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ROLE OF TYPE A PERSONALITY AND SUBSTANCE USE ON PERCEIVED SOCIAL STIGMA AMONG UNDERGRADUATES

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ABSTRACT

This study explored the relationship between Type A personality, substance use and perceived social stigma among university undergraduates. The study was a survey research which adopted the cross-sectional (exploratory) design. The Social Interactionist Theory by Goffman guided the study. A hypothesized model was developed and its empirical suitability was tested with three clearly delineated hypotheses. A sample of three hundred and ninety-seven (397) participants consisting of two hundred and two (202) males and one hundred and ninety-five (195) females, was surveyed. They were selected from twelve faculties from three Universities. Participants' age ranged from 18 to 50 with a mean age of 34 years. The independent *t*-test was used to test hypotheses 1 and 2, while multiple regression was used for hypothesis 3. The first finding of the study revealed a significant influence of Type A personality on social stigma among the participants, thus the hypothesis was accepted. The second finding revealed a significant influence of substance use on social stigma among the participants, the hypothesis was also accepted. The third finding showed that Type A personality and substance use significantly and jointly predicted social stigma, the hypothesis was accepted. The findings of this study provide a better understanding of the social stigma surrounding substance use and how it is perceived by students with Type A personality. The findings were discussed in relation with past theoretical and empirical literature. Conclusions were drawn and recommendations advanced in line with the study's findings.

Keywords: Type A personality, social stigma, undergraduates, social interactionist theory

INTRODUCTION

This study adopted Goffman's (1973) Social Interactionist Theory, which views stigma as a deeply discrediting attribute leading to perceived differences and inferiority. Social stigma manifests as aversion, avoidance, and social rejection based on individuals feeling inferior due to perceived shortcomings.

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Stigmatization assigns negative traits based on behavior or identity, such as mental illness, health conditions, or disability, leading to rejection, avoidance, or fear. Prevalence estimates suggest commonality in stigmatization, varying across populations, conditions, and individual factors (Caddel, 2022). It can manifest as aversion to interaction, avoidance, social rejection, discounting, discrediting, dehumanization, and depersonalization of others into stereotypic caricatures (Dovidio et al., 2009). From a social psychological perspective, stigmatization may have a number of functions (Phelan et al., 2008). One is the function of exploitation and domination (keeping people down). Another function is social norm enforcement (keeping people in). Scholars like Clark et al. (2013) and Corrigan and Shapiro (2004) define stigmatization as negative beliefs and attitudes based on distinguishing characteristics, contributing to rejection, avoidance, or fear. The study aims to explore the impact of Type A personality and substance use on perceived social stigma among university

Existing literature (Anderson et al., 2018; Bogg & Vo, 2018), suggests a relationship between Type A personality and depressive symptoms, social stigma, and being perceived as a "difficult person." Similarly, research on substance use and social stigma (Corrigan & Shapiro, 2010; Keyes et al., 2010; Link et al., 2001) indicates stigmatization's negative impact on life aspects. Studies exploring Type A personality, substance use, and stigmatization present mixed findings (Corrigan and Shapiro, 2010; Evenden et al., 1992; Hiemstra et al., 2017; Kolla et al., 2018; Link, et al., 2001; Pardo et al., 2017).

While research has explored perceived social stigma and its predisposing factors amongst different populations, the results the remained equivocal. The relationship between personality traits, such as Type A personality, and stigmatizing attitudes is an area requiring further investigation. Similarly, the association between substance use and social stigma remains complex and inconsistent across studies. Furthermore, existing literature revealed gaps in understanding the intricate interplay of Type A personality, substance use, and perceived social stigma.

Building on previous research on personality traits and stigmatizing attitudes, the study delves into Type A personality (characterized by traits like competitiveness and impatience) and its specific perceived influence on social stigma among university undergraduates. Additionally, it explores substance use-related social stigma, considering the broad spectrum of psychoactive substances. The research questions focus on the extent and degree to which Type A personality and substance use determine perceived social stigma, as well as their joint influence. By addressing the limitations of past studies, this research aims to contribute to a deeper understanding of the complex interactions between Type A personality, substance use, and perceived social stigma.

