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REDUCING NEGATIVE SEPARATION FROM A VOCATIONAL TRAINING PROGRAM: AN APPLICATION OF STUDENT EMPLOYEES' PREVENTION SERVICES AND RITES OF PASSAGE INTERVENTION

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ABSTRACT

High rates of negative separation from the largest job training program for youth in the United States are associated with substance use. The Let the Circle Be Unbroken-Rites of Passage (LCBU-ROP) was employed as a supplement to the standard substance use prevention services (SUPS), referred to as SUPS Plus LCBU-ROP, for students screening positive for substance use at program entry. The study examined the effectiveness of SUPS Plus LCBU-ROP compared to SUPS only intervention as measured by attitudinal and behavioral indices, and graduation rates among participants. Of 148 students, aged 16 to 24, that screened positive for substance use, 116 participated in SUPS Plus LCBU-ROP, 32 engaged in SUPS program. A 54-item attitudinal and behavioral questionnaire was used

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for data collection. Data on participants' program entry, substance use, follow-up, and exit were obtained from the center's database. Paired t-test, Pearson product-moment correlation, logistic regression, Chi-square, and Analysis of Variance were employed in data analysis. Participants in SUPS Plus LCBU-ROP significantly improved in self-esteem (p = .024), conflict resolution (p = .052), reduction in marijuana use (p = .015), and graduation rate (p = .001) compared to their SUPS counterparts. Pearson's product-moment correlation for all variables was statistically significant. Approximately 70% of participants screening negative at follow-up completed their trade. Findings provide evidence that incorporating rites of passage intervention into the standard prevention modality could be effective in reducing substance use and increasing graduation rates for youth enrolled in a residential job training center.

KEYWORDS: Reducing negative separations, rites of passage, substance use prevention, residential training program, priority population.

INTRODUCTION

The adverse effects of substance use on the health and well-being among adolescents and youth are well documented in the scientific literature. Not only does substance use contribute to poor academic performance as well as physical and mental health problems, it inhibits young people's career development and employment prospects (Murphy & Dennhardt, 2016; Substance Abuse and Mental Health Services Administration [SAMSHA], 2013). Findings from a national survey on drug use and health (SAMHSA, 2012) revealed that the prevalence of substance use among youth participating in Job Corps, the largest residential educational and vocational training program for the economically disadvantaged youth in the United States, was significantly higher than the national average (23.6 versus 21.3 for their age group counterparts, 18-25 years). In addressing this problem, substance use prevention intervention programs were established by the national job training centers to encourage drug-free lifestyle among this group. For example, Job Corps implements a group level intervention with student trainees that test positive for substance use upon entry into the program.

The substance use prevention program for student trainees is implemented within a group setting and covers five topic areas including the consequences of drug use/abuse and the benefits of being drug-free. A licensed Addiction Specialist conducts these sessions. Despite the program being provided, many student trainees continue using substances (U.S. Department of Labor [USDOL], 2015). In fact, as many as 21.4 percent of students who screen positive for drug use upon entry fail the second drug screen. Consequently, a significant number of these youth commit behavioral infractions and find themselves negatively separated from the program for violation of the program's drug-free policy.

In response to the persistently high rates of negative separations and disciplinary issues associated with substance use among students in a national job training center in the United States, the *Let the Circle Be Unbroken - Rites of Passage* (LCBU-ROP) intervention was used as a supplement to the standard substance use prevention services (SUPS) for student trainees in a national job training center situated in Mid-Southern region of the United States. In essence, given the growing body of evidence in the scientific literature (e.g., Abbott & Chase, 2008) that substance use interventions could be enhanced when implemented within cultural context, this study intended to supplement a job training center's standard substance use prevention program with an ethnocentric- based "Rites of Passage" intervention. The goal of LCBU-ROP was to foster positive youth development, including preventing health and life compromising behaviors. While the efficacy and effectiveness of interventions based on the tenets of "Rites of Passage" have been documented (e.g., Okwumabua, Okwumabua, Peasant, Watson, & Walker, 2014; Belgrave, 2002), its application in reducing negative separations and disciplinary infractions related to substance use offenses

among youth in a vocational training program is relatively absent in the scientific literature.

