THE MEDIATING ROLE OF DRINKING
MOTIVES ON THE LINK BETWEEN ALCOHOL
USE AND PERSONALITY FACTORS

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ABSTRACT

Culture, purpose, motive, or even the person itself has an essential part on how an individual
treats a substance. Drinking motives have been known to affect the alcohol use of people and how
personality factors influence alcohol consumption. However, this study investigated the
mediating effect of drinking motives between the two variables. This association was investigated
based on perspectives of college students from different colleges and universities within Calamba
City, Philippines through Partial Least Square-Structural Equation Modeling (PLS-SEM). The
findings uncovered that extraversion and alcohol use have a positive significant relationship,
whereas neuroticism and alcohol use are inversely related. Meanwhile, extraversion and
neuroticism are directly related to drinking motives like the relationship between drinking
motives and alcohol use. Conscientiousness, on the other hand, has no significant effect on alcohol
use and drinking motives. Given that each variable has a direct effect towards one another, this
may imply that different drinking motives, distinguished personality traits, and alcohol use are
interrelated. The study also revealed that drinking motives have no intervening effects on the
link between identified personality traits and alcohol use. The reason why further investigation
on other factors that might lead to mediation between personality factors and alcohol use is
recommended.

Keywords: Alcohol use, conscientiousness, drinking motives, extraversion, mediation, neuroticism,
structural equation modeling.

INTRODUCTION

Drinking alcohol is regarded as a recreational activity. People do not drink just because they want
to; they are either internally or externally driven to drink. Generally, drinking alcohol is seen as
it is, and people who are doing this activity more frequently than other people are being given
labels they never called for. What they do not know is how this act is being influenced by other
factors often overlooked: the motive behind it and their personality. At any age, place, or reason
behind, people drink alcohol. This is why studies focusing on this matter also have great importance to human knowledge.

Consuming alcohol has frequented celebrations at any place, amount, variation, and volume depending on the culture, purpose, motive, or the person itself. Regarding this, Perera et al. (2011) found out that alcohol is one of the most generally used and mistreated substances among college students. Alcohol use significantly intensifies between the age group of 12 to 21, and it is the most prevalent occurrence of drinking that can have a detrimental effect on an individual’s psychological health. Considering this, personality may be conceptualized as a component caused by alcohol consumption. Moreover, studies conducted in humans and animals were found to have continuing acquaintance to alcohol, which causes changes in the activity of reproductive tissues and results in severe asynchronies of body clock systems; in the same manner, clock genes influence alcohol use and abuse behavior.

According to Rachdaoui’s study in 2013, alcohol consumption has harmful effects on male reproductive function. Both acute and chronic alcohol use have been linked to lower levels of testosterone, as well as raised levels of follicle-stimulating hormone (FSH), luteinizing hormone (LH), and estrogen. This can result in lower semen volume, sperm count, motility, and morphologically normal sperm for alcoholic individuals compared to non-alcoholic individuals. Even without liver disease, alcohol abuse can lead to hypogonadism, with alcoholic men diagnosed with cirrhosis having high levels of circulating estradiol and estrone. Alcohol increases the activity of the enzyme aromatase, which converts androgens into estrogens, especially in the liver. Liver disease may also cause a decrease in bioavailable insulin-like growth factor I (IGF-1), which can contribute to hypogonadism. Sutin and colleagues (2013) suggest that inflammatory processes may contribute to depression and illness, which can limit an individual’s ability to socialize and be active. Savage et al (2023) propose that drinking motives can indicate different risk processes associated with alcohol misuse. Therefore, it is expected that the development of diseases would be associated with increases in neuroticism and decreases in extraversion and openness.

Moreover, the decrease in the Central Serotonin Function (CNS) is identified to those who have risk and experienced alcohol consumption, and intoxication. Aside from this, response to alcohol by individuals are found to be determined genetically. This is not solely the basis, though. Hereditary connection on subjective alcohol responses was found to be significantly associated, at portions, with biological influences and gene-environment interaction on a range of personality/symptomatology variables and measurements. It was also found to prove how personality affects the alcohol use, and this personality factor is neuroticism. This stated that those with higher neuroticism tend to perform worse when they drink alcohol compared to the others.

Personality is mostly known to define who people are as a person in a holistic way, which causes people to be foreseen. But aside from this, personality has parts which are essential to be acknowledged so that people would know and understand that even drinking motives are affected by it. This affects drinking motives in terms of several factors: extraversion, conscientiousness, and neuroticism. According to Galbicsiek’s research in 2019, people consume alcohol to fit in and make new friends, or to cope with negative emotions. These motives fall into four categories: enhancement, social conformity, coping, and conformity. Additionally, drinking motives can influence human behavior and perception. This study highlights the impact of drinking motives on personality factors, specifically extraversion, conscientiousness, and neuroticism, which are affected by alcohol use. The study explores how drinking motives mediate the relationship between these personality factors and alcohol use.

According to O’Hara and colleagues (2015), drinking motives, which refer to an individual’s reasons for consuming alcohol, have become a popular approach to better understand drinking
behaviors, particularly among college students. The model of drinking motives has two dimensions, valence (approach vs. avoidance) and source (internal vs. external), which can be combined to generate four motives: (1) social motive, which drives people to improve social interactions through parties or drinking gatherings; (2) enhancement motive, which aims to enhance one's self-view and be perceived more positively; (3) coping motive, which is typically used to escape unpleasant emotions and negative thoughts; and (4) conformity motive, which involves drinking to maintain peer relationships and acquire social approval (Mackinnon et al., 2017). It was suggested in the study of Waddell and colleagues (2022) that consumption of alcohol driven by coping motives with heightened cravings results to decrease affect negatively. In contrast, individuals consuming alcohol crave more alcohol when driven with higher coping motives when either negative or positive affect increases.

Drinking motives have been known to affect the alcohol use of people, and this has been supported by Cooper (1994) when she examined adolescents’ motivation behind alcohol use. She demonstrated that, across subgroups of gender, race, and age, patterns of alcohol consumption and abuse were primarily related invariantly to drinking motives. People, especially college students, are perceived to be consuming alcohol often in dangerous amounts, and this has been expounded by a study of O’Hara et al. (2015) where she found out that social and conformity levels are still consistent along age groups. Social motives, which mostly depend on the companion, are found prominent in college students. Considering this, information regarding these phenomena in the Philippine setting is much needed to spread information for people to open their minds and understand why these are occurring and what causes them.

Personality is a part of people’s life—a part of people’s actions and decisions even in drinking motives. Stewart and colleagues (2001) stated that both internal (coping and enhancement) and external (conformity and social) drinking motives can predict people's drinking behaviors. The study found that those who were motivated by enhancement were more likely to exhibit impulsive, irresponsible behavior and have low self-discipline, specifically low conscientiousness. These traits may contribute to heavy drinking. Of one of the main goals of this study is to reframe drinking from being perceived only as a vice to being recognized as a coping mechanism. The way personality is taught in academia, especially in the field of psychology, is also one thing to be affected by the outcome of this study. Drinking motives will be elaborated along with the personality factors, and the alcohol use will pave its way into new understanding of this knowledge.

