Alcohol consumption among Asian Americans in the U.S: A systematic review

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ABSTRACT
The aim of this study was to review all systematic reviews and meta-analyses of alcohol consumption among Asian Americans in the U.S. An in-depth literature search was conducted using the following electronic databases: MEDLINE, Academic Search Premier, Education Resource Information Center (ERIC), PsycARTICLES, and CINAHL Plus with Full Text. The keywords used for the search were: Alcohol Consumption, Asian Americans, Social Determinants, and Cultural Differences. The results suggested the determinants of alcohol consumption in American society include gender, race and ethnicity, marital status, membership in social groups, genetic factors, sexual orientation, poverty, place of residence and education. Alcohol consumption among Asian Americans is also dependent on their societal perceptions towards alcohol consumption. Other factors determining the consumption of alcohol include affiliation to different social groups, social-cultural affiliations, acculturation and acculturation stress, and cultural observances.

Keywords: Alcohol consumption, Asian Americans, Social Determinants, Cultural Differences

INTRODUCTION
Different people can experience varying health effects with the consumption of alcohol due to the state of their health. The pattern on the consumption of alcohol also determines the health outcomes that will be associated with the consumption. The consumption of alcohol has many effects especially when the rate is high. In some cases, alcohol has been found to have negative health effects even when taken in small quantities. Breast cancer in women is one of the negative health effects that can be caused by even low consumption of alcohol. Alcohol consumption is also said to increase the risks of high blood pressure and some forms of heart diseases. This comprises diseases such as alcoholic hepatitis and cirrhosis raise the blood pressure as well as damaging the heart muscles. It is also a contributing factor towards occurrence of diseases such as cancer of the mouth, pharynx, larynx and esophagus. Other effects of consumption of alcohol include liver diseases, miscarriage in pregnant women and acute intoxication of the brain due to prolonged consumption. Over dependence of alcohol in altering the state of the brain can lead to addiction and once the consumption that in turn can affect the mental health. Victims of excessive use of alcohol are likely to have unprotected sex and hence can acquire sexually transmitted diseases which can lead to coma or death. Addiction is a condition where individuals cannot do without alcohol, and this can trigger one’s concentration, have blurred vision, judgment, erratic behaviors and slurred speeches. There are also chances of a woman who uses excessive alcohol to deliver a low weight baby.

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Abuse of alcohol has also social effects on the individuals, families and the society. Abusing of alcohol may weaken the sense of family and reduce the sense of belonging. The parents who over-indulge in alcohol and drugs will not be able to effective discipline and control their children through nurturing and support. Other social problems associated with the consumption of alcohol include; the challenges in dealing with personal relationships, keeping one’s jobs and engaging in violent crimes such as homicides and assaults. Alcohol kills creative and innovative minds and thereby individuals are left being useless in the society.

The current regular drinkers in the United States has increased, the latest data shows that 14.3% of people aged 35 to 44 are regular drinkers. Statistics also shows that 34% of men and 28% of women drink more than recommended. About 12% of women and 18% of men drink seriously, and 6% of women and 9% of men drink very seriously. Approximately 1.4% pregnant women still consume alcohol during their pregnancy.

**DETERMINANTS OF ALCOHOL CONSUMPTION IN THE U.S**

The amount of alcohol consumption in any given society has always been a sensitive issue in view of its harmful effects upon the physical well-being of an individual, the impairment of good judgment, and most especially because of the danger that intoxication can bring upon innocent bystanders, as exemplified by countless road accidents resulting from people driving under the influence of alcohol. A close to 10% of the total U.S. population is responsible for the consumption of 70% of the total percentage of alcohol consumed in the United States. Inherent in this statistic is the fact that there exist major variations in the pattern of alcohol consumption among alcohol consumers in the U.S. In regard to this, alcohol consumption among different groups in the U.S. has been attributed to various factors ranging from biological and genetic factors to other social factors. One of the most researched and widely accepted determinants of alcohol consumption in the U.S. revolves around the social norms platform. Several studies have indicated social norms as a major factor in shaping alcohol consumption patterns among various social groups, including adults and campus students in the U.S. Social and cultural perceptions as wider representations of social norms play major roles in determining the extent to which people engage in alcohol consumption in the U.S.