Figure 1 was the conceptual model used in this study to represent the phenomena of interest. It makes it easier to grasp the relationships among the variables.

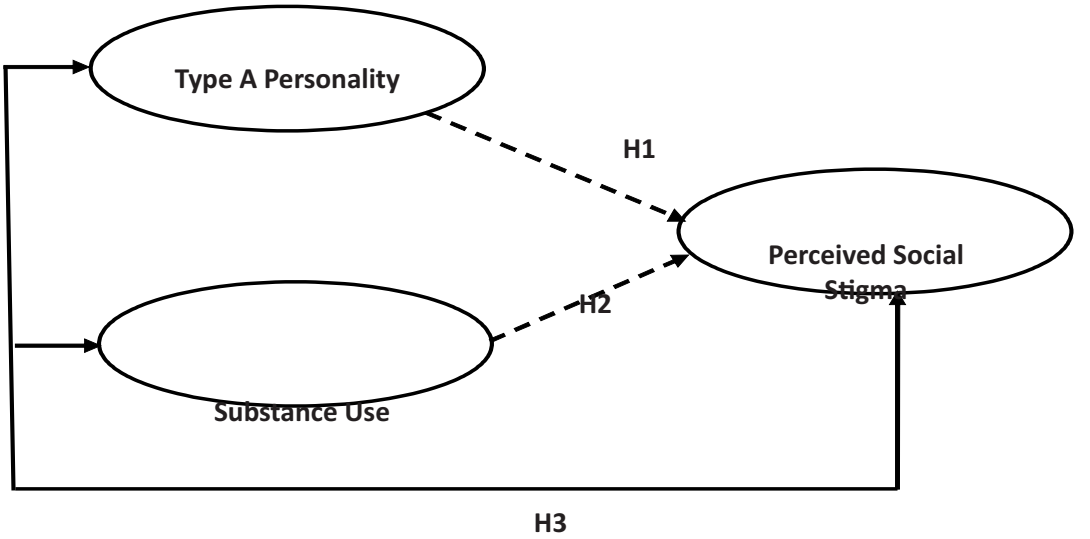

Figure 1:A model showing Type A personality and substance Use as predictors of perceived social stigma

In line with Figure 1, the conceptual model examined the hypothesized connections between the independent (Type A personality and substance use) variables and the dependent variable (perceived social stigma). It in this light that this study hypothesizes that: (1) participants with high score and those with low score on Type A personality will differ on predisposition to perceived social stigma; (2) participants with high score and those with low score on substance use will differ on predisposition to perceived social stigma, and (3) Type A personality and substance use will jointly determine predisposition to perceived social stigma.

METHOD

Design

The study adopted a survey research which utilizes the cross-sectional (exploratory) design. It uses questionnaires as the main instrument of data collection. The justification for the choice of this design was because the design affords the researcher the opportunity for one-time observation of independent and dependent variables, and also to test the hypotheses formulated.

Setting

The study was conducted in Uyo metropolis in Akwa Ibom State. Uyo is on latitude 5.033°N and longitude 7.9267°E situated in the South-South geo-political zone in Nigeria. The study was conducted among undergraduates from the University of Uyo, Akwa Ibom State University and Obong University.

Sample and Sample size

The participants were three hundred and ninety-seven (397) university undergraduates. They were selected using purposive sampling technique. They comprised three hundred and sixty-three (363 or 91.4%) participants from two public universities (University of Uyo and Akwa Ibom State University) and thirty-four (34 or 8.6%) from a private university (Obong University). They were also two hundred and two (202 or 55.88%) males and One hundred and ninety-five (195 or 49.12%) females. Two hundred (200 0r 49.12%) of the participants were drawn from the University of Uyo; One hundred and sixty-three (163 or 37.78%) participants were drawn from Akwa Ibom State University, while thirty-four (34 or 12.06%) of the participants were from Obong University. The participants age ranges from 19 - 40 with a mean of 30 years.

