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# STRESS, ALCOHOL USE AND WORK ENGAGEMENT AMONG UNIVERSITY WORKERS IN NIGERIA

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## ABSTRACT

This study examined the relationship among stress, workplace alcohol use and work engagement among 228 University of Nigeria, Nsukka, workers. The results of the regression analyses showed that job stress significantly predicted workplace alcohol use ($\beta = .17$, $p < .01$). Workplace alcohol use also significantly predicted employee work engagement ($\beta = -.35$, $p < .001$). The results also showed that gender is a significant predictor of workplace alcohol use ($\beta = -.20$, $p < .01$). Marital status also significantly predicted workplace alcohol use ($\beta = -.16$, $p < .05$). The implications of these findings to work productivity and workplace counseling were discussed.

**Key Words:** Stress, Alcohol Use, Work Engagement

## INTRODUCTION

Globalization and the recent increase in competition among firms seem to have brought to the limelight the relevance of human resource in modern organizations. Organizations are forced to innovate, initiate and possibly practice cost reduction mechanisms, use intelligent supply chain solutions either to be ahead in competition or to keep pace with competitors. To achieve this feat, organizations are constantly searching for ways of identifying talent, to nurture the talent and to retain the talent along with the organization for a long time if possible (Lakshmi, 2012). These practices are possible only if the work force is able to adapt to situations and withstand challenges. One of the keys to withstanding various organizational challenges is for organizations to have engaged workforce. This may be the reason Lakshmi (2012) asserted that employee engagement is the driver which can help in obtaining quality outputs, improved performance, employee participation, and increased motivation levels. Employee engagement, therefore, seems to be a driver of success for many organizations. As a result this concept has received special research attention among organizational researchers (Bakker, Schaufeli, Leiter, & Taris, 2008; Macey & Schneider, 2008). Engaged employees are fully involved in and enthusiastic about their work (May, Gilson, & Harter, 2004). Research suggests that engaged workers are a source of inspiration; they are vigorous and keep up the spirit in their team (Engelbrecht, 2006).

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Macey and Schneider (2008) in their review of the construct found evidence of the proliferation of various definitions of engagement. They conceptualized employee engagement as an "aggregate multidimensional construct" (p. 18) that contains different types of engagement (i.e., trait, state and behavioral engagement), each of which entails various conceptualizations. Several authors (e.g., Griffin, Parker, & Neal, 2008; Saks, 2008) have argued against this approach by emphasizing that such a cocktail construct may only create conceptual confusion. The current researchers adopt Schaufeli and Bakker's (2010) definition of work engagement as a positive, fulfilling, and work-related state of mind that features vigor, dedication, and absorption as its components. Vigor is characterized by high levels of energy while working, and the willingness to invest effort in one's work. Dedication refers to being strongly involved in one's work, and experiencing a sense of significance and enthusiasm. Finally, absorption is characterized by being fully concentrated and happily engrossed in one's work (Schaufeli & Bakker, 2010).

Despite the value of employee work engagement to organizations, some behaviors by employees could diminish its capacity. One of such behavior is substance use. Substance use such as alcohol can have significant consequences for the individuals, their co-workers, employers, and organizations as a whole. Alcohol use has been associated with absenteeism (Ames, Grube, & Moore, 1997; Blum, Roman, & Martin, 1993), poor work performance (Lehman & Simpson, 1992; Mangione, Howland, Amick, Cote, Lee, & Bell, 1999), workplace accidents (Elliot & Shelley, 2006), and impaired teamwork (Bennett & Lehman, 1999). There is abundant evidence that alcohol intake in particular excessive alcohol use during work affect the quality of human capital accumulation which may disorientate the employee to treat their jobs with levity (Ames, Grube & Moore, 1997; Frone, 2006; Pringle, 1995) When workers do not show up to work, co-workers often have to go beyond their limits to make up the difference.

Even when alcoholic workers report to work, they may find it difficult to focus on their assigned roles and their lack of engagement on the job can negatively affect the organization. Engagement describes workers' cognitive, emotional, and behavioural attentiveness on the job (Koopman, Pelletier, Murray, Sharda, Berger, Turpin, & Bendel, 2002). Workers with high levels of engagement are actively involved in the tasks at hand and avoid distractions that might interfere with their work performance. On the other hand, workers who are disengaged (i.e., have low levels of engagement) tend to be unmotivated to perform their tasks well. They are likely to be easily distracted on the job, daydream frequently, and complete tasks in a more of a robotic manner than workers with high engagement (Koopman,et al., 2002).