Previous studies (Kuntsche, 2008; Littlefield et al., 2010; Curcio and George, 2011; Kuntscher et al., 2015) conducted about alcohol use and the mediating factors behind it are conducted in many other countries but seldom in the Philippines. For countries like the Philippines, studies like these are not commonly found, hence one of the reasons this study was conducted. Aside from this, these studies focused on how drinking motives affect the personality is also considerably low. Knowing that this matter is important in the area of Psychology, for the general public, the study was made.

Kuntsche and colleagues (2008) conducted a mediation study which demonstrated that drinking motives play a crucial role in the relationship between personality and alcohol use among Swiss college students. Given that college students are at an age where they are transitioning to a new phase of life, they are more likely to value drinking motives related to enhancement, coping, socializing, and conformity. As a result, understanding the link between personality, drinking motives, and alcohol use is particularly important for this age group. This is why the researchers of this study also chose to focus on college students.

Drinking and consuming alcohol has long been viewed in different lenses. Labels and judgements which were never called for are one of the noticeable results of people who are failing to understand the underlying factors behind this. Conducting this study was chosen to change these
perceived norms surrounding the act of drinking alcohol, specifically the drinking motives and personality factors of college students.

LITERATURE REVIEW

Read, et al. (2011) found out that Cox and Klinger have previously studies and proposed a theoretical basis for drinking motives which acknowledges the interaction among these motives and unique psychosocial conditions. These researchers believed that characteristics including mood and mood-related expectancies are linked to the motivation to consume alcohol, and that they played a vital role in determining drinking consumption. The study also found that coping motives play a mediating role in the relationship between negative affect and desensitization expectations regarding alcohol consumption, while enhancement motives mediate the relationship between mental or emotional nourishment factors and the consequences of alcohol use.

Piañar (2020) conducted a study to explore the history of alcohol use in the Philippines and its cultural significance in social gatherings and occasions. The study found that even prior to the colonization period, Filipinos had a long-standing tradition of alcohol consumption which was considered spiritual and symbolic. It was an integral part of their way of life and was often viewed as a religious ritual paying tribute and devotion to God. As time went by, this practice became much more well-known as a feature of any large gatherings or occasions, and it was extensively exercised in a variety of social contexts including fiestas, festivals, birthday celebrations, work successes, and even in leisure pursuits. The same study presented information from the Department of Health - University of the Philippines (DOH-UP) and World Health Organization (WHO) that Filipinos’ drinking consumption ranges from excessive to frequent or rarely drinkers, particularly lambanog as the second most consumed alcohol. The studies mentioned are evidence that explains Filipino personality in connection with alcohol consumption.

Additionally, it was mentioned that Filipinos’ overall drinking consumption is a stress-relieving and self-satisfying exercise. Pagkatipunan, (2017) asserted that the use of alcohol was statistically more prevalent among college students aging 16 to 20 years. Since the notion of drinking motives assumes that individuals drink to achieve definite beneficial results, it became prevalent among young adults as they become more exposed in exploring the reality and identity confusion.

Incentive Theory of Motivation

The incentive theory of motivation, as posited by Skinner (as cited in Vi and Thuy, 2020), suggests that external motivation plays a significant role in driving human behavior. Additionally, studies have found that external factors can influence behavior and contribute to internal motivation (Vi and Thuy, 2020; Cameron and Pierce, 1994; Arnold, 1976). In the context of alcohol use, external factors such as drinking motives and internal factors such as personality can both influence an individual's behavior.

In the 1950s, Hull's incentive motivation theory proposed that the strength and intensity of behavior are determined by acquired knowledge and the current level of drive (Cox and Klinger, 1988). However, later studies showed that this assumption needed modification to account for motivational models of alcohol use. Alcohol alters the reaction of animals based on the incentives presented, highlighting the importance of understanding the relationship between incentive motivation and alcohol use (Cox and Klinger, 1988).

The stimulus-response theory, first explained using Pavlovian conditioning with dogs as participants, suggests that certain stimuli elicit specific responses (Basri et al., 2020). In the
context of the present study, drinking motives serve as the stimulus and alcohol consumption as the response. This theory suggests that casual drinkers may consume more alcohol when they are more motivated to do so by their drinking motives.

Meanwhile, Bandura's (1971) Social Learning Theory proposes that external reinforcement does not solely drive human behavior, as anticipated consequences play a significant role in regulating behavior. Despite awareness of the positive and negative effects of alcohol consumption, individuals are still motivated to drink alcohol, potentially due to their previous experiences and beliefs regarding the outcomes of their behavior.

**Alcohol Use**

Higley et al. (2001) found out that decreased Central Serotonin Function (CNS) is typically observed in individuals who are at risk for or who have experienced alcohol consumption and intoxication. For instance, young abstinent alcoholic men and women have decreased Central Serotonin Function 5-HIAA concentrations compared to healthy individuals. Also, the Central Serotonin Function 5-HIAA levels are substantially lower in depressed patients with first-degree alcoholic relatives. These claims were supported by Viken et al. (2003), postulating that the subjective response to alcohol is genetically determined, and genetic influences on perceived alcoholism and personality are substantially related. Furthermore, the hereditary connection on subjective alcohol responses was found to be significantly associated, at portions, with biological influences and gene-environment interaction, on a range of personality/symptomatology variables and measurements.

A study by Kuntsche, et al. (2015) postulated that historical circumstances, current events, projected effects, and drinking incentives all have a significant contribution in determining alcohol use. Also, the genetic inclination to respond to alcohol as well as personal attributes have all been linked to biochemical responsiveness to alcohol based on scientific concepts. Alcohol consumption can lead to cognitive destructions and neurotransmitter irregularities, which can result in changes in personality and behavior throughout time. It is also linked to an increased risk of chronic conditions like dementia and acute cognitive deficits, which are linked to a decline in conscientiousness, as asserted by Luchetti et al. (2018). Accordingly, light to moderate alcohol intake has been associated with various positive effects such as stress reduction, improved cognitive performance, mental function, fitness, and health, whereas heavy drinking has been linked to negative effects. However, drinking motives have also been found to be associated with alcohol use. O'Hara and Tennen (2015) assert that drinking motives are crucial psychological determinants of drinking behavior and play a vital role in predicting an individual's alcohol consumption levels. It is noteworthy that drinking motives may differ among individuals and may include enhancement, coping, social, and conformity reasons. Enhancement motives refer to drinking for the purpose of increasing pleasure or having a good time, whereas coping motives involve drinking to alleviate negative emotions. Social motives are related to drinking in social situations, and conformity motives are associated with drinking to fit in with a particular group. These motives, in turn, may influence an individual's level of alcohol consumption.

The research conducted by Cooper (2015) focused on examining the correlation between drinking motives and alcohol consumption in college students. The study specifically targeted first-year university students aged between 18 to 20 years old. As a result, the study posited that among various interpersonal drinking situations, the antecedents of alcohol consumption and drinking motives, specifically social and enhancement motives, were linked to higher alcohol behavioral inclination. Significantly, in both the yielding and drinking game situations, coping motives were also linked to motivation to drink alcohol. This is consistent with the study by McDevitt (2015) which states that coping motives were linked to negative effects of alcohol use. Prior studies
exploring the developmental relationship underlying drinking to cope motivations and alcohol use has found similar results.

