational provision in all schools of therapeutic preparation.

Chasek et al. (2015) also support the integration of addiction training into all accredited counseling programs for masters and doctoral-prepared students. Researchers surveyed 63 counseling program liaisons affiliated with the Council for Accreditation of Counseling and Related Education Programs (CACREP) to gather data related to addiction-related curriculum elements, practice competencies, and training standards. Results indicated inconsistency of addiction training methodology among all participants with most counseling programs (74%) requiring addiction training ranging between one and three credit hours, 21% requiring less than one credit hour, and 5% requiring four or more credit hours. Additionally, the preferred method of instruction used in 84% of the programs was a combination of didactic and constructivist approaches, while 11% used didactic instruction alone (Chasek et al., 2015). Though study results did not indicate curricula instruction on specific interventional modalities, SBIRT is illustrative of an experiential learning approach for campus counselor use when identifying and treating at-risk college students.

## **5. Problem Statement**

To assess and evaluate counselor proficiency and SBIRT effectiveness with counselor personnel, a change project question concerning Patient Population, Intervention, Comparison, Outcome, and Timeframe (PICOT) was developed in collaboration with the campus counseling team at a private university in New England. The change project question was as follows:

*Can college counselors at a small, private university in New England, who provide triage assessments for college students at-risk for problematic tobacco, alcohol and drug use, by using the Screening, Brief Intervention, Referral to Treatment (SBIRT) approach, as opposed to non-SBIRT, identify and refer more at-risk students to treatment within an 8 to 10-week timeframe?*

Change project training objectives were as follows:

- Train campus counselors to proficiently screen, intervene, and refer to treatment, college students who are deemed at-risk for developing or living with a substance use disorder based on usage scores as indicated in the *Alcohol Screening, Substance Involvement, Screening Test-Frequencies and Concerns (ASSIST-FC)* screening instrument.
- Educate counselors on proper completion of the *ASSIST-FC* screening instrument, scoring criteria, and sequential SBIRT workflow.
- Provide counselors with SBIRT workflow guidelines, including brief motivational interviewing techniques, and documentation training involving brief intervention and referral to treatment modalities.

By using a clinically-validated screening tool such as the *ASSIST-FC* (WHO, 2002), counselor proficiency was theorized to improve in proactively identifying and treating at-risk college students, resulting in improved student care outcomes, early in the healthcare continuum. This structured assessment and treatment protocol can also be translated into use by campus nurses to increase clinical competency when working with at-risk students seeking medical services. By collectively utilizing SBIRT by all

healthcare practitioners on campus, this effective 3-step approach may serve as a holistic framework in reducing at-risk behaviors early by appropriately treating affected students seen for services.

## 6. Theoretical Framework

Pender's Health Promotion Model (2011) was selected as the theoretical construct for healthcare professional use in assisting students with positive self-transformation by replacing unhealthy behaviors with healthier coping mechanisms (Pender, 2011). By working with the student to recognize internal and external stressors that influence student self-perception and self-efficacy, the counselor professional can serve as a catalyst for the student's self-evolution to a higher quality of life (Pender, 2011). Pender's theoretical underpinnings correlate well with the fundamental principles of SBIRT as an early detection/early treatment collaboration between campus counselor and college student.

## 7. Change Project Methodology

SBIRT training of campus counseling personnel occurred prior to the beginning of the Fall 2018 semester, focusing on the SBIRT 3-step approach of screening, brief intervention, and referral to treatment. A two-hour training seminar was conducted, consisting of SBIRT instructional protocol (WHO, 2002) and two video vignettes involving college students partaking in excessive alcohol use and opiate abuse/dependency. Training concluded with a group debriefing exercise and review of the *SBIRT Proficiency Checklist – Clinical Version* (Pringle, Seale, & Bray, 2014) as a clinical guide when administering SBIRT protocol to at-risk students.