Problem behavior theory is used in this study to explore the causal factors of alcohol consumption. Problem behavior theory consists of three major systems that explain problem behavior: personality, perceived environment, and the behavior system. According to the theory, each system either supports or against engaging in problem behavior. Personality System factors such as self-esteem, self-regulation, impulsiveness, acculturation, and alcohol expectancy; Perceived Environment System factors such as parents' drinking behavior; and Behavior System such as cigarette use and vigorous physical activity are the principle causal factors of alcohol use and they exert direct and indirect influences on drinking and other risky behavior.

Alcohol expectancy has been identified as a major determinant of alcohol consumption among different social groups within the U.S. It refers to the personal belief or disbelief among certain groups that alcohol consumption is likely to lead to specific outcomes. According to various studies, it is common among alcohol consumers that they believe alcohol consumption will reduce their feelings of social anxiety and assertiveness. This has been predicted as a major factor in shaping alcohol consumption behaviors among various age groups within the larger U.S. population. Alcohol expectancies are sometimes established during the early stages in the life of an individual and consumption generally increases with age.

Closely related to alcohol expectancy is the perception of alcohol-related self-efficacy, which refers to the belief that one would perform more competently in a physical state of inebriation. In regard to this, various groups of people within the general U.S. population including Asian American racial groups engage in alcohol consumption with the sole belief that they will fare moderately, such as other alcohol consumers who appear to display...
higher levels of self-efficacy, hence shaping alcohol consumption patterns among various racial groups in the U.S.\textsuperscript{9}

Another important determinant of alcohol consumption is self-regulation. Previous studies have associated higher levels of alcohol consumption with people possessing lower levels of self-regulation. Self-regulation refers to the capacity of an individual to plan and attain prospective adaptive goals through objective or goal-bound behavioral characteristics. This is generally play as a major role in fostering adaptive behavioral change while promoting the concept that abstaining from alcohol consumption in the future, which can be attained through self-regulation or personal conviction.

Although the prevalence of alcohol consumption is higher among adults with respect to more education, among both genders,\textsuperscript{13} heavy drinking is believed to be more prevalent among educated men than it is with educated women. On the other hand, there is broad epidemiological evidence showing a positive relationship between income levels or social economic status and alcohol consumption within the general U.S. population. Most studies linking socio-economic status and alcohol consumption suggest the causal relationship between alcohol dependence and lower social economic status, implying that such status plays a major role in shaping alcohol consumption patterns across different population groups.\textsuperscript{14}

However, an inverse relationship has been established between income and rates of alcohol dependencies in the U.S. American people with higher social-economic status have been found to be alcohol-dependent counterparts with lower social-economic status. Additionally, adults of higher social economic positions are more likely to frequently engage in alcohol consumption than those in lower socio-economic positions. With reference to poverty levels, current alcohol intake increased with increase in income levels: only 45 percent of adults earning incomes below the poverty line were likely to be active drinkers. Among adults earning incomes of 40\% or higher above the poverty line, 75.6 percent were current drinkers. These statistics raise questions as to whether varied, relative education levels of different groups influence the levels of drinking among different social groups within American society.\textsuperscript{15}

Furthermore, there is a relationship between gender and alcohol consumption. Men have proved to consume more alcohol as compared to their female counterparts. Consequently, researchers have established major links between racial and interpersonal problems as possible determinants of alcohol consumption. For instance Caucasian binge-drinkers reported having more interpersonal problems as compared to their African American counterparts. Binge-drinking African Americans also reported more interpersonal behavior issues as compared to their Caucasian counterparts.\textsuperscript{16} this gives a hint about different factors shaping the alcohol consumption behaviours in the U.S.

From a different perspective, family backgrounds can also affect the alcohol consumption behaviors of individuals later in life. This is because the drinking behaviors of parents and their perceptions toward alcohol have been identified as a major determinant of the future alcohol consumption of their children. As such, there has been question of family influences on the growth and development of children. This has been necessitated by the view that children raised by alcoholic parents are more likely to develop alcohol consumption behaviors and a trend of alcoholism in children born to alcoholic parents but adopted and raised by non-alcoholic parents has been established.\textsuperscript{17} Reportedly, adopted children are highly predisposed to alcoholism as compared to children not born of alcohol consuming parents.\textsuperscript{18} Other general determinants of alcohol consumption include an individual's disposition toward cigarette-smoking and the abusive use of other narcotic substances which, in the long run, may either cause physical deterioration or may negatively affect the self-esteem of the individual. These factors cut across racial, social, and cultural groups within the U.S., but they are equally useful in shaping alcohol consumption behaviors and patterns within the larger U.S. population.
CROSS CULTURAL DIFFERENCES IN ALCOHOL CONSUMPTION