The current study examined the effectiveness of the LCBU-ROP intervention model as a supplement to the standard SUPS, referred to as "*SUPS Plus LCBU-ROP*," for youth in a residential vocational training program, as measured by attitudinal and behavioral indices and graduation rates among respondents. Specifically, the aim of the study was three-fold: 1) to deter substance use and the associated disciplinary problems among students screening positive for substance use at program entry; 2) to reduce negative separations from the program among participants that screened positive for substance use at program entry; and 3) to foster positive youth development as measured by conflict resolution and decision-making skills among the target group. The study was guided by the following hypotheses: a) more positive outcomes (i.e., fewer negative separations associated with substance use and more successful program completion rates) would be realized among participants in the *SUPS Plus LCBU-ROP* intervention compared to those who only participated in the training center's standard SUPS program; b) positive correlation would be realized between substance use and self- esteem, conflict resolution, decision-making, and risky peer association among SUPS Plus LCBU-ROP participants; and c) screening negative for substance use at follow-up would be associated with successful completion rates among SUPS Plus LCBU-ROP.

Theoretical Model

"Rites of Passage" is an age-old concept and process that originated in Kemetic or ancient Egyptian society more than 30,000 years ago (Warfield-Coppock, 1992). In many cultures, as young people near the age at which they would be recognized as "adults," they are prepared for the transition and challenges of adulthood (Okwumabua, 1996). For example, young people in many African societies are involved in initiation/training experiences that can extend from few days to several months. The training is generally conducted by the elders in the community who provide the youth with experiences and information to enhance their spiritual, emotional, and mental awareness, while fostering the adoption of life skills and practices relevant to optimal development into responsible adulthood (Okwumabua, 1996; Warfield-Coppock, 1992). Frequently, upon completion of the training, new responsibilities and privileges are given to the youth. The importance of this type experience and process has been underscored by developmental theorists (e.g., Brennan & Barnett, 2009; Erickson, 1963). In Erikson's early work on stages of human development, he pointed out the importance of rituals and community-based processes and engagement to foster the transition from adolescence to responsible adulthood (Erickson, 1963).

Over the last decades, empirical studies (e.g., Gavazzi, Alford, & McKenry, 1996; Alford, McKenry & Gavazzi, 2001; Merten, 2005) have examined the use of "Rites of Passage" in adolescents and young adults for optimal development. In a study by Gavazzi, Alford, and McKenry (1996), the "elders" from the African American community that served as facilitators and mentors in rites of passage training played an important role in adolescents' sense of identity and enhanced self-esteem. A similar, but more quantitative study (McKenry et al., 1997) provided additional support indicating strong association between self-esteem, racial identity, and at-risk behaviors among participants in "Rite of Passage." The amount of time spent in the program was significantly associated with reduction of risky behaviors (McKenry et al., 1997).

The LCBU-ROP curriculum model has been used to foster youth development and to prevent health and life compromising behaviors. The LCBU-ROP model comprises three phases (Okwumabua, 1996): (1) Orientation *Phase* – program facilitators and participants are familiarized with the program's purpose, logistics, and implementation; (2) *Preparation and Training Phase* – the intervention is implemented in the following core elements: a. *Harambe Time* (participants gather and "catch-up"/share" accomplishments/challenges in their life experiences since the last meeting); b/c. *Recitation of the Student and Facilitator Creed*; d. *Didactic training* (lessons from the units of the LCBU-ROP curriculum, e.g., values clarification and goal setting); e. *Health and*

Wellness (helps participants address their mental, emotional, and spiritual needs/well- being); and f. *Me in History* (participant explores the history of his/her descendants). The third (3) and final phase of the model, a *Culminating Phase* – participants are given a challenging task (e.g., engage in social action/community service projects) that must be completed alone or within a group context. The completion of these tasks serves as evidence that the youth has made significant strides toward assuming adult roles and responsibilities (Washington, Barnes & Watts, 2014).

The didactic training core element centers around the following life skills: (1) knowing self and others; (2) family history; (3) family life education; (4) housekeeping and finances; (5) values clarification and goal setting; (6) conflict resolution and violence prevention; (7) creativity; (8) life management; (9) threats to communities; (10) interpersonal relationship; (11) assertiveness and leadership; (12) career development; (13) spirituality – the journey within; (14) the history of African people; (15) communicating with others; and (16) healthy living. A healthy dose of cultural exposure, field trips, and other experiential activities, such as visits to historical sites (e.g., the National Civil Rights Museum) within the city, are incorporated into the training to reinforce concepts presented during group sessions. Discussions concerning the consequences of drug use, including how drugs can cause and/or exacerbate health problems, interfere with one's development and personal responsibility, are integrated into the weekly sessions as part of the health and wellness segment. Trained facilitators conduct the weekly sessions. Malefacilitators work with male participants, while female facilitators work with female participants. Cross gender activities are intentionally incorporated into the slate of activities to enhance group process.