Low engagement causes problems such as low productivity and on-site accidents for organizations (Koopman et al., 2002). Low engagement might be just as damaging and costly for organizations as absenteeism. In other words, when employees report to work but do not put their best effort on the job, might be also be as harmful as when they do not show up for work at all. The negative impact of low engagement on organization productivity has been compared with the outcomes associated with absenteeism (Burton, Conti, Chen, Schultz & Edington, 1999). It has even been suggested that the costs resulting from low engagement exceeds the costs of medical claims and absenteeism combined (Collins, Baase, Sharda, Ozminkowski, Nicholson, Billotti, Turpin, Olson, & Berger, 2005).

The use of alcohol in the workplace tends to pose some challenges for most employees and the relationship between alcohol use and negative job outcomes has been well documented (e.g., Grundberg, Movic, Anderson – Connolly & Greenberg, 1999; Mangione et al., 1999; Lehman & Simpson, 1992). It seems there is no clear laws or policies targeted at the restriction of drinking in the workplace in most organizations in Nigeria in spite of the fact that research has established

links between alcohol consumption and absenteeism, lowered work productivity and employee morale as well as rising health care costs (Ames & Rubhun, 1992). It is therefore envisaged that alcohol use during working periods would be negatively associated with work engagement.

Research indicates that many workers use alcohol (Roman & Blum, 2002). People tend to use alcohol to escape from the stress experienced at work. Individuals may become problem drinkers when they attempt to use alcohol as a stress coping mechanism.

The presence of stress in the world of work may have increased in recent time due to the high work pressure that often emanates from the increased demands by employers to meet set targets as a result of increasing competitive business environment. Thus, workers have to cope with the stress. However, in stress-coping (Wills & Shiffman, 1985) and self-medication (Khantzian, 1997) models of substance abuse, drugs are thought to serve a coping function whereby they facilitate general mood regulation. There is reason to believe that some people use a diverse array of psychoactive drugs, including alcohol (Cooper, Russell, Skinner, & Windle, 1992; Fiki, 2007), cocaine (Jaffe & Kilbey, 1994), cannabis or marijuana (Schafer & Brown, 1991), and tobacco (Schleicher, Harris, Catley & Nazir, 2009) as a means of regulating their mood and coping with work-related stress.

According to Frone (1999), literature on the causes of employee alcohol use generally takes one of the following two perspectives. The first views the causes of employee alcohol use as external to the work place. This means that, an employee may have a family history of alcohol abuse that leaves him or her vulnerable to developing drinking problems, have personality traits reflecting low behavioural self-control that make it difficult to avoid alcohol, or experience social norms and social networks outside work (Ames, Delaney & Janes, 1992; Trice & Sonnenstuhl, 1990). Although external factors clearly influence employee drinking habits, a second perspective views the causes of employee alcohol use as partly arising from the work environment itself.

Most studies linking work stress and alcohol consumption have therefore shown some association between drinking and job stress. For example, as far as cross-sectional studies are concerned, Hingson, Mangione and Barrett (1981) conducted a household survey and reported that job stress was associated with mean alcohol consumption, heavy drinking, and drunkenness. House, Strecher, Metzner and Robbins (1986) found that job tension was associated with average weekly alcohol consumption. In addition, Ragland, Greiner, Yen and Fisher (2000) studied urban transit operators and documented that those who often experienced job stress were likely to drink heavily. Evidence from longitudinal studies have also shown that stress is implicated in alcohol consumption. Crum, Muntaner, Eaton and Anthony (1995) reported that, among men, even after adjusting for job insecurity and workplace support, alcohol dependence and abuse were associated with high-strain jobs. However, Mensch and Kandel (1988) show low correlation between alcohol consumption and job stress among young men, and Cooper, Russel and Frone (1990) documented no significant relationship between job pressure and alcohol consumption or problem drinking. Head, Stansfeld and Siegrist (2004) also reported no significant association between objectively assessed stress and alcohol dependence among male workers by cohort study. The above evidence showed that numerous cross-sectional and longitudinal studies have been conducted to assess the association of occupational environment and stress with alcohol consumption, harmful drinking, and alcohol dependence, and findings are conflicting and inconclusive.

