

**SOCIAL CAPITAL AND ALCOHOL CONSUMPTION: A COMPARISON BETWEEN  
BRAZIL AND VIETNAM**

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## 1. INTRODUCTION

The consumption of alcoholic beverages is an underrated characteristic of complex societies, including many areas of Western Asia (Joffe, 1998). Alcohol has an important role in the development of social identities, but despite an expanding focus of scholarship in recent decades (Arnold, 1999; Dietler, 2006; Dietler, 2019; Joffe, 1998; Williams & Nash, 2021), alcohol remains a relatively overlooked research topic, especially as alcohol and drinking-specific analysis is a relatively recent phenomenon (Wang & Liu, 2022).

The majority of research on alcohol conducted in the 19th and 20th centuries focused on social psychology and public health issues, viewing alcohol consumption as a pathology or social ill (Rush, 1805; Levine, 1978). However, a growing body of recent research offers compelling proof that alcohol had a significant impact on historical changes on a global scale. The emergence of social distinction, the context of the ascent of social hierarchies, and the preservation of social ties between groups and individuals are some of these changes (Liu, 2021; Rosenberg et al., 2021).

As a compressed social fact, beverages serve as both a static expression of social relations and a tool for ongoing social action (Feeley-Harnik, 1995; Mauss, 2006; Hastorf, 2017). Commensality is one of the most effective ways of defining and differentiating social groups when it comes to determining who drinks what with whom, since drinking with a man is a symbol and a confirmation of fellowship and mutual social obligations (Li, 2022). It can foster a sense of camaraderie and a sense of community identity due to the lowering of inhibitions that drinking with others can bring (Williams & Nash, 2021).

As the result of a ritualization process, drinking “constitutes a central fiber in the social, religious, economic, and political fabric of any community” (Sterckx, 2006, p.1), and it can never be separated from other realms of social practice (Min, 2022). Beer, for example, is a central element of social and ritual events, cementing relations of mutuality between individuals within families and groups (Lobnibe, 2018; Dueppen & Gallagher, 2021).

Some researchers have more recently emphasized the need for practical studies that address the alcohol as a set of unique social phenomena that construct social identity, formulate political power, precipitate historical transformations (Wang & Liu, 2022), increases social interaction that facilitates the building of new alliances, sense of belonging and the trust between individuals (Williams & Nash, 2021), used to expand social networks, sustain intra- and intergroup solidarity and support, gain and maintain power (Liu, 2021), creates a strong sense of family or community as well as the provision of bonding social capital (Manton et al., 2013), and the importance of drinking to their masculine identities (de Visser & Smith, 2005).

There remains a strong focus on social capital as a public good, while social capital at the individual level is still relatively unexplored (Sadri et al., 2018). Few studies address social capital at the microlevel, both theoretically and methodologically. For instance, Yamamura (2016), Albrecht (2018) and Dussailant and Guzmán (2014) theorize social capital as a private resource and properly analyze it at different stages of the crisis management cycle when natural crises occur (Morsut et al., 2021).

While there is a extensive literature about the role of alcohol in contexts that includes the social and political aspects of production and consumption, use in religious practices, and impact on individual and group experiences (e.g., Dietrich et al., 2012; Guerra-Doce, 2014; Jennings et al., 2005; Liu, 2021; McGovern, 2009; Paulette, 2021; Wang et al., 2021; Williams & Nash, 2021), and there are some researchers that argues that social capital is associated with drinking alcohol (Fat et al., 2015; Child et al., 2017; Theall et al., 2009), no references were

found about practical studies that verify if the alcohol drinking intentions and frequency are associated to the leverage of the individual social capital, such as means to achieve and leverage resources, influence norms, achieve power, defines social boundaries, expand network, creates mutual responsibility, obligations and collective action.

A search in international databases using as search criteria (restricted to words in the title and keywords) the combination "social capital and alcohol consumption", "social capital and drinking", yielded a total of 11 articles that approached social capital and alcohol consumption; none of them, specifically addressed the question of whether drinking intentions are connected to the intention of leveraging social capital. In the databases, no articles were identified in Wiley Online Library, Web of Science and SCIELO; one article was identified on Sage Journals; one on Emerald Publishing; one in JSTOR and eight in Google Scholar. Most of the published articles approach social capital and drinking alcohol from a health risk perspective (7), gender issues (1), the college environment (2), and levels of drinking (1).

As a result, the purpose of this article was to answer two fundamental questions that have received little attention in the literature: specifically, if alcohol is used to leverage individuals' social capital, and if the individual's social capital affects the frequency of drinking.

The primary goal is to test the hypothesis of whether alcohol is used to leverage individuals' social capital and whether the individual's social capital influences the frequency of drinking.