MATERIALS AND METHODS

All participants in the study were youth aged 16 to 24 years enrolled in a residential vocational training program, situated in a large urban area of the Mid-South. Many of the participants were persons who either dropped out of high school, were once in foster care or homeless, exhibited basic skill deficits, and/or required vocational training. The majority of participants met the guidelines for receipt of selective prevention services and had been identified as a priority population (SAMHSA, 2013). All participants had failed a drug screen that was conducted within 24 hours of their arrival at the vocational training center.

| Plus LCBU-ROP | | | | | |
|------------------------|-----|------|--|--|--|
| Category | n | (%) | | | |
| Sex | | | | | |
| Male | 82 | 56 | | | |
| Female | 65 | 44 | | | |
| Age (Years) | | | | | |
| 16-18 | 49 | 33.3 | | | |
| 19-21 | 68 | 46.3 | | | |
| 22-24 | 30 | 20.4 | | | |
| Race/Ethnicity | | | | | |
| Black/African American | 124 | 84 | | | |
| Caucasian | 18 | 12 | | | |
| Other classification | 6 | 4 | | | |

| Cable 1: Percentage distribution of demographic characteristics of participants in SUPS |
|---|
| Plus LCBU-ROP |

Of 402 students enrolled in the training center within 16 months period, 148 initially screened positive for substance use (age range, 16 to 24 years; mean age, 19.42) at program entry. As presented in Table 1, approximately 33%

were 16-18 years, 46% were 19-21 years, and 20% were 22-24 years of age. The male to female distribution in the group was 56% (n = 82) to 44% (n = 65), respectively. Approximately 84% (n = 124) were African American, 12% (n = 18) Caucasian, and 4% (n = 6) other classification. Of the students that screened positive for substance use, 116 participated in the SUPS Plus LCBU-ROP intervention supplement, while 32 participated in the standard and mandatory SUPS intervention only.

At the point of entry into the vocational training program, all individuals that screened positive for drug use were required to participate in SUPS until they were retested approximately 30 days later. A student testing positive for drug use at the second screening could result in termination from the program. In addition to participating in SUPS program, all students screening positive for substance use were strongly encouraged to participate in the LCBU-ROP intervention model, aforementioned as "SUPS Plus LCBU-ROP." Their participation in the SUPS Plus LCBU-ROP intervention was completely voluntary; no incentives were given to participate or rewards for participation. Demographic information as well as data on outcome measures and graduation rates for all participants in both intervention approaches (i.e., "SUPS" and "SUPS Plus LCBU-ROP") were gathered and documented.

Consistent with the standard SUPS program, the LCBU-ROP intervention component was also implemented at the job training facility once a week for 10 weeks for an hour per session. A team of facilitators that included prevention practitioners, members of the center's vocational training staff, and "elders" from the local community conducted approximately 16 curriculum-based units (e.g., the journey from within, values clarification and goal setting, knowing self and others, and interpersonal communications and relationships) of the LCBU-ROP model after receiving an orientation on its application and implementation. In addition, a healthy dose of cultural exposure, field trips, and other experiential activities such as visits to historical sites (e.g., the National Civil Rights Museum, and the Brooks Museum) within the city, were incorporated into the SUPS Plus LCBU-ROP intervention to reinforce concepts presented during group sessions. Approval to conduct the study was obtained from the vocational training center's administration and from the Institutional Review Board (IRB) at the University of Memphis.

Data on participant's substance use at entry and exit (i.e., separation status) from the vocational training program, duration of participation in SUPS Plus LCBU-ROP or in SUPS only intervention program, and results of follow-up screening for substance use were obtained from the center's database. A 54-item questionnaire that comprised a variety of attitudinal and behavioral measures was employed at pre-post intervention points to gage SUPS Plus LCBU-ROP intervention outcomes. The subscales of the instrument included measures of self-esteem, conflict resolution, decision-making, and risky peer association.