Moreover, LaBrie et al.’s (2011) research study, which explored the drinking motives of Asian college students in Caucasia, provided further evidence to support the idea of a significant correlation between drinking motives and alcohol consumption. This study aligns with previous literature that emphasizes the strong association between alcohol use and drinking motives, indicating that individuals with higher drinking levels based on two internal motives, enhancing and coping, are more likely to experience negative alcohol-related outcomes. In addition, there are studies that examine alcohol use as an independent variable for mediation. Urban et al. (2008) found that alcohol use played a moderate but meaningful role in mediating the relationship between sensation seeking, defined as a personality trait characterized by a desire for new experiences and willingness to take risks in pursuit of them, and drinking motives. These findings suggest that alcohol use is a flexible variable that is linked to personality factors and various drinking motives.

**Personality Factors**

Personality is recognized to help determine the level of alcohol use of an individual. However, Lim (2012) posited that alcohol has an impact on more than just physical wellbeing, hence, it also has an impact on emotional and psychological health stability. Moreover, both beneficial and harmful effects have been reported and observed depending on the amount of alcohol (Immonen, 2011). Clark et al. (2012) indicated that gender and conscientiousness concerning cognitive self-regulation were found to be predictive of periodic alcohol use. The findings corroborate previous studies which highlight the significance of low conscientiousness and strong positive beliefs regarding cognitive self-control as contributing factors in excessive drinking behavior. Certain personality traits have been linked to a higher probability of engaging in alcohol consumption.

On the other hand, Hudson et al. (2015) found out that personality traits may influence individuals more susceptible to alcohol use by increasing heavy drinking motivations. Such drinking motivations have been linked to excessive alcohol use, which included the desire to drink to relieve unpleasant feelings, prevent social and public costs, and boost one’s own positive emotions and perspective about self. Personality risk variables were mostly linked to poorer reinforcement factors for drinking. Furthermore, these relationships appeared to be unique and conceptually significant when it comes to coping and conformity motives. As a result, drinking may be influenced by an internal ought to cope with depressive emotions in individuals, as well as a desire to alleviate negativity. To further investigate, Bruce and colleagues (2013) proposed that these personality traits are not the only variables that have a notable correlation with drinking behavior and motives. There are types of personality like Type D which was scientifically recognized and characterized as the phenomenon of negative emotionality and social comparison that shows an important association to the consumption of alcohol and alcohol dependence.

When it comes to clinical implications in students’ learning, Doherty and Nugent (2011) found out differing levels of personality factors that are associated with other variables that can explain students’ behavior. According to previous research (Terracciano et al., 2008), individuals with low levels of conscientiousness tend to exhibit higher levels of neuroticism and lower levels of extraversion, which in turn can lead to greater susceptibility to stress. Also, Mezquita (2016) asserted that published investigations utilizing a standard measure of coping motives found that neuroticism or weak emotional stability influenced coping drinking motives. Throughout this investigation, there was evidence that conscientiousness may be beneficial during the primary years of higher education yet may be detrimental afterwards, except if extraversion provides protection. Moreover, personality-based therapies focused on personality-based motivational
connections to excessive alcohol drinking have now been proven to be effective in young university students; anxiety sensitivity-based therapy has been demonstrated to diminish coping objectives.

Mosher et al. (2017) found that gender and alcoholism are contributing variables that confirm nonalcoholic individuals are more likely to drink for enhancement and social motives than coping and conformity, and this relationship is consistent across genders. This study reveals a connection between personality and alcohol use that can be associated with drinking motives. Additionally, prior research has examined the relationship between alcohol use and personality factors, specifically the three subdimensions of extraversion, conscientiousness, and neuroticism. These sub-dimensions are commonly used to explore the relationship between alcohol use and drinking motives, and the present study utilizes them as well to build on existing supporting research for the potential outcomes.

**Drinking Motives**

According to Mackinnon et al. (2017), drinking motives differ among countries, but social motives are prevalent in collectivist cultures. This is because collectivist cultures emphasize shared goals, while individualistic cultures prioritize autonomy. As a result, people from collectivist cultures are more likely to drink for social and conformity reasons than those from individualistic cultures. O'Hara et al. (2015) noted that drinking motives play a crucial role in predicting alcohol consumption levels. They classified drinking motives into affective dimensions and different approaches, such as internal (enhancement) and external (social) motives. Higher levels of alcohol consumption were linked to greater acceptance of enhancement, social, and coping motives, while lower levels of alcohol use were associated with increased conformity motives.

Anderson et al. (2016) found that greater alcohol behavioral willingness was associated with social and enhancing goals across distinct peer drinking contexts. On the other hand, coping motives were more commonly associated with drinking in smaller peer groups rather than large gatherings or parties. Stewart et al. (2001) asserted that drinking motives, such as enhancement, coping, social, and conformity motives, have a significant mediating role in the link between personality dimensions and alcohol use. Mohr et al. (2018) also found that enhancement and coping motives were the two internal motives that reliably predicted an individual's drinking characteristics, while social and conformity motives influenced external factors.

**HYPOTHESIS DEVELOPMENT**

According to O'Hara et al. (2015), alcohol consumption and withdrawal may be influenced by an individual's health, lifestyle, and well-being as they age, as well as genetic factors. Additionally, alcohol has the potential to affect personality development in various ways. Luchetti et al. (2018) suggest that the link between alcohol use and changes in personality is not as clear, especially among older individuals compared to young adults. The study utilized the five-factor model personality traits to examine the impact of alcohol use and addiction histories on personality changes, providing evidence of a correlation between personality factors and alcohol consumption. Hudson et al. (2015) found out that personality traits may influence individuals more susceptible to alcohol use by increasing heavy drinking motivations. Such drinking motivations have been linked to excessive alcohol use, which included the desire to drink to relieve unpleasant feelings, prevent social and public costs, and boost one's own positive emotions and perspective about self. Furthermore, Mohr et al. (2018) posited that various theoretical frameworks have explained the different drinking motivations regarding people's tendency to drink alcohol to release stress or, more extensively, to relieve or escape uncomfortable emotional
and psychological experiences. In response to positive factors, an individual’s consumption of alcohol was more intimately connected with drinking because they love the experience and the good atmosphere, they get rather than drinking to enjoy a gathering or a party.

Furthermore, a study focused on one of the Big Five Personality which is neuroticism. The Neuroticism Questionnaire was adopted as a reliable indicator along with its previous studies linking it to alcohol issues. However, even if it is also a measure of dispersed psychiatric symptoms, it is not unexpected that it demonstrates phenotypic and genetic relationships with alcohol consumption. According to this study, those with higher levels of neuroticism had worse performance when they drink alcohol which is consistent with other related literature of the study. From these studies, the following hypotheses were formulated:

\[ H1a: \text{There is a positive significant relationship between extraversion and alcohol use.} \]
\[ H1b: \text{There is a positive significant relationship between conscientiousness and alcohol use.} \]
\[ H1c: \text{There is a positive significant relationship between neuroticism and alcohol use.} \]

According to Mackinnon et al. (2017), it is still essential to consider the internal or external nature of drinking motives in current motivational models. Hudson et al. (2015) suggested that personality risk variables were strongly related to poorer reinforcement factors for drinking, particularly coping and conformity motives, which indicates that drinking may be influenced by an internal need to cope with negative emotions or a desire to alleviate negativity. Bruce et al. (2013) found that individuals with Type D personalities, characterized by negative emotionality and social comparison, tend to drink for both internal and external reasons, indicating that they use alcohol to cope and fit in with others. Furthermore, Kuntsche et al. (2008) argued that personality factors reflect biologically-based systems that affect people's responsiveness to positive and negative affective cues. Extraverted individuals are more likely to use alcohol for enhancement motives, while those with high neuroticism tend to drink for coping motives. From these studies, the following hypotheses were formulated:

\[ H2a: \text{There is a positive significant relationship between extraversion and drinking motives.} \]
\[ H2b: \text{There is a positive significant relationship between conscientiousness and drinking motives.} \]
\[ H2c: \text{There is a positive significant relationship between neuroticism and drinking motives.} \]

Kuntsche et al. (2008) conducted a study among Swiss college students and found that drinking motives are significantly associated with personality and alcohol use. The study revealed two sub-variables of drinking motives: enhancement and coping motives, which were linked to personality factors such as extraversion, conscientiousness, and neuroticism. Drinking alcohol for enhancement motives is positively associated with extraversion and conscientiousness, while coping motives are linked with alcohol use and neuroticism. The study suggests that interventions or treatments targeting specific drinking motives may be more effective in reducing harmful drinking among young adults who score high on certain personality traits that are resistant to change.