Instruments

The main instrument used for data collection in this research was the Questionnaire. The questionnaire contains four (4) sections A, B, C and D). Section A was used to obtain information about the participant's demographics including the participants Name of department, sex, and age.

Section B was Social Stigma scale developed by Michael et al., 2007). The instrument contains 28-items which are made up of a three-factor structure: the first concerns discrimination, the second disclosure and the third potential positive aspects of mental illness. The items were scored on a five-point Likert response pattern (1=Disagree, 2=Strongly Disagree, 3=Neither Disagree or Agree, 4=Agree and 5=Strong Agree). The proof of reliability of Cronbach's alpha (α) = 0.87. Cronbach's alpha for the first sub-scale (discrimination) was 0.87; for the second (disclosure) 0.85 and for the third (positive aspects) was 0.64. By correlating the subscales of social stigma, Michael et al., (2007) obtained concurrent validity coefficients of 0.87. Scores on the Self-Esteem Scale (high score indicates high self-esteem) were negatively correlated with the overall Stigma Scale core and sub-scale scores.

Section C was the Type A personality Behaviour Pattern Scale developed by Perlman et al., (1984). The scale has 10-items with all the items being directly scored. The scale was rated on a four-point Likert form A-D, where A= not at all, B = to some extent, C = to a great extent, and D = to a very great extent). The construct reliability Cronbach's alpha (α) coefficient of the Type A personality behaviour pattern scale was 0.71 for men and 0.70 for female. To assess the validity of Type A personality scale, content validity was established by ensuring that the scale items were based on a thorough review of the literature related to type A personality.

Section D was the Drug Use questionnaire developed by Harvey (1982) which was used to assess substance use. The instrument contains 20-item, the instrument elicits response concerning information about participants' potential involvement with drugs not including

alcoholic beverages during the past 12 months. The response categories for the instrument are set up on a checklist form- "True" or "False". "True" was assigned the value of 2, and "False" was assigned a value of 1. The instrument has a high Cronbach's (α) alpha reliability coefficient of 0.79, indicating a high reliability of the scale. Also, inter-rater reliability was conducted for the scale. Harvey (1982) provided construct validity evidence for the scale, showing a significant correlation of r=0.103 (p=0.001, two-tailed).

The three instruments were combined into a questionnaire, and their suitability was pilot-tested. The reliability analysis yielded Cronbach's alpha (α) and Guttman Split-Half coefficients for each scale: social stigma scale (α=0.92, Guttman Split-Half=0.91), Type A personality scale (α=0.72, Guttman Split-Half=0.61), and substance use scale (α=0.86, Guttman Split-Half=0.82).

Procedure

Approval was sought from relevant authorities in the institutions that participated in this study. Once approval for the study was granted, the participants were individually approached to solicit for their consent after explaining the purpose of the study. The researchers personally approached the participants and administered the questionnaires to them. They were also instructed to respond to the questionnaire as sincerely as possible. The participants were assured of their anonymity and confidentiality. The three hundred and ninety-seven (397) copies of the questionnaires administered were also retrieved immediately after completion for coding and eventually the data analysed. The coded data were saved in formats that guaranteed the privacy and confidentiality of the participants' information.

Statistical Analysis

Descriptive statistic, Pearson Product Moment Correlation (PPMC), independent t-test, and the multiple regression were computed. Descriptive analyses were computed to understand the characteristics of the sample, while correlation analyses using Pearson Product Moment Correlation (PPMC) was used to determine the relationship between the demographics, Type A personality trait, substance use and the dependent variable (perceived social stigma). The independent t-test and multiple regression permitted for testing independent and joint influence of the variables.

RESULTS

The data analyzed revealed that 202 (50.9%) participants were males and 195 (49.1%) were females. Ninety-five (23.9%) participants were below the age of 18, 181 (45.6%) of them were between 19 and 25 years, 82 (20.7%) were between 26 and 32 years, 29 (7.3%) were between 33 and 40 years while the remaining 10 (2.5%) were 40 years and above. As regards the type of institution, 34 (8.6%) participants attended private schools, and 363 (91.4%) participants

attended public schools. In terms of birth order, 116 (29.2%) participants were Firstborns, 132 (33.2%) participants were the second child, 89 (22.4%) participants were the third child, and the remaining 60 (15.1%) participants are of a different order. Lastly, the descriptive analysis showed that 136 (34.3%) of the participants were from polygamous homes, and the remaining 261 (65.7%) were from monogamous homes.