Banks Self-Esteem Scale (Banks, 1984) assessed personal self-esteem (e.g., "when I meet someone, I usually think he/she is better than I am"); physical self-concept (e.g., "I like the color of my skin"); and school-esteem (e.g., "I like school"). Respondents indicated their level of agreement on a Likert scale that ranged from 1 (Agree very much) to 4 (Disagree very much). The Cronbach's alpha reliability coefficients range from .67 to .81 (Banks, 1984).

The *Anger Style Inventory* (Prothrow-Stith, 1987), a 12-item self-report instrument, was used to assess conflict resolution style of the youth. Each item presented a vignette describing a hypothetical conflict. A sample vignette is: "Your friend has let you down in a big way. Next time you see your friend, you would probably: (a) push him or her out of the way and keep going; (b) pretend nothing has happened; and (c) let your friend know you are angry and why." The respondent marked the response most closely reflect how he/she would react. Responses involved three distinguishable modes: (1) violent anger response; (2) verbal anger response; and (3) anger control response. Responses were summed such that each respondent received an individual score for each mode. For the purpose of this study, violent anger responses indicated an aggressive conflict resolution style. Anger control response indicated a controlled conflict resolution style. The verbal anger response mode included items that reflected both

verbally aggressive and verbally controlled responses. Hence, scores for verbal anger response style were not included in this assessment so that aggressive and controlled responses could clearly be differentiated. Responses were scored such that higher scores reflect higher endorsement of each mode. The instrument has a Cronbach's alpha reliability coefficient of .76.

Adolescent Decision-Making Questionnaire is a seven (7)-item subscale that measured respondent's confidence in making decisions (ADPRC, 2003). Participants were asked to consider the statements in the instrument (e.g., "I feel confident about my ability to make decisions," "I tend to wander into decisions without thinking about them"). Participant considered each statement and marked the response that most likely applied to him or her. Respondents indicated their level of agreement on a five (5)-point Likert scale that ranged from 1 (Agree very much) to 5 (Disagree very much). It has an alpha reliability coefficient of .67.

Peer Association Scale: assessed the extent to which respondents associate with peers who engage in risky behaviors (e.g., alcohol and substance use) or pro-social behaviors (e.g., do things to help the community). The face validity of the instrument was judged and found to be appropriate by a panel of experts at the University of Memphis as well as teachers and counselors at the vocational training center. The 14-item survey assessed individual risky behavior, peer risky behavior, individual pro-social behavior, and peer pro-social behavior. Respondents indicated whether they or their friends engage in such behaviors by choosing the option, "I do this"/ "My friends do this" or "I do not do this."

Student Separation and Completion Record: data on participants' entry in the program, substance screen results, as well as program separation and completion rates were obtained from the center's database. Information on participants' demographics including age, grade, and race/ethnicity were also collected and documented. In considering the association of age with outcomes in data analysis, age was classified into three groups: 16-18 years, 19-21, and 22-24 years. It is well documented that age is associated with risky or health promoting behaviors among youth (e.g., Grant & Dawson, 1997).

FINDINGS AND ANALYSIS

The objective of statistical analysis was four-fold: (1) to compare the pre- and post- scores for all 54 questionnaire items using paired t-test and/or McNemar's test to determine if participants made significant change in any aspect of outcome variables after intervention; (2) to examine the correlation between substance use and self-esteem, conflict resolution, decision-making, and risky peer-association; (3) to identify the predictive factors of self-esteem, conflict resolution, decision-making, and risky peer- association for substance use; and (4) to test if graduation rate was affected as a result of participation in SUPS versus SUPS Plus LCBU-ROP, and whether or not screening negative for substance use at post intervention was associated with successful program completion rate among participants in SUPS Plus LCBU-ROP.

Group scores were computed by the sum of the scores of all variables within groups. The minimum-maximum score of each group was adjusted from 0 - 100, with higher scores indicating improvement. Substance use was assigned "1," and "0" for nonuse. Using pre-data and mean scores on group variables, the relationship among variables and substance use was analyzed.

Pearson product-moment correlation coefficients were calculated to assess the relationship among variables. Logistic regression was performed to determine the association of substance use with the five predictive factors (i.e., self-esteem, conflict resolution, decision-making, and risky peer association). Since the five predictive variables were closely related, exhibiting a "multicollinearity" problem (Sarkar, 1992), the logistic ridge regression was employed to correctly identify the important predictors with high impact on substance use.