Stewart et al. (2001) further supports this claim by stating that coping motives play a significant mediating role in the relationship between neuroticism and drinking problems. Enhancement-motivated drinkers tend to be impulsive and lacking in self-management, which correlates with specific personality dimensions such as low conscientiousness. On the other hand, those who drink for coping motives tend to be worried, unhappy, aggressive, self-conscious, and fragile, which are consistent with prior findings that anxiety responsivity is a relatively low characteristic of neuroticism and is indicative of coping-motivated alcohol consumption. From these studies, the following hypothesis were formulated:

\[ H3: \text{There is a positive significant relationship between the drinking motives and alcohol use.} \]
Consistent to the preceding study, Littlefield et al. (2010) found out that when adjusting for enhanced growth characteristics, coping motives retained significant mediators of the relationship involving neuroticism and drinking consumption. Furthermore, analyses indicate that impulsivity as an enhancing motive continued to be a major mediator connecting neuroticism and alcohol use. According to Curcio and George’s (2011) study, personality traits such as impulsivity and its facets, including sensation seeking and negative urgency, are significant predictors of alcohol use and related concerns through various pathways, including drinking motives. Specifically, they found that the relationship between sensation seeking and alcohol use is mediated by social motives, while the relationship between negative urgency and alcohol-related problems is mediated by coping motives. The authors also noted that difficulty in inhibiting approach behaviors has been linked to the desire for alcohol-related benefits and the onset of alcohol use.

Furthermore, enhancement motives were found to mediate the relationship between sensation seeking and alcohol use, although drinking motives had a minor impact. The study's participants were university students, with younger and residential students showing a higher risk of heavy alcohol use. Kuntsche et al. (2015) conducted a study that focused on the mediation role of drinking motives in the use of alcohol and cultural differences, including gender. This is in line with the prior studies on drinking motives as well as alcohol consumption in total, which revealed that differences between men and women only become more prominent during early adolescence. Alcohol use is frequently initiated inside the family or as a result of family-related circumstances such as alcohol-specific restrictions and behavior as well as exposure to adult drinking or alcohol use. From these studies, the researchers hypothesized that:

- **H4a:** Drinking motives mediate the link between extraversion and alcohol use.
- **H4b:** Drinking motives mediate the link between conscientiousness and alcohol use.
- **H4c:** Drinking motives mediate the link between neuroticism and alcohol use.

![Figure 1: Research Framework](image-url)
METHODS

Participants, Sampling Technique, and Sample Size

The participants of the study were college students from private colleges and universities within the City of Calamba, Laguna. Respondents must be 18 years old and above and are casual drinkers. Casual drinker is defined as a moderate drinker; moderate drinking is defined as a balancing act in which risks are overshadowed by the alcohol’s benefit on one’s health (Harvard School of Public Health, 2019).

A study by Wechlerset al. (2012) posited that alcohol outlets are more likely to be found in regions near university campuses, resulting in a substantial prevalence of alcohol consumption to students. In addition, based on the study conducted by Pagkatipunan (2017), alcohol drinkers are more prevalent in private schools compared to public schools. Furthermore, these college students are relevant to the inception of data and information in connection with the mediating role of drinking motives to the relationship between personality factors and alcohol use, seeing that Anderson, Garcia, and Dash (2016) found out that early adult college students have been shown to be more inclined to indicate current alcoholism records.

In accordance with the scoring of Alcohol Use Disorder Identification Test (AUDIT), the respondents must acquire a minimum score of 1 and a maximum score of 7 to be considered as a casual drinker. The study used convenience sampling for it was conducted amidst pandemic. The samples were identified because they fit for the given qualifications and their accessibility.

The sample size was estimated using a-priori analysis via a software called G*Power. An a-priori estimate is done before the actual data collection to compute for the minimum sample size (Memon et al., 2020). Power analysis computes the minimum size of the sample by evaluating the research model with the biggest number of predictors (Hair et al., 2017; Roldan & Sanchez-Franco, 2012). Using a medium effect size of 0.15, $\alpha = 0.05$, and statistical power of 0.95, and following the rule of maximum number of arrows pointing to a variable in a proposed model, the calculated minimum sample size is 129. This study utilized 152 valid responses, which is more than the minimum sample size. Therefore, the data gathered are robust enough to support the results of the hypothesized relationships.

Table 1: Demographic Profile of the Respondents

<table>
<thead>
<tr>
<th>Profile</th>
<th>$N$</th>
<th>%</th>
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<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>48</td>
<td>31.58</td>
</tr>
<tr>
<td>Female</td>
<td>104</td>
<td>68.42</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-20</td>
<td>26</td>
<td>17.11</td>
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<tr>
<td>21-22</td>
<td>122</td>
<td>80.26</td>
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<tr>
<td>23 and above</td>
<td>4</td>
<td>2.63</td>
</tr>
</tbody>
</table>

Table 1 shows the total sample of the respondents. Out of 152 respondents, only 152 of them passed the screening process using AUDIT. Of the total respondents, 104 are female while 48 are male. Moreover, 26 among the 152 respondents were between the age range of 18 to 20 years old, 122 respondents are 21 to 22 years old, and only 4 among the respondents were 23 years old and above.
Data Collection

The research utilized electronic survey questionnaires to collect data from the participants. These were sent to the respondents' personal email along with an informed consent document that explained the study's terms and the participants' responsibilities. The Alcohol Use Disorder Identification Test (AUDIT) was used to screen the respondents and categorize them as social, non-drinkers, and heavy drinkers. The participants who passed the screening process proceeded to take the Big Five Inventory (BFI) personality test (John & Martinez, 1998) and the Drinking Motive Questionnaire-Revised (DMQ-R) (Cooper, 1994). After the participants completed the questionnaires, the data were collected and subjected to analysis and interpretation. The research team performed data cleaning to increase the study's reliability and validity.