It was shown that perceived social stigma (Table 1) had a significant positive relationship with substance use (r = 0.51; p<.001), but a significant negative correlation was obtained with Type A personality (r = -0.22; p<.001) and Type of home (r = -0.19; p<.001). It was revealed that Type A personality had a significant negative relationship with substance use (r = -0.17; p=.001). It was also revealed that substance use had a significant negative correlation with the Type of home (r = -0.17; p=.001). Also, Table 1 showed that age group had a significant positive relationship with birth order (r = 0.15; p=.003). While, type of institution had a significant positive relationship with the Type of home (r = 0.14; p=.005). Lastly, birth order had a significant negative relationship with the Type of home (r = -0.11; p=.03).

Hypotheses Testing

To test the hypotheses, the independent *t*-test and multiple regression statistics were used to analyze the data obtained in this study. The hypotheses formulated were tested to know the independent and joint influence of the independent variables on the dependent variable. The first hypothesis for the study sought to test if Type A personality will significantly predispose the participants to perceive social stigma. The independent t-test was used to test this hypothesis. Table 2 presents results on the influence of Type A personality on perceived social stigma among the participants.

The result of the analysis revealed that there exists a significant influence of Type A personality on social stigma among the participants [t (395) = 5.07; p<.001]. The table also showed that participants who score low on Type A personality have a higher mean score *on social stigma*
This supports the stated hypothesis; the hypothesis was therefore accepted.

($\overline{X}$) =74.06; *sd* = 22.41).

DISCUSSION

The concept of perceived social stigma has been well discussed in this study putting together past empirical studies and theories that revealed its true meaning. The results of the data analyzed to test the three hypotheses in this study are hereby discussed. Findings by researchers (Anderson et al., 2018; Jones & Smith, 2019; Lee et al., 2020) lends credence to the findings for Hypothesis 1 which sought to explore if Type A personality will be susceptible to perceived social stigma. It is probable, to conclude, that individuals that score high on the Type A personality trait (high task-oriented, competitive, ambitious) and

Results of correlation among all variables

A zero-order correlation was conducted to examine the pattern of relationships that exist among all the variables measured in the study. The minimum value, maximum value, range, mean, and standard deviation of all the variables were all computed (Table 1).

Table 1: Correlational Matrix showing Means (M), Standard Deviations (SD), and Correlations among all variables

	Variable	1	2	3	4	5	6	7	8
		Social Stigma	Type A Personality	Substance Use	Gender	Age	Type of Institution	Birth Order	Type of Home
1	Social Stigma	1.00							
2	Type A Personality	-0.22**	1.00						
3	Substance Use	0.51**	-0.17**	1.00					
4	Sex	-0.04	-0.03	-0.04	1.00				
5	Age	0.02	0.01	0.06	-0.02	1.00			
6	Type of Institution	-0.04	0.02	0.07	-0.02	0.04	1.00		
7	Birth Order	0.04	-0.01	-0.01	-0.04	0.15**	0.08	1.00	
8	Type of Home	-0.19**	0.02	-0.17**	0.05	-0.01	0.14**	-0.11*	1.00
	Range	104.00	18.00	20.00	na	Na	na	na	na
	Minimum	28.00	6.00	0.00	na	Na	na	na	na
	Maximum	132.00	24.00	20.00	na	Na	na	na	na
	Mean	79.21	14.88	6.92	na	Na	na	na	na
	Standard Deviation	22.56	3.54	4.71	na	Na	na	na	na

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 2: Summary of independent t-test showing the differences in Type A personality on perceived social stigma

Dependent	Type A personality	*n*	$\overline{??}$	*Sd*	*df*	*t*	*p*
Social Stigma	Low (<14.88)	183	85.22	21.26	395	5.07	<.001
	High (>=14.88)	214	74.06	22.41			

with other connected behavioural traits might result to heightened pressures which can make the individuals to be prone to being stigmatized. It is important that behavioural experts assists the vulnerable groups (university undergraduates) from labelling in society to avoid the consequent devasting effects on their emotional and psychological wellbeing.