Despite the fact that it is widely believed that increased alcohol consumption is a common response to work-related stress, empirical tests of this model have consistently failed to support a strong relationship (Blum & Roman, 1997). Reports of small effect sizes between work stress and alcohol consumption and problems (e.g., Shore, 1997; Wilsnack &

Wilsnack, 1992) have been noted in previous investigations, prompting many researchers to develop more nuanced models to explain the relationship between work stress and alcohol (Ames & Rebhun, 1996). Frone (2003) argued that models that identify vulnerable subgroups of workers as well as the intervening linkages between work stressors and alcohol use are a promising direction for future research. It is therefore important to test the relationship between stress and alcohol use among several groups and in different contexts. The focus of this current study is to examine whether stress could be linked to workers' alcohol consumption during working periods in Nigerian university context where there is limited empirical reports. It also explores whether alcohol consumption during work could be related to work engagement.

## METHOD

### Participants and Procedure

The participants were 228 administrative staff of the University of Nigeria, Nsukka. Out of the 228 participants, 136 (59.652%) were men. Among the respondents, 160 were married while 68 were single. The ages of the respondents ranged between 23 years to 59 years, with an average age of 42.40 years. The minimum educational qualification of the participants was senior school certificate.

The survey was administered individually in various offices during working hours by selected and trained research assistants. The respondents were assured of the anonymity in their responses. They were allowed to complete the survey at their convenience and the research assistants returned to collect the completed survey at the time agreed upon by the respondent and the research assistant. Out of the 289 workers surveyed initially, 235 (81.31%) completed and returned their questionnaire. Seven out of the 235 retuned copies of the questionnaire were not properly completed and were discarded leaving 228 that were used for data analysis. All the respondents volunteered to participate in the study.

### Measures

*Employee engagement*

The short version of the Utrecht Work Engagement Scale (UWES-9) was used to measure employee work engagement (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002; Schaufeli & Bakker, 2010). The scale measures three dimensions of work engagement: vigour, dedication and absorption. Although the original UWES-9 scale was a seven-point Likert-type, in other to make response easier, a 5-point Likert-type response format ranging from 0 to 4 "Never" to "Very often," was adopted in the present study. Other researchers (e.g., Halbesleben, Harvey, & Bolino, 2009; Bakker, & Xanthopoulou, 2009) equally used 5-point against the 7-point in their separate studies. The scale has a reliability coefficient (Cronbach's alpha) of .89. Sample items include: "At my work, I feel bursting with energy" (vigour), "I am enthusiastic about my job" (dedication), and "I feel happy when I am working intensely" (absorption).

*Job Stress*

To assess job stress, the Role-based Stress Questionnaire developed by Rizzo, House and Lirtzman (1970) was adopted. The questionnaire comprises of 18 items that measure role conflict and role ambiguity among employees. The Role-based Questionnaire has been used in several studies in several countries including Nigeria (e.g. Ugwu, 1995). The reliability coefficient (Cronbach's alpha) of .91 was obtained for the present study. Sample items include: I receive incompatible requests from two more people (role conflict); I know what my responsibilities are (role ambiguity).

*Employee alcohol use*

To assess alcohol use among workers we adopted the method used by earlier researchers (e.g. Frone, 2006) to assess frequency of alcohol use during and after work. The participants were asked how often during the past one year they consumed alcohol in six different contexts: shortly before starting the day's work, within 2 hours of starting their work, during lunch breaks, while working, after the

close of work, and took alcohol during social and other events. The response options range from very often (5), Often (4), Sometimes (3), Rarely (2), to Never (1). To obtain an individual's total score on workplace alcohol use, the person's scores in these contexts: shortly before starting the day's work, within 2 hours of starting the work, during lunch breaks, and while working were added up. A Cronbach's alpha coefficient of .84 was obtained for the present study.

**Data Analyses**

Analyses were carried out on the data using correlation and regression. Correlational analyses were used to determine the intercorrelations of the study variables. Regression was employed in order to assess the amount of variance explained by each type of predictor variable.

## RESULTS

The results of the correlational analysis showed that stress had positive relationship with workplace alcohol use ($r = .21$, $p < .001$). This means that the more stress the participants report the higher their report of workplace alcohol use. The results further revealed significant negative relationship between alcohol use and work engagement ($r = -33$ $p < .001$), showing that workers who use alcohol at workplace tend to report higher scores on work engagement. Stress was positively related to work engagement ($r = .14$, $p < .05$). Thus, the higher the participants' scores on stress , the higher their scores on work engagement. Gender was also significantly related to alcohol use ($r = -.19$, $p < .01$). Male participants tend to score higher in workplace alcohol use than female participants. Marital status was also significantly related to alcohol use ($r = -.24$, $p < .001$). Married participants tend to score higher in workplace alcohol use than single participants.