Research Instruments

The researchers in this study utilized standardized-survey questionnaires to measure three factors: personality, alcohol use, and drinking motives. To assess the alcohol consumption of the respondents, they used the first domain of the Alcohol Use Disorders Identification Test (AUDIT) which has been proven to be accurate in detecting alcohol dependence among university students (Babor et al., 2001). The AUDIT includes a three-item question that asked the respondents about drinking behavior, particularly the frequency of drinking, typical quantity, and frequency of heavy drinking. In measuring personality factors, the study utilized three sub-scales of the Big Five Inventory (BFI) — extraversion, conscientiousness, and neuroticism — each consisting of five-item indicators answered through a five-point Likert Scale (John & Srivastava, 1999). For drinking motives, the study utilized the four dimensions of the Drinking Motive Questionnaire Revised (DMQ-R) — enhancement, social, conformity, and coping — each consisting of five-item indicators rated through a five-point Likert Scale (Cooper, 1994). All three factors measured have high internal consistencies (Cronbach’s $\alpha_{Extraversion} = .82$, $\alpha_{Conscientiousness} = .85$, $\alpha_{Neuroticism} = .84$; Cronbach’s $\alpha_{Social} = .85$, $\alpha_{Coping} = .84$, $\alpha_{Enhancement} = .88$, $\alpha_{Conformity} = .85$).

Data Analysis

In the current research, the relationship between personality factors (extraversion, conscientiousness, and neuroticism), drinking motives (conformity, enhancement, social, and coping), and alcohol use was investigated using partial least squares-structural equation modelling (PLS-SEM). This statistical approach was chosen due to its suitability for mediation analysis and the assessment of lower-order and higher-order constructs (Hair, Hult, et al., 2016).

The PLS-SEM comprises two stages. The first stage is the measurement model evaluation, which assesses the validity and reliability of the constructs. The second stage is the structural model evaluation, which examines collinearity, path coefficients, coefficient of determination, effect sizes, and predictive relevance (Hair, Hult, et al., 2016; Samani, 2016).

Ethical Consideration

In data collection, the researchers provided consent forms to the participants to confirm their voluntary and anonymous participation. In line with the use of AUDIT in participant selection, those who obtained scores beyond the negative range were advised to seek professional evaluation and intervention. The researchers sent the test results and corresponding recommendation to these individuals via email.
RESULTS

Common Method Bias

In order to ensure that the structural model is free from common method bias and collinearity issues, it is necessary for the full collinearity VIFs to have a value equal to or less than 3.30 (Kock, 2015; Kock & Lynn, 2012). All constructs – alcohol use (=1.063); extraversion (=1.486); conscientiousness (=1.352); neuroticism (=1.045) and drinking motives (=1.182) are within the acceptable thresholds as reflected in Table 2.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Full collinearity VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower-order</strong></td>
<td></td>
</tr>
<tr>
<td>Alcohol use</td>
<td>1.063</td>
</tr>
<tr>
<td>Extraversion</td>
<td>1.486</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>1.352</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>1.045</td>
</tr>
<tr>
<td><strong>Higher-order</strong></td>
<td></td>
</tr>
<tr>
<td>Drinking motives</td>
<td>1.182</td>
</tr>
</tbody>
</table>

Assessment of Measurement Model

Table 3 displays the outcomes of the assessment of the measurement model, which measures the dependability of the hidden variables and their convergent validity. A latent variable can be considered dependable if its composite reliability (CR) value is equal to or greater than 0.70, according to Fornell and Larcker (1981), Nunnally (1978), Nunnally and Bernstein (1994), Kock (2014), and Kock & Lynn (2012). Based on the results, all reliability coefficients are higher than the 0.70 threshold – alcohol use (CR = 0.736); extraversion (CR = 0.736); conscientiousness (CR = 0.823); neuroticism (CR = 0.822); conformity (CR = 0.913); social (CR = 0.897); enhancement (CR = 0.904), and coping (CR = 0.879).

To assess the convergent validity of the latent constructs, both factor loadings and average variance extracted (AVE) were examined. For each variable, a factor loading greater than or equal to 0.50 with a significant p-value (p ≤ 0.05) is necessary to establish convergent validity (Hair, Black, et al., 2009; Kock, 2014). If the factor loading of an item falls below 0.50, it should be removed from the construct to achieve convergent validity (Kock, 2017). The findings of the evaluation of the measurement model, including the reliability and convergent validity of the latent constructs, are shown in Table 3. Also, items EXT4, EXT13, EXT19 for extraversion; CN5, CN11, CN14, CN25 for conscientiousness; and NEU3, NEU6, NEU15, NEU18, NEU21 for neuroticism were deleted due to low item loadings. These items with low factor loadings are called offending items (Kock, 2017) and must be deleted. To evaluate the convergent validity of each latent construct, the AVEs were assessed, and the values must be equal to or greater than 0.50 (Hair, Black, et al., 2009; Kock, 2014). If the AVE falls below 0.50, the CR must be at least 0.60 to meet the criterion (Fornell & Larcker, 1981). As shown in Table 3, all lower-order latent constructs meet the requirement for convergent validity.
<table>
<thead>
<tr>
<th>Construct / Item (lower-order construct)</th>
<th>Factor loading</th>
<th>AVE</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU1</td>
<td>0.693</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU2</td>
<td>0.501</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU3</td>
<td>0.865</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraversion</td>
<td></td>
<td>0.489</td>
<td>0.824</td>
</tr>
<tr>
<td>EXT1</td>
<td>0.750</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXT7</td>
<td>0.787</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXT10</td>
<td>0.635</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXT16</td>
<td>0.533</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXT22</td>
<td>0.778</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td></td>
<td>0.485</td>
<td>0.823</td>
</tr>
<tr>
<td>CN2</td>
<td>0.655</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CN8</td>
<td>0.800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CN17</td>
<td>0.655</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CN20</td>
<td>0.747</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CN23</td>
<td>0.628</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neuroticism</td>
<td></td>
<td>0.606</td>
<td>0.822</td>
</tr>
<tr>
<td>NEU9</td>
<td>0.756</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEU12</td>
<td>0.775</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEU24</td>
<td>0.804</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conformity</td>
<td></td>
<td>0.681</td>
<td>0.913</td>
</tr>
<tr>
<td>CON1</td>
<td>0.604</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CON2</td>
<td>0.874</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CON3</td>
<td>0.864</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CON4</td>
<td>0.869</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CON5</td>
<td>0.881</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td></td>
<td>0.638</td>
<td>0.897</td>
</tr>
<tr>
<td>SOC1</td>
<td>0.828</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC2</td>
<td>0.708</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC3</td>
<td>0.848</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC4</td>
<td>0.884</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC5</td>
<td>0.710</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enhancement</td>
<td></td>
<td>0.657</td>
<td>0.904</td>
</tr>
<tr>
<td>ENH1</td>
<td>0.895</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENH2</td>
<td>0.836</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENH3</td>
<td>0.651</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENH4</td>
<td>0.793</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENH5</td>
<td>0.856</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coping</td>
<td></td>
<td>0.599</td>
<td>0.879</td>
</tr>
<tr>
<td>COP1</td>
<td>0.569</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COP2</td>
<td>0.825</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COP3</td>
<td>0.904</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COP4</td>
<td>0.630</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COP5</td>
<td>0.883</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. All factor loadings are significant (p < 0.001).*
In evaluating the measurement model, it is important to determine the discriminant validity of the constructs used in the study. The Heterotrait-Monotrait (HTMT) ratio of correlations was utilized to establish this. The HTMT ratios are considered acceptable if their values are less than 0.85 according to Henseler et al. (2015), and less than 0.90 according to Gold et al. (2001) and Teo et al. (2008). The results presented in Table 4 indicate that all constructs in the study have satisfactory discriminant validity as evidenced by the HTMT ratios.