Using Chi-square test and Analysis of Variance, further analysis was performed to examine: (a) whether program successful completion rates differed for the SUPS Plus LCBU-ROP participants compared to individuals who only participated in SUPS; and (b) whether graduation rate was affected by gender and age. The Fisher's Exact assessed whether screening negative for substance use at follow-up was associated with successful completion rates among participants in the SUPS Plus LCBU-ROP intervention. Data from the study were analyzed using the IBM SPSS 24.0 statistical software program.

The sample for the current study included 148 youth that initially screened positive for substance use at their entry into the job training program. Of this group, 116 volunteered to participate in the SUPS Plus LCBU-ROP intervention, while 32 elected not to participate. Instead, these 32 students only participated in the mandatory and standard SUPS intervention program.

When self-esteem measure was examined at post program intervention, findings among participants in SUPS Plus LCBU-ROP indicated improvements in perceptions of their physical appearance (p = .024) and school environment (p = 0.024). They also showed gains in conflict resolution skill (p = .052) and reductions in marijuana use related to peer association (p = .015). Applying simple logistic regression of marijuana use on each of the five variables (i.e., self-esteem, personal appearance/body image, school environment, conflict resolution, and decision making) revealed that the odds of smoking marijuana among respondents decreased when the scores for conflict resolution increased (p = .053), and decision-making marginally increased (p = .075). This suggests improvements in resolving conflicts and making better decisions related to marijuana use.

| | SE | PHYS | SCH | CON | DEC | PEERi | PEERf |
|-------|----|----------|----------|--------|----------|--------|---------|
| SF | | | | | | | |
| SE | 1 | 0.765 | 0.695 | 0.237 | 0.499 | 0.167 | 0.201 |
| | | < 0.0001 | < 0.0001 | 0.0161 | < 0.0001 | 0.0965 | 0.0605 |
| PHYS | | 1 | 0.616 | 0.080 | 0.471 | 0.0189 | 0.140 |
| | | | < 0.0001 | 0.4286 | < 0.0001 | 0.0634 | 0.1964 |
| SCH | | | | | | | |
| | | | 1 | 0.144 | 0.714 | 0.263 | 0.257 |
| | | | | 0.1460 | < 0.0001 | 0.0075 | 0.0125 |
| CON | | | | 1 | 0.225 | 0.215 | 0.255 |
| | | | | 1 | 0.0223 | 0.0361 | 0.0185 |
| DFC | | | | | 0.0220 | 010001 | 010100 |
| DEC | | | | | 1 | 0.329 | 0.152 |
| | | | | | | 0.0007 | 0.1507 |
| PEERi | | | | | | 1 | 0.512 |
| | | | | | | 1 | 0.312 |
| | | | | | | | <0.0001 |
| PEERf | | | | | | | 1 |
| | | | | | | | 1 |
| | | | | | | | |

Table 2: Correlation coefficient among group variables* for SUPS Plus LCBU- ROP participantsSE PHYS SCH CON DEC PEERI PEERf

*Variables:

SE – Personal self-esteem PHYS – Physical self-concept SCH – School esteem CON – Conflict resolution DEC – Decision-making PEERi – Peer association (risky behavior) PEERf – Peer association (pro-social behavior)

Pearson correlation analysis indicated a strong relationship between self-esteem (SE) and personal appearance/body image (PHYS) (r = 0.765, p = .0001), school environment (SCH) (r = 0.695, p = .0001), personal appearance/body image and school environment (r = 0.616, p = .0001), as well as decision-making and interaction associated with school environment (r = 0.714, p = .0001) among participants in SUPS Plus LCBU-ROP (Table 2). In the correlation matrix provided in Table 2, we learned that the five covariates (i.e., self-esteem, personal appearance/body image, school environment, conflict resolution, and decision making) were highly correlated, leading to a multicollinearity problem. Employing logistic ridge regression analysis, findings indicated that conflict resolution (p = .067) had a positive but marginal effect on non- marijuana use among respondents.