The results of the regression analysis showed that gender significantly predicted workplace alcohol use ($\beta = -.20$, $p < .01$). Marital status also significantly predicted workplace alcohol use ($\beta = -.16$, $p < .05$). The results also revealed that stress significantly predicted workplace alcohol use ($\beta = .17$, $p < .01$) even when the effects of the control variables (gender, age, and marital status) were statistically controlled. Stress contributed to 2.8% variance in workplace alcohol use above the effects of the control variables. With regard to work engagement, the regression results showed that none of the control variables statistically predicted the participants' work engagement. As a block, the control variables contributed an insignificant 1.5% variance in work engagement. Workplace alcohol use significantly and negatively predicted employee work engagement ($\beta = -.35$, $p < .001$). Workplace alcohol

**Table 1:** Means, standard deviations, and inter-correlation among study variables

| Variables | Mean | Standard Deviation | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|
| Engagement | 25.40 | 5.74 | - | | | | | |
| Gender | 1.40 | .49 | -.05 | - | | | | |
| Age | 38.40 | 7.10 | .04 | -.04 | - | | | |
| Marital Status | 1.30 | .46 | .10 | .07 | -.07 | - | | |
| Alcohol Use | 6.27 | 2.83 | -.33*** | -.19** | .01 | -.24*** | - | |
| Stress | 57.42 | 11.52 | .14* | -.09 | .10 | -.03 | .21*** | - |

**Keys:** *** = $p < .001$; ** = $p < .01$; * = $p < .05$

**Note:** A total of 228 employees completed the questionnaires. Gender (1 = male, 2 = female); Marital status (1 = Married, 2 = Single,). Raw scores for workplace alcohol use, age, stress, and engagement were keyed in as they were collected.

use contributed to a significant 11.4% variance in employee work engagement above the effects of the control variables.

## DISCUSSION

The results of the study demonstrated that workers' perception of stress is positively related to workplace alcohol use. Results of the regression analyses provide important information about the link between stress and workplace alcohol use. Earlier studies (e.g. Crum et al., 1995, Hingson et al., 1981) have also demonstrated that stress is linked to alcohol consumption or problem drinking. Although there are several ways (both adaptive and maladaptive) of coping with stress (Onyishi, 2005), many people may view the use of alcohol as a way of relaxing after long hours of work or stress-inducing activities. The use of alcohol during work however, seems not to fall into this reasoning. The result of the present study demonstrates that individuals may also take alcohol as a mitigating mechanism to prevent stress or to reduce the impact of stress during work.

In this study, it was also found that alcohol use negatively predicted employee work engagement. Workers who are engaged in their jobs are viewed to be highly involved and committed workers who go about performing assigned roles with enthusiasm. Employees who are engaged are also productive while workers who are disengaged are easily distracted and less productive (Koopman, et al., 2002). The finding that workers who use alcohol during work periods are less engaged than those who do not use alcohol while working demonstrates that alcohol use during work could have detrimental effects on both the worker and the organization. The present finding could help us to understand the previous findings that linked alcohol use with low productivity in the workplace (e.g. Grundberg, et al., 1999; Mangione, et al., 1999; Ames, et al., 1992). It is probable that low productivity associated with alcohol use among workers is as a result of the low engagement of workers who use alcohol during work.

The findings of this study have implications for strategic management and counseling in our workplace, especially in universities. Excessive use of alcohol could be very detrimental to an individual's health. Use of alcohol during working periods could also harm the individual and the employing organization. There is need to build workplace that are less stressful as this will in turn reduce alcohol use among workers. . Designing work systems that encourage creativity and innovation may help in reducing boredom that may predispose individuals to stress. Streamlining work roles for individuals and adequate communication within the organization could also be important in reducing inter-personal and intra-personal conflict that lead to stress that may result in workplace alcohol use. Those who are already taking alcohol can benefit from counseling. Establishing a functional staff counseling centre is desirous in this circumstance.

## CONCLUSION

The use of alcohol during work tend to have negative impact on employee work behaviorus. The findings that workplace alcohol use and stress have negative impact on employee work engagement have implications for organizational effectiveness. Efforts geared toward reducing stress and workplace alcohol use may help in building a work environment that supports employee work engagement which has been viewed to be important in building a productive organization.

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