Ethnicity is partly shaped by cultural beliefs, attitudes, customs, values, and the norms of ethnic groupings to which individuals belong. Membership in a given ethnic group shapes personal responses, interpretations and behaviors accompanying certain activities including alcohol consumption.\(^\text{18}\) However, ethnic inclinations and experiences are filtered through such issues as immigration, colonization, religion, enslavement, physical variations, minority status, and social class.\(^\text{19}\) As a result of this, people sharing a particular ethnic background may depict varying behavioral and interpersonal characteristics. Within the U.S. literature on ethnic-based characteristics has centered on minority ethnic groups including African Americans, Asian Americans, Hispanics, and Native Americans.\(^\text{20}\) These groups display varying trends in alcohol consumption behaviors partly due to factors cutting across the social, psychological, and economic environments.

Considering this, it should be mentioned that a majority of the ethnic minority groups in the U.S. have been underrepresented in the most alcohol consumption-related studies. This is due to the fact that most of the cross-cultural studies have taken universal approaches, thereby failing to take into consideration the existing variability within different ethnic sub-groups forming larger racial minority groups in the country. As a result, researchers have often ended up making poor generalizations.

According to the National Association of Social Workers, both white and non-white Hispanic groups depict, identical alcohol dependence levels is approximately 3.4 percent. Among Native Americans, alcohol dependence stood at 5.6 percent in 2002. The levels of alcohol dependence among other ethnic minority groupings were lower; Caribbean Americans registered 1.9 percent; Cuban Americans 0.9 percent; and Asian Americans 1.8 percent.\(^\text{21}\) Asian Americans have generally fostered lower levels of alcohol consumption than a majority of the other ethnic minority groups in the country.\(^\text{22}\)

However, a majority of Asian American alcohol consumers report fewer heavy drinking tendencies than their African American and white counterparts, who are reported to have heavier drinking tendencies. Similarly, it was established that on the average, Native Americans consumed alcohol at earlier stages and in heavier quantities as compared to other ethnic groups in the country.\(^\text{19}\) Moreover, sub-groups of the same ethnic or racial groups depict differences in drinking patterns. For example, Japanese Americans describe themselves as heavy drinkers as compared to their Chinese counterparts.\(^\text{23}\)

As such, cross-cultural differences in alcohol consumption within the U.S. are attributed to such factors as cultural group ethics and norms, expectations about alcohol and different cultural values.\(^\text{24}\) Members of different cultural and ethnic origins might depict preferences for particular alcohol brands, and these preferences may further affected by issues, such as the relative alcohol content, access and the cost of alcohol.\(^\text{25}\) Cross-cultural interactions have a major impact on alcohol consumption patterns within the U.S. People of different ethnic origins may display similar alcohol consumption characteristics as a result of their increased levels of interactions. Some cultures also dispel the use of alcohol; for example, religion plays a very important role in determining the abstaining values of young adults, Muslims and immigrants from Norway. Therefore, this shows that culture has a great effect on belief systems about alcohol and alcohol-related behaviors among users and their support systems.\(^\text{26}\)

Aggregating alcohol consumption among the larger Asian American population has however been viewed as likely to mask the significance of heterogeneity in alcohol consumption across different ethnic sub-groups within this particular group.

However, a review of past literature reveals the existence of major differences among different ethnic sub-groups constituting the larger Asian American population in as far as binge drinking and alcohol consumption are concerned.\(^\text{16}\) Regarding alcohol consumption among various ethnic groups within the Asian American population, Korean and Filipino Americans have largely reported higher levels of alcohol consumption than Chinese and Vietnamese Americans, who are reported to have the lowest levels of alcohol consumption.\(^\text{14}\)
ALCOHOL CONSUMPTION AMONG ASIAN AMERICANS

According to 2000 U.S. census, there were approximately 12 million Asian Americans residing in America. Although this population constitutes only about 5% of the entire population, the number of Asian Americans has increased by roughly 50 percent. This group is distributed throughout the U.S., although a majority of Asian Americans reside in Los Angeles, San Francisco, and New York. Asian Americans in the U.S. constitute such sub-groups as Filipino, Chinese, Vietnamese, Asian Indians, Japanese, and Koreans; these six groups constitute about 87% of the total Asian American population in the US.