We propose a framework that integrates social capital and alcohol consumption in a micro-oriented perspective (Coleman, 1988) in combination with Bourdieu's definition of social capital as resources (Bourdieu, 1986), based on the hypothesis that alcohol consumption frequency and intention are related to social capital leveraging, including enhancing social identity, obtaining resources, power, and influence, and defining social boundaries, norms and collective action.

The article is organized into four parts. In the first, the theoretical framework addresses the topic of alcohol consumption and social capital. In the second, the methodological procedures that guided the research are presented. The results, discussed in the third part, present the hypothesis tests performed, demonstrating whether alcohol drinking behavior and frequency are associated with the leverage of social capital intention. Finally, the fourth part presents the discussions and conclusions of the study.

## **2. SOCIAL CAPITAL AND ALCOHOL CONSUMPTION**

### **2.1 Alcohol and its role on social life**

Alcohol consumption has a long history (McGovern et al., 2004; Wilson, 2005; Liu et al., 2018), due to the high nutritional properties and its psychoactive qualities that make it a highly desirable beverage (Dietler, 2006; McGovern et al., 2004), although the specific significance of alcoholic beverages and the contexts in which these are consumed may vary (e.g., Dietler, 2006; Joffe, 1998).

In this regard, the role of alcoholic drinking has often been discussed within the context of the rise of social hierarchies and the maintenance of social ties only on a theoretical level or based on ethnographic analogies (Rosenberg et al., 2021). Wang and Liu (2022) consider alcohol a vigorous force that constructs social life and establishes linkages between various components in a society.

Sociocultural anthropologists have long recognized that drinking defines social boundaries and identity, reflecting the social organization and cultural identities (Douglas, 1991), involves both culturally embedded behaviors and material symbols, making it an inclusionary or exclusionary practice in group identity politics (Douglas, 1991; Crown, 2018), asymmetrical power relationships between individuals and constituent groups of multi-ethnic

and diverse societies (Williams & Nash, 2021) and recent works stress that the relationship between drinking and identity is not static, as social identity (Wang & Liu, 2022).

Alcohol can provide a mechanism for increased social interaction to build new alliances and an escape from social barriers. In the 1816 Bussa Rebellion, for instance, alcohol may have facilitated the planning and trust between individuals (Williams & Nash, 2021).

Drinking may also offer a privileged sense of belonging to the group, since this facet of the shared experience creates a tie of unity among those who may not share other social norms in common, and thus creates new shared social identities among participants, while at the same time creating an exclusive group dynamic that differentiates them from those who are not participants (Williams & Nash, 2021).

Other characteristics of consumption events can also mark adherence to certain social identities by participants, in addition to building a preference for a favorite drink. The spatial, temporal, quantitative, and behavioral distinctions of drinking feasts may also mark participants' adherence to group norms (Dietler 2019, p. 121). Men and women can drink in different spaces and the serving order of drinks can also mark social distinctions and unique behaviors. The amount of alcohol served to individuals can also characterize inclusion within a given social group to the detriment of others and the way someone behaves while drinking may reflect certain social norms of group inclusion (Williams & Nash, 2021).

Some studies have considered the association between alcohol and identity. De Visser and Smith's (2005) analysis revealed a variety of associations between masculinity and alcohol consumption. Some men believed that alcohol consumption was a marker of masculinity and behaved accordingly. Another study analyzed the relationship between popularity and levels of alcohol and drug use, detecting a positive correlation (Pearson et al., 2006; Diego et al., 2003). The more popular they felt among their peers, the more they tended to drink and smoke (Diego et al., 2003).

Power and authority were created through social relationships (Bourdieu, 1977), and alcohol was used to build these relationships in a variety of ways, conferring life force and symbolic meanings to an object and making it suitable for ritual and political events (Wagner, 1978). Drinking together affords a united face for all social effects and creates fellowship and reciprocal social duties (Feeley-Harnik, 1994, p. 11). The interrelated realms of drinks, ritual, and commensality, therefore, are critical for revealing cultural distinction and social change (Chang, 1977; Van der Veen, 2003; Min, 2022).

Drinking takes place in domestic and public spaces, highly ritualized or casual gatherings (Capron, 1973; Şaul, 1981). Globally, archaeologists have long emphasized the social and ritual dimensions of alcohol (Dueppen & Gallagher, 2021). Ritual activities with communal consumption may have been projected to build and expand social networks, sustain intra- and inter-group solidarity, and support elites to gain and maintain power (Liu, 2021).

## **2.2 Individual social capital, alcohol consumption**

Social capital should be understood both in terms of norms and resources (Demant & Jarvinen, 2011) and it is associated with drinking alcohol (Fat et al., 2015; Child et al., 2017; Theall et al., 2009). The more alcohol-positive the norms of a person's peer network are and the higher the consumption level in the network, the more the person tends to drink (Spijkerman et al. 2004; van Schoor et al. 2008; Chawla et al. 2009).