<table>
<thead>
<tr>
<th></th>
<th>AU</th>
<th>EXT</th>
<th>CN</th>
<th>NEU</th>
<th>CON</th>
<th>SOC</th>
<th>ENH</th>
<th>COP</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU</td>
<td>0.299</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXT</td>
<td>0.182</td>
<td>0.687</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CN</td>
<td>0.127</td>
<td>0.220</td>
<td>0.178</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEU</td>
<td>0.339</td>
<td>0.211</td>
<td>0.159</td>
<td>0.082</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CON</td>
<td>0.441</td>
<td>0.382</td>
<td>0.163</td>
<td>0.187</td>
<td>0.284</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC</td>
<td>0.451</td>
<td>0.298</td>
<td>0.128</td>
<td>0.128</td>
<td>0.349</td>
<td>0.794</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENH</td>
<td>0.458</td>
<td>0.243</td>
<td>0.111</td>
<td>0.204</td>
<td>0.429</td>
<td>0.474</td>
<td>0.684</td>
<td></td>
</tr>
<tr>
<td>COP</td>
<td>0.458</td>
<td>0.243</td>
<td>0.111</td>
<td>0.204</td>
<td>0.429</td>
<td>0.474</td>
<td>0.684</td>
<td></td>
</tr>
</tbody>
</table>

In the current study, one of the latent variables treated as a higher-order construct is drinking motives, which includes four dimensions: conformity, social, enhancement, and coping. To assess the measurement model for this construct, a disjoint two-stage approach was used (Agarwal & Karahanna, 2000; Becker et al., 2012), which involves evaluating the factor weight and p-value for each dimension, as well as assessing the variance inflation factor (VIF) and full collinearity VIF. To demonstrate that the higher-order formative construct is both convergent and free from collinearity issues, the VIF and full collinearity VIF must not exceed 3.30 (Diamantopoulos & Siguaw, 2006; Kock, 2015; Kock & Lynn, 2012). The findings in Table 5 indicate that the dimensions of drinking motives have significant factor weights with p-values greater than 0.001, and the corresponding VIF and full collinearity VIF are within the acceptable threshold of 3.30. Therefore, the higher-order formative construct of drinking motives exhibited convergent validity and passed the measurement model assessment.

<table>
<thead>
<tr>
<th>Formative Construct (Higher-Order)</th>
<th>Factor weight</th>
<th>p-value</th>
<th>VIF</th>
<th>Full collinearity VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking motives</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conformity</td>
<td>0.245</td>
<td>&lt;0.001</td>
<td>1.184</td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>0.341</td>
<td>&lt;0.001</td>
<td>1.904</td>
<td>1.182</td>
</tr>
<tr>
<td>Enhancement</td>
<td>0.379</td>
<td>&lt;0.001</td>
<td>2.400</td>
<td></td>
</tr>
<tr>
<td>Coping</td>
<td>0.334</td>
<td>&lt;0.001</td>
<td>1.589</td>
<td></td>
</tr>
</tbody>
</table>

Assessment of the Structural Model

The structural model's evaluation involves the assessment of path coefficients, effect sizes, and p-values. The results of the hypothesis testing conducted can be observed in Figure 2 and Table 5. Based on the analysis, it was revealed that alcohol use is significantly influenced by extraversion ($\beta = 0.193; p = 0.007$) and neuroticism ($\beta = 0.187; p = 0.009$). The effect of extraversion on alcohol use is positive, indicating that as the level of extraversion increases, an individual's alcohol use moves in the same direction, albeit with a small effect size ($f^2 = 0.004$). On the other hand, neuroticism's effect is negative, suggesting an inverse relationship between neuroticism and alcohol use, also with a small effect size ($f^2 = 0.033$). Conscientiousness, on the other hand, was
found to have no significant effect on alcohol use. Thus, H1a and H1c are supported, while H1b is not.

Furthermore, data analysis revealed that extraversion ($\beta = 0.291; p < 0.001$) and neuroticism ($\beta = 0.142; p = 0.037$) significantly influences drinking motives. The relationship between extraversion and drinking motive is positive indicating that an increase in the propensity of extraversion leads to drinking motives of an individual, with a small effect size ($f^2 = 0.085$). Additionally, neuroticism and drinking motives are as well directly related, meaning, an increase in the level of neuroticism translates into drinking motives of an individual, with a small effect size ($f^2 = 0.022$). Contrary, conscientious was found to have no effect on drinking motives. Hence, H2a and H2c are supported, while H2b is not.

The study also conducted a mediation analysis to assess whether drinking motives mediate the relationship between personality traits (extraversion, conscientiousness, and neuroticism) and alcohol use. However, the results showed that drinking motives do not play a mediating role in the relationship between the identified personality traits and alcohol use. Therefore, hypotheses H4a, H4b, and H4c are not supported. The structural model was further assessed by measuring the predictive relevance, ($Q^2$), coefficient of determination ($R^2$).

The coefficient of determination ($R^2$) was utilized to determine the proportion of the endogenous construct that is explained by the exogenous construct or constructs in the structural model. According to Cohen (1988), $R^2$ values are categorized as weak (0.02), moderate (0.13), and substantial (0.26). The $R^2$ values obtained in this study were within the range of weak to moderate.

Moreover, predictive relevance was assessed using the Stone-Geisser test (Geisser, 1974; Stone, 1974). For the measurement model to exhibit predictive validity, the $Q^2$ coefficients must be greater than zero (Kock, 2015). The $Q^2$ coefficients obtained in this study met this criterion.
Table 6: Results of Hypothesis Testing

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path</th>
<th>Coefficient</th>
<th>p-value</th>
<th>SE</th>
<th>Effect size</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Direct effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H1a. EXT → AU</td>
<td></td>
<td>0.193</td>
<td>0.007</td>
<td>0.078</td>
<td>0.044</td>
<td>Supported</td>
</tr>
<tr>
<td>H1b. CN → AU</td>
<td></td>
<td>-0.030</td>
<td>0.857</td>
<td>0.081</td>
<td>0.001</td>
<td>Not supported</td>
</tr>
<tr>
<td>H1c. NEU → AU</td>
<td></td>
<td>-0.187</td>
<td>0.009</td>
<td>0.078</td>
<td>0.033</td>
<td>Supported</td>
</tr>
<tr>
<td>H2a. EXT → DM</td>
<td></td>
<td>0.291</td>
<td>&lt;0.001</td>
<td>0.076</td>
<td>0.085</td>
<td>Supported</td>
</tr>
<tr>
<td>H2b. CN → DM</td>
<td></td>
<td>0.016</td>
<td>0.422</td>
<td>0.081</td>
<td>0.001</td>
<td>Not supported</td>
</tr>
<tr>
<td>H2c. NEU → DM</td>
<td></td>
<td>0.142</td>
<td>0.037</td>
<td>0.079</td>
<td>0.022</td>
<td>Supported</td>
</tr>
<tr>
<td>H3. DM → AU</td>
<td></td>
<td>0.255</td>
<td>&lt;0.001</td>
<td>0.077</td>
<td>0.071</td>
<td>Supported</td>
</tr>
<tr>
<td><strong>Mediating effect</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H4a. EXT → DM → AU</td>
<td></td>
<td>0.074</td>
<td>0.095</td>
<td>0.056</td>
<td>0.017</td>
<td>Not supported</td>
</tr>
<tr>
<td>H4b. CN → DM → AU</td>
<td></td>
<td>0.004</td>
<td>0.472</td>
<td>0.057</td>
<td>0.000</td>
<td>Not supported</td>
</tr>
<tr>
<td>H4c. NEU → DM → AU</td>
<td></td>
<td>0.036</td>
<td>0.263</td>
<td>0.057</td>
<td>0.006</td>
<td>Not supported</td>
</tr>
</tbody>
</table>