In contrast to other racial groups within the U.S, the Asian American racial group has typically been viewed as a 'model minority,' boasting of low rates of alcohol use and low rates of heavy alcohol consumption. However, this trend has at times been attributed to the lack of comprehensive studies on alcohol consumption among members of this particular racial group. Most studies have also explored Asian Americans as a single group, ignoring the dynamic nature of most ethnic sub-groups categorized as Asian Americans. As a result of this, most previous studies have failed to examine the variability that exists among the different subgroups.

However, several studies have revealed major variations in general alcohol consumption rates among various sub-groups of the larger Asian American population in the U.S. Different Asian American sub-groups foster varying alcohol consumption trends despite the existence of lower drinking rates within this particular racial group. For instance, according to research on four Asian ethnic groups in Los Angeles, Japanese and Chinese Americans consist of more alcohol consumers than abstainers. However, the trend is different among Filipino and Korean American groups, which display higher levels of abstainers than alcohol consumers. Consequently, there are major variations among different Asian ethnic groups in as far as heavy alcohol consumption is concerned. Japanese Americans have been found to foster higher proportions of heavy alcohol consumers, followed by Filipino, Korean, and Chinese Americans respectively. Asian Americans of Vietnamese origin foster higher alcohol consumption levels than Chinese, Koreans, and Filipinos in the U.S.

DETERMINANTS OF ALCOHOL CONSUMPTION AMONG ASIAN AMERICANS IN THE U.S.

Despite the major variations mentioned above, the overall rate of alcohol consumption among Asian Americans is lower than the average total alcohol consumption rate. This data has, at times, been attributed to such physiological factors as flushing of the skin among a majority of the Asian American population. Physiological sensitivity to alcohol has thus been indicated as a major factor hindering excessive consumption of alcohol among Asian Americans in the U.S. Additionally, lower rates of alcohol consumption within the Asian American group has also been attributed to cultural values, including the ancient Confucian and Taoist philosophies within the Chinese and Japanese cultures. Increased adherences to general levels of conformity, harmony, and individual responsibilities within these philosophies are seen as a major determinant in the basic levels of alcohol consumption among people of Asian origin in America. From a different point of view, the fact that most Asian cultures promote the consumption of alcohol exclusively for specific social events is seen as a major reason for the lower rates of alcohol consumption among people of Asian origins in the U.S.

Furthermore, regarding determinants of alcohol consumption among Asian Americans, there are major differences in alcohol consumption across genders within this particular racial group. Asian American women report higher levels of abstinence from alcohol consumption than their male counterparts. Gender differences still exist in general alcohol consumption behaviors among various ethnic sub-groups within the Asian American racial group, with Japanese American women reporting higher alcohol consumption rates than their Cambodian, Korean, and Filipino American counterparts.
Given the seemingly major effects of cultural structures on alcohol consumption patterns among Asian Americans, acculturation to mainstream American culture has been seen as another major determinant of alcohol consumption within this particular racial group. Acculturation has been cited as a major factor in pushing Asian Americans toward the adoption of white Americans’ alcohol consumption behaviors and patterns. In regard to this, different groups of immigrants from the Asian region have at times displayed similar alcohol consumption patterns with their American counterparts. Needless to say, recent groups of Asian immigrants tend to adopt more relaxed Asian cultural norms, and with them, different alcohol consumption patterns.32

Additionally, Asian Americans born and raised within the U.S. foster different alcohol consuming behaviors compared to their adult counterparts born outside the U.S.30 However, rapid economic growth, globalization, and general urbanization trends among such Asian countries as Korea, Taiwan, and Hong Kong have been viewed as likely to shape certain aspects of social behaviors among the Asian American group in the U.S. This has had the effect of transforming a majority of the traditional Asian cultural practices on the basic alcohol consumption patterns among Asian Americans in the U.S. Based on the grounds of acculturation, alcohol consumption among certain groups of Asian Americans reflects the practices and norms of the larger American society.31 For instance, some of these studies show that Asian Americans who have been further acculturated in the U.S. consume more alcohol and on a more frequent basis than those who have not.