Table 3: Chi-square analysis for graduation rate among respondents by SUPS Plus LCBU-ROP versus SUPS (only), for graduation rate, gender, and age

| | Graduated | | | | |
|-----------------------|-------------|-------------|---------------|---------------------------------------|--|
| Respondents | Yes | No | Total | p-value from chi-square test | |
| SUPS Plus LCBU-ROP | 95 (82%) | 21 (18%) | 116 (100%) | 0.001** | |
| SUPS | 17 (53%) | 15 (47%) | 32 (100%) | | |

| | SUPS Plus LCBU-ROP | 54 (95%) | 3 (5%) | 57 (100%) | |
|--------|------------------------|--------------|--------------|--------------|---------|
| Female | SUPS | 5 (62.5%) | 3 (37.5%) | 8 (100%) | 0.003** |
| | SUPS Plus LCBU- ROP | 40 (69%) | 18 (31%) | 58 (100%) | |
| | SUPS | 12 (50%) | 12 (50%) | 24 (100%) | |

| Age 16- | SUPS Plus LCBU- ROP | 34 (81%) | 8 (19%) | 42 (100%) | |
|---------|------------------------|-------------|------------|--------------|---------|
| 18 | SUPS | 2 (29%) | 5 (71%) | 7 (100%) | 0.004** |
| | SUPS Plus LCBU- | 43 | 10 | 53 | |

| Age 19- | ROP | (81%) | (19%) | (100%) | |
|---------|-----------------|-------|-------|--------|--------|
| 21 | SUPS | 10 | 5 | 15 | |
| | | (67%) | (33%) | (100%) | |
| | SUPS Plus LCBU- | 17 | 3 | 20 | |
| Age 22- | ROP | (85%) | (15%) | (100%) | 0.041* |
| 24 | SUPS | 5 | 5 | 10 | |
| | | (50%) | (50%) | (100%) | |

As presented in Table 3, when graduation rate was considered, the rate among SUPS Plus LCBU-ROP participants was significantly higher (p = .001) than the rate for the standard SUPS only participants. Similarly, SUPS Plus LCBU-ROP female participants reported a significantly higher graduation rate compared to their SUPS only counterparts (p = .003). There was no significant difference between SUPS Plus LCBU- ROP and SUPS male participants. When age was considered, the 16 - 18 and 22 - 24 years age group for SUPS Plus LCBU-ROP showed significantly higher graduation rates compared to their SUPS only counterparts (p = .004; and p = .041, respectively). No significant difference was observed for the 19-21 years age category for either SUPS Plus LCBU-ROP respectively. No significants. At follow-up screening and graduation rate, 70% of respondents in SUPS Plus LCBU-ROP with negative follow-up test results successfully completed their trade, while less than 5% that screened positive at follow-up completed their trade.

RECOMMENDATIONS

The current study examined the effectiveness of the LCBU-ROP intervention model as a supplement to the standard SUPS for high-risk youth enrolled in a vocational training program. The findings suggest improvements in participants' self-esteem and conflict resolution skills, subsequently resulting in reduced negative separations from the vocational training program and increased graduation rates. The study also indicated significant overall gain in graduation rate at post intervention among females who participated in the SUPS Plus LCBU-ROP compared to their counterparts in SUPS. It is noteworthy that consistent with the national job training programs (e.g., Schochet & Burghardt, 2008), graduation rate was significantly higher among females compared to their male counterparts. It is not clear why this is the case. However, one may speculate that the high female graduation rate may be related to having a larger percentage of female students and that females are less likely to engage in serious disciplinary issues that may negatively impact their graduation compared to their male counterparts (McKenry, Kim, Bedell, Alford, & Gavazzi, 1997; Merten, 2005).

It is interesting to note that no gains in graduation rate were reported for male respondents or for those aged 19-21 years at post assessment for SUPS Plus LCBU-ROP versus SUPS only program participants. Empirical studies revealed that in residential settings where high-risk youth and adolescents are clustered, the odds of being surrounded by high-risk peers are high, thus increasing the likelihood of being around high-risk associates (Kepper, van den Eijnden, Monshouwer, & Vollebergh, 2014; Thomson & Auslander, 2007). It is possible that in a residential job training program, like the one in which this study was conducted, males and those in 19 - 21 years age group maybe less likely to show significant benefits from engaging in either the SUPS Plus LCBU-ROP or the SUPS prevention intervention modalities. It is not clear why this is the case.

