



Relationship Between Drinkers' Motivation Before Therapy and Propensity to Relapse After Therapy Among Undergraduates with Substance Use Disorders in Nigerian University

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ABSTRACT

Relapse cases after alcohol use disorder treatments have been a great challenge to individuals suffering from addiction, their families, and mental health professionals. This study examined influence of drinkers' readiness to change on their propensity to relapse after therapies. It also examined other factors that could be responsible for propensity to relapse after therapies among undergraduates in Ekiti State University. 24 students, male (n=19) and female(n=5), who scored 7 and above in Alcohol Use Disorder Identification Test and showed interest in therapy during baseline survey and were randomly assigned into three treatment groups and one control group. Drinkers' motivation was tested before therapy and while propensity to relapse was assessed after therapy. The research shows that all stages of drinkers' motivation to change jointly predict propensity to relapse [$F(3, 20) = 3.19, p = .046, R^2 = .32$]; meanwhile, only ambivalence (lack of motivation) significantly predict propensity to relapse [$\beta = 6.73, p = .006$]. Propensity to relapse is significantly higher among male (mean = 100.89) than female (mean = 67.80); $t(22) = 3.41, p < .01$; meanwhile there is no significant sex difference in readiness to change among participants. It is clear from this study that lack of motivation among drinkers significantly predict higher propensity to relapse. In addition, gender related issues should be considered during therapies to prevent relapse. It is pertinent therefore, that therapists in substance use disorder/addiction treatment centers should ensure drinkers' motivation to quit alcohol use before therapies and conduct pretreatment assessment to identify individual factors that may engender relapse after therapies.

Keywords: Drinkers' Motivation, Propensity to relapse, Addiction, Undergraduates and Alcohol Use Disorder

BACKGROUND OF THE STUDY

Relapse cases after alcohol use disorder treatment have created a lot of concerned to alcohol users, their families and mental health professionals [1]. It has been recognized that relapse following treatment is all too common [2] Despite availability of necessary social support before and during therapy, relapse is still prevalent among drug users [3]. Adolescence stage where most of the undergraduates fall into, has been recognised as a critical period for the onset of substance use and early age of onset for alcohol use disorder (AUD) may impact negatively on treatment outcomes [2]. Furthermore, it has been recognized that younger patients were at increased risk of relapse [4,2]. Addiction treatment can be a critical or even lifesaving resource for alcohol or drug users, but at times service users may not recover from the drinking habit or dependence on alcohol due to physiological and psychological reasons.

Therapies, Propensity to Relapse and Alcohol Use Disorder

Alcohol use disorder is a chronic relapsing disorder characterised by a prolong course of alcohol-related problems and a persistent vulnerability to relapse [5]. The World Health Organization (WHO) estimated about 2 billion people worldwide who consume alcoholic beverages and 76.3 million with diagnosable alcohol use disorders [6]. Based on the scourge of alcohol use disorder (AUD), many therapeutic centers have emerged around the world to combat it and a lot of high resource inputs have been introduced into substance use treatment [7]; however, relapse among alcohol dependent patients has been a great concerned to their families and substance use disorder treatment professionals [1,8,9]. Relapse rate among individuals in SUD treatment may vary based on the type of study population and duration of treatment [4] More so, pretreatment negative emotional states, such as anxiety and depression; and motivation to change substance use behavior may predict relapse after SUD treatment [4].

Drinkers' Motivation and Propensity to Relapse

The challenge of alcohol use is compounded by the social acceptability of alcohol in the society. It is mostly seen as a social drink and many who are involved in the use do not recognize initially the danger of abuse that sometimes leads to drug use disorder. Many youths recovering from alcohol/other drug abuse or addiction are often faced with the challenge of continuing recovery due to external triggers they are exposed to after therapy. For example, one study found that virtually all adolescents returning to their former school after treatment reported being offered drugs on their first day back; it was also found that while 85% of teens who completed in-patient treatment reported some substance use barely a year after their programme, those who were motivated to stop drinking showed greater skills for relapse prevention [2].

METHODS

Sample

A survey was conducted among undergraduates in Ekiti State University in Nigeria to assess alcohol use disorder (AUD) in which, alcohol use disorder identification test (AUDIT) an assessment instrument was employed. [10], reported a male scores 8 and above; and a female scores 7 as the norm for problematic drinking pattern or AUD for Nigerian sample.