The acculturated stress model, on the other hand, promotes the view that alcohol consumption among Asian Americans is related to high stress levels accompanying acculturation processes. Examples of this trend include family conflicts and discriminations felt as new members of the group become acculturated into mainstream American society. Following the acculturation stress model, many Asian American immigrants turn to alcohol consumption as a way of coping with the stress accompanying acculturation.29 A flaw of the results presented based on the two models is that both levels of acculturative stress and acculturation have not been used to further explore the same study. Furthermore, few of the studies have explored the moderating effects of religiosity and social support.28

As a result of acculturation, there are some sub-groups among Asian Americans which demonstrate higher alcohol consumption. According to data from the Substance Abuse and Mental Health Services Administration (SAMHSA), Japanese and Korean Americans demonstrate higher alcohol consumption levels than other sub-groups forming the large Asian American racial group.13 For instance, 62% of Korean and Japanese Americans consume higher amounts of alcohol as compared to about 25% of other groups such as Vietnamese, Chinese and Filipino Americans.30

On the other hand, self-confidence and psychological maladjustments have been linked with increasing alcohol intake levels among Filipino and Chinese young adults. Among other Asian Americans groups, psychological distress, immigration and low levels of self-regulation have also been closely linked to increases in alcohol consumption among Hong Kong and Vietnamese adults.34 With interest in addressing most challenges in studying the problem of alcohol consumption among Asian Americans, this study took into consideration both acculturative, cultural, and individual factors in shaping alcohol consumption among Asian Americans in the U.S.28

As a result of acculturation, Japanese Americans have reportedly demonstrated similar alcohol consumption trends as white Americans. It is therefore evident that there are major differences in alcohol consumption patterns across various ethnic sub-groups forming the larger Asian American population in the U.S. Due to the use of small sample sizes and the adoption of non-inclusive strategies, most previous studies have failed to give a clear pattern concerning alcohol consumption among U.S.-born Asian American adults. Additionally, generational status has often been overlooked in most studies on alcohol consumption among Asian Americans in the U.S. This refers to the question of whether the parents of an individual were born and
raised within or outside of the U.S. However, the few studies that have put generational status into consideration have revealed that those Asian Americans born within the U.S. but whose parents were born outside this country, are three times more likely to engage in alcohol consumption compared with those who do not have similar generational characteristics. Asian Americans falling above second generation status develop similar alcohol consumption patterns and behaviors to those of their American counterparts. These patterns and behaviors are however directly related to the level of acculturation of an individual.

Another major factor closely related to acculturation in shaping alcohol consumption among Asian Americans is ethnic identity. This refers to the specific cultural characteristics maintained by the practices, values, acquisitions, and beliefs of an individual. Different ethnic sub-groups within the Asian American population depict varied trends of alcohol consumption depending on specific ethnic cultures. Certain factors associated with ethnic identity include ethnic pride which has largely been associated with strong family values and, consequently, greater levels of alcohol avoidance.

Descriptive norms have been identified as another major determinant of alcohol consumption among various racial and ethnic groups in the U.S. These are the general norms and values perceived by individuals as being shared by a larger peer group. People with higher descriptive norms report higher rates of alcohol consumptions than their counterparts with lower levels of descriptive norms.

CONCLUSION
The exploration of recent trends in the consumption of alcohol among Americans reveals major variations in alcohol consumption among minority ethnic groups in this country. The exploration of the determinants of alcohol consumption within American society includes the genetic inclination of different groups as well as the predisposition created by societal forces such as physical appearance and social forces of segregation, among others. Other cultural constructions determining alcohol consumption within American society include religion, cultural values and cultural perceptions of alcohol. In regard to this, alcohol consumption among Asian Americans is dependent on their societal perceptions towards alcohol consumption. For example, Asian Americans, among other culturally strong groups such as Muslims, are viewed as model groups due to their high levels of alcohol abstinence.

The determinants of alcohol consumption in American society include gender, race and ethnicity, marital status, membership in social groups, genetic factors, sexual orientation, poverty, place of residence and education. Among Asian Americans, the determinants of alcohol consumption include their genetic mutation, as shown by the presence of an alcohol-metabolizing enzyme; and sub-group identity, for instance, Japanese Americans and Korean Americans, drink more than Chinese Americans. Other factors determining the consumption of alcohol include affiliation to different social groups, social-cultural affiliations, acculturation and acculturation stress, and cultural observances.

In order to better understand the alcohol consumption patterns of Asian Americans, there is a need to address a number of misconceptions which are likely to have impaired the reliability of previous findings. These errors include the fact that most studies have explored Asian Americans as a single group, not taking into account the socio-cultural differences among the subgroups. Furthermore, many of the previous studies have not explored the group from the perspective of acculturation and acculturation stress, consecutively; there is also the error that most of the studies reached only college and young-adult subjects. This indicates that the actual picture of alcohol consumption among the sub-groups may be completely differ from previous findings; incorporating acculturation and acculturation stress is likely to yield different results and the drinking patterns of older adults may be different from that of young adults.
REFERENCES