*Note: $f^2$ is the effect sizes (Cohen, 1988) where 0.02 = small, 0.15 = medium, 0.35 = large*

**DISCUSSION**

Findings revealed that extraversion has a significant positive relationship towards alcohol use. Extraversion is a personality attribute that has been associated with drinking habits. Extroverts (or people who exhibit extraversion) are more exposed in gatherings, parties, or get-togethers that usually involve alcohol as celebration of an important occasion, especially in the Philippine culture. The study results indicate that there exists a meaningful and positive correlation between extraversion and alcohol use. It has been established multiple times that Freud's personality theory is linked to substance use, as he proposed the three components (i.e., id, ego, superego) that build up the personality through his psychosexual perspective and covered the lack of self-control (Montgomery, 2021). Alcohol drinkers find themselves thinking about the mouthfeel, sensation, general enjoyment, and pleasure of having a drink. For this instance, the id – pleasure principle dominated the occurrence. The desires exhibited by an individual's innate drives were too intense to control where he or she ended up giving in. A casual drinker that has a high level of extraversion normally goes to gatherings to mingle with other people and feel the sensation that comes from drinking different types of alcohol. That said, they are fantasizing about the feeling of excitement, entertainment, and enjoyment from social interaction. Some studies have also argued that such connections are due to extraverted people's heightened drinking sensitivity (Fairbairn et al., 2015), and that those who are high in extraversion benefit more from alcohol. However, alcohol administration studies have not indicated that not all people with high levels of extraversion have a better mood after drinking alcohol (Fairbairn et al., 2015).

The study's results indicate a significant negative relationship between neuroticism and alcohol use, which is contrary to the common notion that individuals with high neuroticism tend to be problematic alcohol drinkers. According to Horney's psychoanalytic social perspective, neurotic individuals adopt protective measures against negative thoughts and basic anxiety by conforming to gain acceptance and approval (Fiest & Fiest, 2009). As neuroticism encompasses negative emotions such as anxiety, anger, and depression, neurotic individuals tend to adopt a compliant personality type to feel secure and approved. Therefore, conforming to other alcohol drinkers helps reduce the level of basic anxiety, eliminating negativity and aggression. This finding is consistent with Adan et al.’s (2017) study, which indicates that emotionally stable individuals are more likely to consume alcohol than those who feel negative emotions such as anger and
irritability. While psychological studies tend to focus on how emotional instability leads to excessive drinking, this study highlights that neurotic individuals tend to avoid alcohol consumption. This finding contradicts the common belief that high levels of neuroticism are associated with problematic alcohol consumption.

Conscientiousness, on the other hand, is associated with a personality that promotes great care, neatness, and correctness. The results of the study revealed that there is not enough evidence to conclude that there is a significant positive relationship between conscientiousness and alcohol use. People with a high level of conscientiousness are rarely to not consume alcohol. Another element from Freud’s personality theory known as the superego, which exercised morality, somehow connects to an action that is showing a strong commitment to what is correct—and that is conscientiousness. Since the results found conscientiousness to have no association with alcohol use, the morality principle dominated the occurrence of pleasurable desire to consume alcohol. An individual with a high level of conscientiousness is more likely to resist the pleasure to exhibit correctness and having great care of one’s health.

Having said that, alcohol consumption is not the right thing to do, especially when it comes to an individual’s physical, mental, and emotional health. Studies already proved that by conducting various scientific and philosophical experiments. According to Luchetti et al. (2018), individuals with higher levels of conscientiousness are more likely to abstain from alcohol consumption. The study suggests that this may be attributed to the effects of conscientiousness on self-control and discipline, which help reduce the risk of excessive drinking. Healthy coping mechanisms (e.g., cognitive reframing and mindfulness therapy) are highly recommended to reduce alcohol consumption for individuals with a low level of neuroticism, and it can also be applicable for other personality factors that are associated with a lack of self-control.

The extraversion and the neuroticism are found to be significant influences of drinking motives. Thus, it can be said that these two are related in such a way that when the drinking motives increase means there is also an increase in the level of neuroticism that causes it. The study's findings suggest that individuals who are more extroverted and neurotic are more likely to have drinking motives. This finding is consistent with Alfred Adler's Individual Psychology, which emphasizes the importance of social interest and cooperation in human activity (Adler, 1925; Feist & Feist, 2009). College students who are high in extraversion and neuroticism may view alcohol consumption as a means of participating in social activities, particularly in the context of the Philippines where drinking alcohol is a common recreational activity.

In relation to this, the researchers take these implications into consideration by suggesting organizing interactive events with recreational activities that are arranged by the institution for the students to fill in their social needs as well as for their neurotic personality factor to demonstrate less. These are important to be understood as this is where the college students are coming from. Therefore, understanding the cause will lead people into finding the right answer on to why and how drinking alcohol happens for them.

Meanwhile, Fairbairn et al. (2015) conducted a study with a large sample size and reliable measures of personality, which showed that individuals with high levels of neuroticism derive more reward from consuming alcohol compared to those with low levels of extraversion. The authors suggest that alcohol-related rewards may reinforce drinking behaviors, and this finding has clinical significance in understanding individual differences in vulnerability to AUD. The results highlight a key mechanism that may explain why individuals with high extraversion are more susceptible to developing alcohol-related problems.

It is also revealed that conscientiousness does not influence drinking motives. This indicates that being conscientious does not predict which student will be inclined to have drinking motives, as they are people with self-control. Considering Abraham Maslow's Hierarchy of Needs (1943), it could be said that conscientiousness eliminates drinking of alcohol/ alcohol consumption on the
The results showed that college students of Calamba City have the tendency to increase their alcohol consumption when they are more motivated to do so. Therefore, supporting the stimulus-response theory (Pavlov, 1902), drinking motives act as a stimulus, which causes the people to consume more alcohol. Motivation is usually complex (Maslow, 1970; Feist & Feist, 2009) given that alcohol drinkers may drink for different intentions at different times. As Mackinnon et al. (2017) mentioned, it is vital to determine the extent of one’s motive regardless if it is internally or externally driven. They may be drinking to socialize, to boost one’s confidence, to reduce anxiety, or to just fit in. Nevertheless, such motivation serves as driving forces to increase alcohol intake. Alternative activities that do not include any alcohol or substance and give off the same satisfaction to the person (e.g., hiking with friends, meditation, exercising) to divert the motivation is recommended for it can lessen the alcohol consumption of an individual.

Cooper et al. (2015) found that college students’ inclination towards alcohol consumption is related to various interpersonal drinking situations. O’Hara (2015) also found that social and conformity intentions are associated with alcohol consumption during gatherings, whereas drinking for enhancement motives is more likely to occur at bars, and individuals who drink for coping intentions tend to drink alcohol at home. Additionally, Hudson et al. (2015) found that excessive alcohol use and specific drinking motivations have a positive relationship, and this may imply that the level of alcohol consumption depends on the underlying motivations. Mohr et al. (2018) also suggested that the identified drinking motives are related to individuals drinking to alleviate negative feelings, thoughts, and emotions.