The result of this survey revealed that some of the students scored 7 and above high which is the norm that qualifies them for the diagnosis of AUD. From the result of this survey, 40 eligible individuals who scored 7 and above in alcohol use disorder identification test (AUDIT) were selected, out of which only 24 individuals consented to participate in therapy, this consists 19

males and 5 females. They were randomly assigned into three treatments groups and one control group.

Measures

Besides the AUDIT which was administered at the survey phase to assess AUD, two other scales were administered, before therapy to assess drinkers' motivation to change and after therapy to assess propensity to relapse. They are:

The Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES)

SOCRATES is a 19-item experimental instrument designed to assess drinkers' motivation for change [11]. The instrument yields three factorially-derived scale scores: Recognition (Re), Ambivalence (Am), and Taking Steps (Ts). The 19-item scale scores are highly related to the longer (39 item) scale for Recognition ($r = .96$), Ambivalence ($.88$), and Taking Steps ($.94$).

Recognition: High scorers directly acknowledge that they are having problems related to their drinking, tending to express a desire for change and to perceive that harm will continue if they do not change. High score ranges between 34 and 35; while medium score ranges between 31 and 33. Low scorers deny that alcohol is causing them serious problems, reject diagnostic labels such as "problem drinker" and "alcoholic" and do not express a desire for change. Low score ranges between 27 and 30 while very low score ranges between 7 and 26.

Ambivalence:

High scorers say that they sometimes wonder if they are in control of their drinking, are drinking too much, are hurting other people, and/or are alcoholic. Thus, a high score in this category reflects uncertainty. Very high score ranges between 18 and 20; High score ranges between 16 and 17; while medium score ranges between 14 and 15.

Low scorers say that they do not wonder whether they drink too much, are hurting others, or are alcoholic. Note that a person may score low on ambivalence either because they "know" their drinking is causing problems (high Recognition), or because they "know" that they do not have drinking problems (low Recognition). Thus, a low ambivalence score should be interpreted in relation to the Recognition score. Low score ranges between 9 and 13 while Very Low score ranges between 4 and 8.

Taking Steps:

High scorers report that they are already doing things to make a positive change in their drinking, and may have experienced some success in this regard. Change is underway, and they may want to help to persist or to prevent backsliding. A high score on this scale has been found to be predictive of successful change. Very high score ranges between 37 and 40; High score ranges between 34 and 36 while medium score ranges between 31 and 33.

Low scorers report that they are not currently doing things to change their drinking, and have not made such changes recently. Low score ranges between 26 and 30 while Very Low score ranges between 8 and 25.

Advance WArning of RElapse (AWARE) Questionnaire, was designed as a measure of the warning signs of relapse, as described by [12]. Version 3.0 with 28 items of the scale was used for this study.

Procedure

As indicated in AUDIT manual, the 24 participants have problematic drinking patterns such as substance use problems, dependence symptoms, drinking to intoxication in the past month and/or perception of alcohol abuse as a significant problem [13]. Those who participated were individuals with alcohol use disorders but at baseline had not received any professional treatment for alcohol use disorder. The participants had insight into their alcohol-related problems and consented to participate in alcohol abuse treatments as revealed in the consent form attached to baseline survey done using Alcohol Use Disorder Identification Test (AUDIT).

Based on the informed consent during baseline survey, before the therapy sessions began, **the Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES)** designed to assess readiness or motivation for change in alcohol abusers was administered on the participants that were selected for therapy. The participants went through the therapy, and the results of the therapy showed that the therapeutic techniques used were effective in reducing alcohol use disorder among the participants. Thereafter, **Advance WArning of RElapse (AWARE) Questionnaire** designed as a measure of the warning signs of relapse was administered on the participants.

RESULTS

Hypothesis One

Drinkers' motivation for change (recognition, ambivalence, taking step) will have significant joint and independent influence on propensity to relapse.

Table 1: Multiple Regression Analysis- Levels of Motivation to Change on Propensity to Relapse

Variables	β	t	P	R	R ²	F	P
Recognition	-1.07	-.88	.391				
Ambivalence	6.73	3.07	.006	.57	.32	3.19	.046
Taking Steps	.71	.77	.450				

Table 1 showed dimensions of drinkers' motivation to change jointly predict propensity to relapse [$F(3, 20) = 3.19, p = .046, R^2 = .32$]. Independently however, only ambivalence significantly predict propensity to relapse [$\beta = 6.73, p = .006$] while recognition [$\beta = -1.07, p = .39$] and taking steps [$\beta = .71, p = .45$] did not independently predict propensity to relapse. This means that an increase in ambivalence significantly predict higher propensity to relapse. Therefore, the hypothesis is supported.