Following training, counselors administered SBIRT to at-risk students seeking campus counseling services during the first eight weeks of the Fall 2018 semester. Comparison data were analyzed from non-SBIRT assessments administered to students during the last eight weeks of the Spring 2018 semester ( $n=30-40$  positive screenings). During the SBIRT timeframe, students who scored positive for general substance use on the non-SBIRT assessment questionnaire were further screened for specific substance use patterns and behaviors using the SBIRT-supported *Alcohol Screening Substance Involvement Screening Test-Frequencies and Concerns (ASSIST-FC)* (WHO, 2002) to obtain detailed usage information and risk level by substance. The counselor then asked the student for permission to review *ASSIST-FC* results. Moderate to high use levels by substance(s) were identified and discussed. Motivational interviewing techniques including empathy, self-efficacy, optimism, and self-determination were utilized by the counselor to encourage student-centered decision-making about eliminating or reducing unhealthy behaviors involving substance use. Health promotion information involving risky alcohol consumption, as outlined by SAMHSA (2017), was also provided to positively screened students as a prophylactic measure, whether problematic drinking was an identified issue or not. Counselor and student then worked together to determine an agreeable disposition plan. Acquired data from three samples of randomly selected SBIRT documentation obtained by each counselor were then measured for counselor competency in performing SBIRT proficiently, using *ASSIST-FC* Administration and Scoring Procedures. Of note, during SBIRT implementation, psychology doctoral interns underwent their first practicum experience in working with

college students seeking behavioral health services on campus. Translating theoretical principles of counseling to clinical practice involved a significant and rapid learning curve for the doctoral interns, which comprised most of the counseling team during change project implementation.

## 8. Results

Prior to and immediately following SBIRT implementation, counselors completed a 75-question survey concerning SBIRT relevance and feasibility during the intake process. With the exception of the two leading SBIRT training questions, the remaining data were divided into four subscales, beginning with counselors' attitudes about working with students with alcohol and tobacco/drug problems; perceived importance of administering SBIRT protocol; perceived confidence in the delivery of SBIRT protocol; and perceived frequency of providing SBIRT protocol.

In the first section of ten questions, counselors' attitudinal perceptions about working with individuals who use alcohol were assessed using a ten-point Likert scale rating system (1= 'Strongly Agree' to 10 = 'Strongly Disagree'). Results indicated  $p$ -values of greater than 0.05 for all questions in this section, ranging from  $p=0.094$  (Question#5: 'I feel I have the right to ask clients questions about drinking when necessary') to  $p=0.828$  (Question#9: 'I feel I do not have much to be proud of when working with clients who drink alcohol'), indicating no statistical significance in this category, resulting in acceptance of the null hypothesis, although there was response movement that may be more indicative of clinical significance.

The second section of ten questions on the survey was the same as the first set of questions pertaining to alcohol, except 'tobacco and drugs' were replaced wherever



the term ‘alcohol’ was used. The same Likert rating system was utilized with the counselors’ indicating their attitudinal perceptual responses to each statement pertaining to tobacco and drug users. Results for this section again demonstrated similar findings as in section one of the survey, with results ranging from  $p=0.250$  (Questions#13 & 22: ‘I feel I know enough about the causes of tobacco & drug problems to carry out my role when working with clients who use tobacco & drugs’ & ‘In general, I like clients who use tobacco & drugs’) to  $p=1.000$  (Question#21: ‘In general, it is professionally rewarding to work with clients who use tobacco & drugs’), indicating no statistical significance in this category. Due to large  $p$ -values for this series of questions exceeding the significance test  $p$ -value of 0.05, the null hypothesis was accepted indicating SBIRT training did not influence counselors’ attitudinal perceptions about working with students with tobacco and drug problems.

The third section consisted of 18 questions, separated into nine questions pertaining to alcohol and nine identical questions pertaining to tobacco and drugs. Question focus pertained to understanding the importance of administering SBIRT protocol, including, ‘using a validated screening tool’, ‘providing feedback’, ‘using motivational interviewing techniques’, ‘assessing for client readiness to change’, ‘educating clients about risk levels’, ‘advising at-risk clients to decrease or stop usage’, ‘negotiate a referral plan’, ‘refer clients to self-help groups’ and ‘refer client to formal treatment’. A Likert rating scale was used to determine importance ranking (1= ‘Not Important’ to 10= ‘Extremely Important’).

Results indicated  $p$ -values of greater than 0.05 for all questions in this section, ranging from  $p=0.063$  (Questions# 23i, alcohol & tobacco/drugs: ‘Referring a client

to a formal treatment setting for both alcohol and tobacco/drugs) to  $p=0.688$  (Question#23e, alcohol only: ‘Educating clients about lower-risk use’), indicating no statistical significance overall in this category though near clinical significance was achieved when recognizing the importance of referral to formal treatment for substance use.

The fourth section of the survey consisted of 18 questions, separated into 9 questions pertaining to alcohol and 9 identical questions pertaining to tobacco and drugs. Counselors were asked to rate their perceived confidence level in each question related to administering SBIRT protocol, including the same criteria as noted in the above section of this paper. Questions# 24 d/d for both alcohol and tobacco/drugs involving ‘Assessing clients’ readiness to reduce their use of alcohol, tobacco and drugs’, were found to be of statistical significance with equal  $p$ -values of 0.031. Because both test response  $p$ -values of 0.031 fell below the established statistical test  $p$ -value of 0.05, the null hypothesis was rejected indicating SBIRT training did influence counselor confidence in assessing clients for readiness to reduce their use of alcohol, tobacco and drugs.