Findings from this study suggest that an application of the rites of passage model as a supplement to the standard employee substance use prevention program for students in a vocational job training center could be effective in reducing substance use associated with disciplinary problems and subsequently increasing graduation rates among this group. To our knowledge, based on a review of the scientific literature, no studies have methodologically examined the effectiveness of a rites of passage model as a supplement to a standard approach for substance use prevention among youth in a residential vocational training center. This is probably because vocational training programs usually focus on referral, placement, support services, enrollment, and completion rates (Center for Disease Control and Prevention [CDC], 2012; Smith, Buzi, & Abacan, 2014). While these outcome measures are important, it is also critical that the issues of drug-related offenses and negative separation from the program be addressed in the context of rites of passage intervention model serving as a "protective" mechanism for substance use among this group.

The rites of passage model underscore the implications of cultural and ethnic identity toward prevention and optimal human development. For example, self- identification as a group has been found to enhance self-esteem among ethnic minority adolescents in diverse settings (Umafia-Taylor & Shin, 2007). It has also been reported that ethnic minority youths that have high levels of racial identity are more likely to resist or delay substance use initiation, and to exhibit negative attitudes toward substances than their counterparts who have low levels of racial identity (Stock, Gibbons, Weng, et al., 2013). Prevention practitioners are encouraged to consider incorporating a rites of passage model as a supplement to the standard substance use prevention services for youth in residential vocational training programs.

CONCLUSIONS

This study has some limitations that are noteworthy. First, enrollment in the national job training program in the current study did not have a fixed duration but varied widely with an average enrollment period of eight months (Schochet & Burghardt, 2008). This creates problems in tracking and monitoring students' participation in SUPS Plus LCBU-ROP for data collection and analysis. Second, the study used a convenience sample and self-report method of data collection. Consequently, there is the possibility that responses to the survey may not accurately represent participants' experiences and behavior. Third, participants in this study were drawn from one vocational training center situated in an urban Mid-South area of the United States. Thus, it may be difficult to generalize the findings to youth enrolled in residential vocational training programs in other regions of the United States.

Despite these limitations, this study is relevant in terms of the association of its findings with statistically decreasing substance use and related disciplinary problems, and increasing graduation rate among the targeted youth. Further studies are needed to examine the importance of risk indicators (e.g., clustering in a residential setting) and high-risk behaviors by age, gender, and race/ethnicity in efforts to enhance approaches toward preventing substance use and the associated disciplinary and academic problems among this group. Furthermore, future studies should consider conducting a randomized controlled trial to examine the overall impact of rites of passage as a supplement to a standard substance use prevention services on the performance of youths enrolled in a vocational training program. This approach may provide a more targeted intervention aimed toward preventing substance use, reducing disciplinary issues, and increasing successful program completion rates among this group. It is hoped that the rites of passage intervention modality as a supplement to the standard prevention approach would help alleviate the incidence of disciplinary issues and negative separations from job training programs related to substance use among this population, and mitigate undesirable human conditions.

REFERENCES

Abbott, P., & Chase, D.M. (2008). Culture and substance abuse: Impact of culture affects approach to treatment. *Psychiatric Times*, 25, 1-7.

Alcohol and Drug Prevention Research Center (2003). Tennessee Alcohol and Drug Prevention Outcome Longitudinal Evaluation. Memphis: Department of Anthropology.

Banks, J.A. (1984). Black youths in predominantly white suburbs: An exploratory study of their attitudes and self-concepts. *The Journal of Negro Education*, *53*, 3-17.

Belgrave, F.Z. (2002). Relational theory and cultural enhancement interventions for African American girls. *Public Health Reports*, *117*, 76-81.

Brennan, M.A., & Barnett, R.V. (2009). Bridging community and youth development: Exploring theory, research, and application. Community Development, 40, 305-310

Centers for Disease Control and Prevention. (2012). Youth Risk Behavior Surveillance: United States, 2011. U.S. Department of Health and Human Services.

Erickson, E.H. (1963). *Children and society* (2nd ed.). New York: Norton.

Gavazzi, S.M., Alford, K.A., & McKenry, P.C. (1996). Culturally specific programs for foster care youth. *Family Relations*, 45, 166-174.

Grant, B.F., & Dawson, D.A. (1997). Age of onset of alcohol use and its association with DSM-IV alcohol abuse and dependence: Results from the national longitudinal alcohol epidemiologic survey. *Journal of Substance Abuse*, *9*, 103-110.