Hypothesis 2 which sought to examine if substance use will predispose the participants in this study to perceived social stigma was also accepted. There is plethora of studies, for instance (Corrigan et. al, 2010; Keyes et al., 2010; Link, et.al, 2001), has corroborated the findings of this study. Public stigma, such as negative attributions, can lead individuals who use substances to be labeled as dangerous. Internalizing stigma can decrease self-esteem and self-worth through self-labeling, leading individuals to seek coping mechanisms, such as substance use, which do not effectively address perceived social stigma.

Hypothesis 3 which states that Type A personality and substance use will jointly determine perceived social stigma was confirmed. The findings of this study supported research findings (Bogg & Vo, 2018; Hiemstra, et al., 2017; Kolla et al., 2018) which had earlier found that Type A personality traits were positively associated with substance use, suggesting that individuals with Type A personality may be more prone to engaging in substance use behaviors. The study also found that substance use was associated with higher levels of perceived social stigma, indicating that individuals who use substances may be stigmatized by others. These studies suggest that individuals with a Type A personality may be more susceptible to social stigma related to substance use compared to individuals with a Type B personality.

Drawing from the evidence and perceptions derived from existing literature on the relationships among Type A personality, substance use, and perceived social stigma, as well as the findings of this study, we can conclude that individuals who experience perceived social stigma also encounter social discrimination, labeling, and prejudice. These experiences have detrimental effects on such individuals, considering the psychological, social, and behavioral challenges associated with

The second hypothesis stated that substance use will have a significant influence on Perceived Social Stigma. The independent *t*-test was also used to test the hypothesis and the result is presented in Table 3.

Table 3: Summary of independent *t*-test showing differences in substance use among the participants on perceived social stigma

Dependent	Substance Use	*n*	??	*Sd*	*df*	*t*	*p*
Social Stigma	High (>=6.92)	215	89.43	16.87	395	11.27	<.001
	Low (<6.92)	182	67.13	22.49			

The result of the analysis revealed significant influence of substance use among the participants on perceived social stigma [*t* (395) = 11.27; *p*<.001]. The table also showed that participants who scored high on the drug use scale had a higher mean score on social stigma ($\overline{X}$=89.43; *sd* = 16.87) when compared to participants who had a low score on social stigma ($\overline{X}$ = 67.13; *sd* = 22.49). This supports the stated hypothesis; it was therefore accepted.

The third hypothesis stated that personality type and substance use will jointly determine perceived social stigma, this hypothesis was tested using the Multiple Regression analysis . Table 4 was used to present the result of multiple regression analysis for the joint influence of Type A personality and substance use on perceived social stigma among the participants.

Table 4: Summary of multiple regression showing Type A personality and substance use as predictors of perceived social stigma

Criterion	Predictor	*β*	*T*	*P*	*R*	R^2	*F*	*p*
Social Stigma	Type A Personality	-0.14	-3.24	<.001	0.526	0.277	75.48	<.001
	Substance Use	0.48	11.13	<.001				

It was revealed that Type A personality and substance use significantly and jointly predicted perceived social stigma (R = 0.526; R^2 = 0.277; F (2,394) = 75.48; p<.001). Furthermore, the predictor variables (Type A personality and substance use) jointly accounted for about 27.70% variance in perceived social stigma. In addition, Type A personality ($\hat{a}$ = -0.14; t = -3.24; p<.001) and substance use ($\hat{a}$ = 0.48; t = 11.13; p<.001) were found to have significantly predicted perceived social stigma independently. This confirms hypothesis three; hence, the hypothesis was retained.

being stigmatized. In summary, while some studies suggest a potential connection between Type A personality traits, substance use, and perceived social stigma, these findings are not consistently supported across various studies. Therefore, we recommend further research to gain a deeper understanding of the intricate interplay between these factors and their implications for individuals who experience perceived social stigma. Additionally, it may be beneficial to explore the utilization of treatment options offered by psychologists, counselors, and experts in behavioral and substance use rather than seeking alternative approaches.