The fifth section of the survey consisted of 18 questions, separated into nine questions pertaining to alcohol and nine identical questions pertaining to tobacco and drugs. Counselors were asked to assess their frequency of using SBIRT protocol during counselor-student interactions before and after SBIRT implementation. The Likert scale for this section consisted of five points, ranging from 1=‘Never’ to 5=‘Always’, highlighting the same SBIRT protocol criteria as noted in the third section of the survey.

Results indicated no statistical significance as indicated by  $p$ -values of greater than 0.05 for all questions in this

section, ranging from  $p=0.094$  (Question# 25f, alcohol = 'Educating clients about lower risk use') to  $p=1.000$  (Questions #25c,c, and 25j,j, alcohol and tobacco/drugs, 'Frequency of providing feedback' and 'Frequency of referring to formal treatment'). Due to the large  $p$ -values for this series of questions exceeding the significance test  $p$ -value of  $\leq 0.05$ , the null hypothesis was accepted that SBIRT training did not influence counselors' frequency of use of SBIRT protocol.

The number of SBIRT assessments during the change project timeframe was 31 positive screenings. Based on these results, SBIRT was found to be comparable to non-SBIRT in the number of identified and referred to treatment cases of at-risk students screened by campus counselors at a private university in New England during an 8 to 10-week timeframe. SBIRT was also found to be of statistical insignificance in positively influencing counselors' overall assessment, intervention, and referrals skills for students at-risk for developing or living with a SUD.

Counselors did identify significant value in health promotion opportunities evident during SBIRT brief interventions with students. Counselors also expressed increased comfort in discussing 'readiness to change' behaviors and treatment options with students. Interactive discussion between counselor and student about replacing unhealthy substance use behaviors through health promotion and 'risky usage alcohol' education corresponded well with Pender's Health Promotion Model. Through counselor motivational interviewing techniques and health education discussion, students were self-empowered to consider replacing unhealthy substance use behaviors with healthier coping mechanisms (Pender, 2011). Counselors utilized SBIRT guided scripting to address students' substance use in a non-confrontational and non-judgmental

manner which built rapport and facilitated student self-efficacy in determining prolongation, reduction or discontinuance of their substance use (Pender, 2011).

The SBIRT approach was viewed by counselors as more time-consuming than non-SBIRT. Time inadequacy in administering SBIRT in an unrushed manner became more apparent to the counselors as the project progressed. Counselor enthusiasm and clinical value of SBIRT change in workflow were not as strongly evident at change project conclusion than at change project introduction.

## 9. Discussion

Sustainability of SBIRT protocol through Electronic Health Record (EHR) integration into the pre-assessment interview process was discussed by counseling administration as a possible future workflow enhancement. The need for a community case manager to facilitate disposition referrals became more evident during SBIRT implementation as a student-centric care necessity.

Though use of SBIRT by college counselors during the intake process did not result in identifying more at-risk students, counselors highly valued SBIRT as an effective health promotion, skill-building modality in identifying students' readiness to change maladaptive substance use behaviors. Counselors also determined SBIRT was an effective, harm reduction approach when working with at-risk students seeking therapeutic assistance on college campuses. Additionally, counselors viewed SBIRT as an empowering opportunity for at-risk students in identifying motivational factors for reducing or discontinuing substance use and avoidance of adverse consequences to student academic success.

SBIRT implementation with counselors-in-training is not recommended due to parallel learning occurring between the new therapist's role and SBIRT proficiency. Counselor interns may not have enough clinical perspective to fully appreciate SBIRT value in skill-building development when working with at-risk students. Emphasis on time allocation to perform SBIRT properly by trained counselors must be allotted to ensure successful SBIRT implementation on any college campus.

Recommendations for future research include more testing of SBIRT in mental health clinics and medical service

departments on college campuses. Studies involving inter-collaborative implementation of SBIRT by campus counselors and nurses needs to occur to evaluate student health outcomes associated with at-risk clients (American College Health Association, 2010). System-wide program operability and process improvement policies need to be explored from administrative and multi-clinical perspectives to ensure SBIRT program success (Babor, Del Boca, & Bray, 2017). Lastly, more research needs to be conducted in validating practitioner proficiency associated with SBIRT training effectiveness and comfort with screening tool instrumentation.

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