Kepper, A., van den Eijnden, R., Monshouwer, K. & Vollebergh, W. (2014).

Understanding the elevated risk of substance use by adolescents in special education and residential youth care: the role of individual, family, and peer factors. European Child Adolescent Psychiatry, 23, 461-472. Doi:10.1007/s00787-013-0471-1

McKenry, P.C., Kim, H.K., Bedell, T., Alford, K. & Gavazzi, S.M. (1997). An Africentric rites of passage program for adolescent males. *Journal of African American Men*, *3*, 7-20.

Merten, D.E. (2005). Transitions and "trouble": Rites of passage for suburban girls. *Anthropology and Education Quarterly, 36*, 132-148.

Murphy, J.G., & Dennhardt, A.A. (2016). The behavioral economics of young adult substance abuse. *Preventive Medicine*, 92, 24-30.

Okwumabua, T.M. (1996). Let the circle be unbroken: A model curriculum for Rite of Passage activities and programs. New Jersey: Lawrence Erlbaum Associates

Okwumabua, T.M., Okwumabua, J.O., Peasant, C., Watson, A. & Walker, K. (2014). Promoting health and wellness

in African American males through rites of passage training. *Journal of Human Behavior in the Social Environment*, 24,702-712.

Sarkar, N. (1992). A new estimator combining the ridge regression and the restricted least squares methods of estimation. *Communication in Statistics – Theory and Methods, 21*, 1987-2000.

Schochet, P.Z. & Burghardt, J.A. (2008). Do Job Corps performance measures track program impacts? *Journal of Policy Analysis and Management*, 27, 556-576.

Substance Abuse and Mental Health Services Administration (2013). Job Corps health and wellness report: Results from the 2012 National Survey on Drug Use and Health: National Findings. Retrieved from http://www.samhsa.gov/data/Nationa findings/NSDUHresults2012.htm.

Smith, P., Buzi, R., & Abacan, A. (2014). Workforce development as a promising approach to improving health disparities among young males. *The Journal of Men's Studies, 22*, 3-11.

Stock, M.L., Gibbons, F.X., Weng, C., Gerrard, M., Houlihan, A.E., Lorenz, F.O., & Simons, R.L. (2013). Racial identification, racial composition, and substance use vulnerability among African American adolescents and young adults. *Health Psychology*, *32*, 217-247. Doi: 10.1037/a0030149

Thomson, R.G., & Auslander, W.F. (2007). Risk factors for alcohol and marijuana use among adolescents in foster care. *Journal of Substance Abuse Treatment*, *32*, 61-69.

Umafia-Taylor, A.J., & Shin, N. (2007). An examination of ethnic identity and self- esteem with diverse populations: Exploring variation by ethnicity and geography. *Cultural Diversity and Ethnic Minority Psychology*, *13*, 178-186. Doi:10.1037/1099-9809.13.2.178

U.S. Department of Labor (2015). Job Corps Annual Report: Program Description Retrieved from www.data.gov/JobCorpsJobDesc.

Warfield-Coppock, N. (1992). Africentric theory and applications, 11: Advances in the adolescents' rites of passage. Washington, DC: Baobab Associates.

Washington, G., Barnes, D. & Watts, R.J. (2014). Reducing risk with Pyramid Mentoring: A proposal for a culturally-centered group intervention. *Journal of Human Behavior and the Social Environment*, 24, 646–657.

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Author's Biography

Dr. Theresa Okwumabua, a native of Atlanta, Georgia, is a licensed Clinical Psychologist and CEO, NIA Psychological and Health Consultants, Memphis, Tennessee. Keenly aware of the myriad of challenges facing communities today, she crafted her career and work to focus on preventing "at risk" youth from engaging in risky behaviors such as becoming sexually active and, logically, parents too soon, dropping out and failing in school, using and abusing alcohol and other drugs, and getting involved in gangs and criminal activities. She is known for the development and implementation of the "*Let the Circle Be Unbroken: Rites of Passage*" curriculum and other youth development programs which are being used in communities across the country as a means of preparing youth for responsible adulthood and to adopt health-promoting lifestyles. In the last few years, Dr. Okwumabua has worked with churches and other faith-based organizations within this community, attempting to build their capacity to effectively work with "at risk" youth and their families.