Hypothesis Two

Male will significantly score higher on propensity to relapse than female

Table 2: Male will significantly score higher on propensity to relapse than female

	Male (N= 19)	Female (N=5)	t	P
	Mean (SD)	Mean (SD)		
Propensity to relapse	100.89 (27.39)	67.80 (16.54)	3.41	.006

Independent sample t-test (Table 2) showed that the difference in propensity to relapse between males (M = 100.89) and females (M = 67.80) is statistically significant, $t(22) = 3.41$, $p < .05$. This means that male participants had higher propensity to relapse than the female participants. Therefore, the hypothesis is supported.

Hypothesis Three

Male will significantly score higher on drinkers' motivation to change than female

Table 3: Male will significantly score higher on drinkers' motivation to change than female

	Male (N= 19)	Female (N=5)	t	P
	Mean (SD)	Mean (SD)		
Recognition	18.00 (4.67)	18.00 (4.15)	-.347	.73
Ambivalence	12.37 (2.29)	10.00 (2.54)	2.01	.056
Taking steps	25.32 (6.07)	25.00 (5.52)	.105	.92

Independent sample t-test (Table 3) showed that the differences in drinkers' motivation to change for each of the subscales between males and females are not statistically significant. This means that gender does not necessarily determine if an individual will be motivated to change an addictive behaviour or not. Therefore, the hypothesis is not supported.

DISCUSSION

Hypothesis one tested if drinkers' motivation for change will significantly predict propensity to relapse. As shown in the table 1, dimensions of drinkers' motivation for change (Recognition, Ambivalence, Taking Step) jointly predict propensity to relapse. This reveals that dimensions of alcohol drinkers' motivation for change will determine if recovery will take place or not. Specifically, as shown in table 1, only ambivalence (lack of motivation) independently predict propensity to relapse suggesting that people who have not made up their mind to stop using or abusing alcohol or enter addiction treatment against their will, may still have propensity to relapse despite exposure to therapies. Similar to the result of this hypothesis were the findings of several studies that established drinkers' motivation for change to be a predictor of propensity to relapse [14-17].

Sometimes, external environment may be motivating some people to change, for example, people may enter addiction treatment because of court order, or spouse has threatened to leave, or because their employers threatened to sack them; but they may not completely be certain they want to change [14]. So, any drinker that enters addiction treatment because of motivation from external environment may still relapse after therapy. As found in this study and supported by other studies as revealed above, it is therefore very necessary for therapists at the preliminary stage of addiction treatment to prepare participants for motivational interviewing [17]; so that therapeutic techniques may lead to recovery and prevent relapse.

Hypothesis two tested that male will significantly score higher on propensity to relapse than female. This hypothesis was supported revealing that gender issues should be considered in order to prevent relapse during or after therapy. It has been noted that women are one third less likely to relapse; suggesting that transitioning from recovery to using vary by gender [18]. In addition, it has been recognized that most of males' drug/alcohol use initiation comes majorly through experimentation and peer influence while most of females' initiation comes through sexual or relationship issues [18-19]. Furthermore, National Institute of Drug Abuse (NIDA) has found that women in substance use disorder treatment relapse less frequently than men do [21].

With these findings, majority of males start using drugs earlier than females due to their initiation route. Since males may have longer duration of use than females, relapse cases may be higher among males due to substance abuse or addiction severity. As discovered in this paper therefore, course of drug use, propensity to relapse, and treatment participation differs for men and women [18]. So, in attending to relapse cases, males and females might benefit from different relapse prevention therapies.

Hypothesis Three tested that male will significantly score higher on drinkers' motivation to change than female. This hypothesis was not supported revealing that gender does not actually play a significant role in who gets motivation for psychoactive drug/alcohol use cessation. This shows that motivational interview should be done for all clients that come for SUD treatment irrespective of their sex.

CONCLUSION

Majority of patients with alcohol use disorder, their families, and mental health professionals would desire sustainability of recovery process. In order to prevent relapse and sustain recovery process, therapists in alcohol use disorder treatments should ensure pretreatment assessments are carried out to elicit emotional states and individual factors (such as gender and drinkers' motivation for change) that can predict propensity to relapse and include outcome of pretreatment assessment in their therapies.

More so, therapists should encourage problem drinkers to enter self help or treatment quickly and ensure longer duration of treatments for sustainable outcome [22-23].

Informed Consent: Informed consent was obtained from all individual adult participants included in the study.

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