However, a mediation analysis showed that drinking motives do not mediate the relationship between personality traits (extraversion, conscientiousness, and neuroticism) and alcohol use. This result contradicts the postulations of Kuntsche et al. (2008), as the findings revealed that drinking for enhancement motives has a positive effect between alcohol use and both extraversion and the negative association with conscientiousness, whereas drinking for coping motives showed a direct effect between alcohol use and neuroticism. Additionally, Stewart et al. (2011) found that coping motives mediate the relationship between neuroticism and drinking problems, while Littlefield et al. (2011) stated that coping motives have a significant mediating effect on the relationship between neuroticism and drinking consumption.

Given the contradicting results, identifying the mediating role of each drinking motives between distinguished personality traits and alcohol use might have a significant effect towards the result of the study. The previous studies were conducted by Western researchers using Western college students as the respondents, whereas this study was conducted in an Asian culture. Particular behaviors are acted upon depending on the contextual factors of its occurrence, presuming that contexts encountered in everyday life constantly change (Baez, Garcia, & Ibanez, 2018). Consequently, what influences the different drinking intentions might vary depending on the social context of the respondents.

The study indicated that drinking motives did not mediate the relationship between personality traits and alcohol use. However, the results showed that personality traits, particularly extraversion and neuroticism, had direct effects on drinking motives. This finding is in line with Hudson et al. (2015), who suggested that personality traits may influence one's alcohol consumption by increasing the motivation to drink. Additionally, Bruce et al. (2013) found that individuals with Type D personalities might be motivated to drink to cope and fit in with others.

In addition, direct effects of drinking motives towards alcohol consumption are also evident. LaBrie et al. (2011) found out that drinking motives and alcohol consumption has a strong
correlation. Consistent with the study of O’Hara (2015), drinking motives are crucial in projecting the alcohol consumption levels of an individual. Moreover, Cooper et al. (2015) postulated that higher alcohol behavior tendency is associated with the determinants of alcohol consumption and drinking motivations, particularly in drinking for social and enhancement.

Given that personality traits, specifically extraversion and neuroticism, have direct effects towards drinking motives, and drinking motives have direct effects towards alcohol use, this could mean that the different drinking motives, personality traits, and alcohol use are interrelated. Moreover, these results might also explain why certain hypotheses were supported while others were not.

**IMPLICATIONS**

The study results indicate that drinking motives do not mediate the relationship between personality factors (extraversion, neuroticism, and conscientiousness) and alcohol use, which is contrary to the findings of Kuntsche et al. (2018). Therefore, further research on other potential factors that may mediate this relationship is necessary. Additionally, O’Hara et al. (2015) suggest that genetic factors may also play a role in the development of alcohol dependence and personality through alcohol consumption, warranting further investigation.

To obtain more accurate results, Andrade (2020) recommends using a larger sample size that is more representative of the population and expanding the scope of the study to include a broader range of respondents (e.g., corporate employees) and locations (e.g., the province of Laguna).

Given the positive correlation between alcohol use and personality factors on drinking motivations, early detection of harmful alcohol consumption in high-risk populations, such as college students, is essential. Encouraging healthy coping mechanisms, such as cognitive reframing and mindfulness therapy, is also recommended for individuals with low levels of neuroticism to reduce alcohol consumption. Moreover, Kuvaas et al. (2014) suggest that exhibiting self-regulation can benefit in the reduction of high-risk drinking.

This research focused on college students and explored how drinking motives and alcohol use relate to personality factors. Understanding personality traits, such as extraversion, neuroticism, and conscientiousness, can help educators better understand student behavior in the classroom and during learning activities. The study found that drinking motives have a direct link with personality traits, which helps explain consistent behavior in different contexts.

Additionally, this study sheds light on the misconceptions surrounding alcohol consumption, which is often viewed solely as a vice rather than a means of coping and social conformity. By understanding the drinking motives of alcohol consumers, programs can be developed to encourage young adults to drink less and communities can gain knowledge and awareness on how drinking motives affect patterns of alcohol consumption among young adults. Finally, the mediating role of drinking motives can help identify the link between alcohol, psychological and social processes, and personality, providing a deeper understanding of how alcohol affects the human brain.

**CONCLUSION**

The findings indicate that the relationship between personality factors and alcohol use can be divided into different dimensions. One such dimension is extraversion, which shows a positive and significant relationship with alcohol use. This means that as an individual’s level of extraversion increases, so does their alcohol consumption. People who are more extroverted tend
to enjoy the excitement, entertainment, and pleasure of social interaction that alcohol provides. Studies have consistently shown that individuals with high extraversion report greater mood-enhancing effects from alcohol (Fairbairn et al., 2015).

On the other hand, neuroticism has a negative significant relationship with alcohol use. This means that individuals who are high in neuroticism are less likely to consume alcohol and maintain emotional stability while drinking because they seek acceptance, which eliminates negativity and aggression. This finding is consistent with a study by Adan et al. (2017), which suggested that individuals with high emotional instability avoid drinking alcohol.

Furthermore, individuals with higher extraversion levels are more likely to have drinking motives, while individuals with higher neuroticism levels are associated with low agreeableness, low conscientiousness, and high neuroticism, all of which are significantly linked to alcohol involvement (Malouff et al., 2007). In the Philippines, where drinking alcohol is a popular recreational activity, college students with high extraversion and neuroticism levels may see alcohol consumption as the center of social interest.

On the other hand, drinking motives and alcohol use have a direct relationship; an increase in drinking motives leads to an increase in the alcohol use of the respondents. Hence, the said variables conversely affect one another. Certain drinking motivations have been linked to excessive alcohol consumption, which denotes that the desire to drink is inclined to relieve unpleasant feelings, prevent social and public costs, and boost one's own positive emotions and perspective about self (Hudson, et al., 2015). Given that, whatever motivates an individual to drink, such motivation serves as driving forces to increase alcohol intake.

Lastly, the drinking motives do not mediate the alcohol use and personality factors. Therefore, the hypothesis drawn is rejected. In contrast to Kuntsche et al.'s (2008) findings, drinking for enhancement motives is positively associated with both extraversion and negatively associated with conscientiousness, whereas drinking for coping motives shows a direct effect between alcohol use and neuroticism. The study highlights the importance of identifying the mediating role of each drinking motive in the relationship between personality traits and alcohol use, as it could significantly affect the study's outcome.

The study is important as it will meet a gap in the literature from a psychological perspective, especially in a different setting. It was also the first attempt to evaluate the mediating role of drinking motives in the relationship between alcohol use and personality factors based on the Philippines' drinking culture. As researchers, it is pivotal to understand the underlying significance of various personality factors on alcohol use and the motivations behind it, because there can be risk factors for hazardous drinking that people are not fully aware of.

Furthermore, it may be useful in clinical practice to determine individuals who are at risk for various health problems (e.g., mental disorders, cognitive and physical health issues), as well as to consider psychotherapy and behavioral conditioning as interventions. The presence of drinking motives in both personality and alcohol consumption still lacks empirical evidence. Nevertheless, this study can be used in the early identification of high-risk drinkers and could potentially prevent the emergence of serious symptoms, as it may aid the development of evidence-based preventive interventions and treatment plans that could influence public health policy on preventative measures and health assistance.
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