Based on the insights gained from this research, the following recommendations are proposed for practical implementation:

Firstly, undergraduate students should abstain from the use of alcohol, marijuana, and other psychoactive substances because of the social, health, and financial repercussions associated with them.

Secondly, due to the harmful impact of social stigma on the mental and emotional well-being of individuals, society should refrain from labeling, discriminating against, and prejudicing vulnerable individuals. This can be accomplished through policy advocacy and strategic engagement with relevant stakeholders.

Finally, individuals diagnosed with Type A personality traits or those who engage in the misuse of alcohol and psychoactive substances should actively seek help and support.

Conclusions

The study comprehensively explores perceived social stigma by integrating past empirical studies and theories. The analysis of data to test three hypotheses is detailed. Hypothesis 1, examining Type A personality's susceptibility to perceived social stigma was affirmed by works from Anderson et al., Jones & Smith, and Lee et al. Those with high Type A traits may experience societal pressures, necessitating intervention by behavioral experts, especially among vulnerable groups like university undergraduates, to alleviate potential emotional and psychological consequences. Hypothesis 2, investigating the link between substance use and perceived social stigma, is affirmed. Studies by Corrigan et al., Keyes et al., and Link et al. corroborate the findings, indicating that public stigma may label substance users as dangerous, leading to reduced self-esteem and reliance on ineffective coping mechanisms like substance use. Confirming Hypothesis 3, suggesting joint determination of perceived social stigma by Type A personality and substance use, the study aligns with prior research by Bogg & Vo, Hiemstra et al., and Kolla et al. This implies that individuals with Type A traits might be more prone to substance use, consequently facing increased social stigma. These findings imply a potential vulnerability of Type A individuals to substance use-related social stigma compared to those with Type B

personalities.

Drawing from evidence and insights from existing literature and the study, it is concluded that individuals facing perceived social stigma often encounter social discrimination, labeling, and prejudice, leading to adverse psychological, social, and behavioral effects. Although some studies suggest connections between Type A traits, substance use, and perceived social stigma, further research is needed for a deeper understanding of these dynamics and implications. Additionally, exploring treatment options provided by psychologists, counselors, and behavioral experts may be more beneficial than alternative approaches.

Based on the findings and limitations of the current study and aim to contribute to the advancement of knowledge in the field, we offer suggestions for future directions Overall, these suggestions serve as a roadmap for ongoing and future investigations to build upon and refine existing knowledge.

1. Conducting longitudinal studies will allow researchers to track how perceived social stigma evolves over time among individuals with Type A personality traits and substance use behaviors. This approach can provide valuable insights into the causal relationships and underlying mechanisms shaping these dynamics.

2. Designing and implementing intervention programs specifically targeted at reducing perceived social stigma in individuals with Type A personality traits and substance use behaviors is crucial. Evaluating the effectiveness of these interventions will help in understanding their impact on psychological well-being and attitudes towards stigmatization.

3. Investigate the influence of cultural and contextual factors on the experience of perceived social stigma. Understanding cultural variations in stigma perception and assessing the effectiveness of interventions across diverse cultural contexts will contribute to more tailored and globally relevant strategies.

4. Explore the intersectionality of Type A personality traits, substance use, and other demographic or psychological factors. By considering factors like gender, socioeconomic status, and their interplay, researchers can gain insights into how multiple identities contribute to unique experiences of stigma, informing more nuanced and targeted intervention strategies.

5. Investigate alternative treatment approaches beyond traditional methods. Exploring options like peer support groups, community-based interventions, and technology-assisted strategies can provide a comparative understanding of their effectiveness in addressing perceived social stigma among individuals with Type A personality traits and substance use behaviors.

These suggestions collectively aim to deepen the understanding of the complex relationships involved, leading to more effective interventions and policies that support the well-being of individuals while working towards reducing the harmful effects of social stigma.

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