Although social capital is a background factor influencing participants' relationship to alcohol, it is also an effect of their drinking experience (Demant & Jarvinen, 2009). Popular youth tend to drink more than others, and drinking contributes to the social capital of the participants (Demant & Jarvinen, 2009). The social relations in which individuals are embedded

and the resources that potentially flow from these relations, show how people benefit from social capital (Granfield & Cloud, 1999).

The idea of social capital is, as Portes (1998, p.2) points out, as old as sociology itself, dating back to Durkheim's conception of group life as "the antidote to anomie and self-destruction". Bourdieu (1986, p. 248) defines social capital as "the aggregate of the actual or potential resources that are linked to the possession of a durable network of more or less institutionalized relationships of mutual acquaintances or recognition". Furthermore, social capital can be understood as a "resource for action" related to certain, collectively stipulated norms" (Coleman, 1988. p. 95). It can facilitate certain actions and inhibit others, reflecting specific positions held by members of a social network, as well as contributing to these positions (Coleman, 1988, p. 101).

Coleman's definition has less emphasis on resources and more on the normative aspects of social capital, this understanding is close to Durkheim's description of the moral power of the clan, and the sanctioning capacities of social integration (Durkheim 1972). In Coleman's perspective, social capital is a functional effect of certain structural patterns tied to specific networks and less of a personal resource that the individual can benefit from outside of this specific structure (Demant & Jarvinen, 2009).

Bourdieu's perspective is less interested in the normative functions of social capital and more in the capacity of social capital to favor certain groups and individuals at the expense of others. Central to Bourdieu's understanding of social capital is that it stems from the interplay between economic and cultural capital and is, therefore, unequally distributed and reinforces hierarchies (Morsut et al., 2021).

In Bourdieu's (1986) perspective, social capital is strongly associated with power and influence. According to his concept, some groups and some individuals within them succeed in "generalizing" their own values and norms, while others don't even try because they know beforehand that their group's values and norms are not marketable in other fields than their own. In fact, the ability or inability to transfer capital from one's own to other groups is the variable that distinguishes those in power from those without power (Demant & Jarvinen, 2011).

Coleman's perspective is more focused on social capital as norms and Bourdieu's perspective on social capital as resources (Demant & Jarvinen, 2011). As norms, the key words are values and mutual influence, "the rules by which people coordinate their actions along with systems of sanctions and incentives that ensure consistency in those actions" (Reimer et al., 2008, p. 259), and as resources, the focus is on group relationships and the benefits of networks, in which resources participants can compete for, gain (or lose) and transfer (or fail in transferring) to other social fields (Fulkerson & Thompson, 2008). Social capital studies should consider both dimensions (Reimer et al., 2008).

This paper considers the two approaches to social capital – the normative approach and the social resource approach – and analyzes the interaction between them, arguing that both dimensions of social capital are equally important for the understanding of people's relationship to alcohol.

Social capital may also be analyzed at two levels: the macro and the micro. The macrolevel refers to the institutional context in which organizations operate (see Olson 1982; North 1990), which involves formal relationships and structures, the rules of law, legal frameworks, the political regime and the policy formulation process (Bain & Hicks, 1998). The microlevel involves the potential contribution that horizontal organizations and social networks make to development. Within the microlevel, there are two types of social capital: cognitive and structural (Uphoff, 1996).

Cognitive social capital is the less tangible side of social capital and refers to values, beliefs, attitudes, behaviors, and social norms. These values include trust, solidarity, and

reciprocity among members of a community, which create the conditions under which communities can work together for the common good (Bain & Hicks, 1998).

Structural social capital involves the practices, formal and informal, of local-level institutions that serve as instruments of community development. It is constructed through horizontal organizations and networks that have collective and transparent decision-making and practices of collective action and mutual responsibility (Bain & Hicks, 1998).

This article applies a micro-oriented perspective (Coleman, 1988)—with a specific focus on collective norms and resources the participants compete to achieve the benefits of networks—in combination with Bourdieu's definition of social capital as resources, that can favor certain groups and individuals (Bourdieu, 1986).

Social capital has been theorized as both a collective (Putnam, 1993) and individual resource (Bourdieu, 1986; Coleman, 1988). As a resource, social capital is used by individuals, who usually invest time and energy to build networks consisting of people with whom both economic and cultural capital may be transacted, converted, or reinforced, and where personal favors are traded in reciprocity (Bourdieu, 1986). In addition, each individual possesses a volume of social capital, which is related to the size of the network(s) and the forms chosen to mobilize this network (Bourdieu, 1986; Morsut et al., 2021).

Networks are important since they enhance social cohesion by enabling individuals to cooperate not only with each other within the network but also with members of other networks. This leads to mutual benefits (Field, 2008) and involves the number of resources an individual obtains from his or her own social networks (Portes, 1998), which can be family ties, friends, information, money, and other things (Morsut et al., 2021).

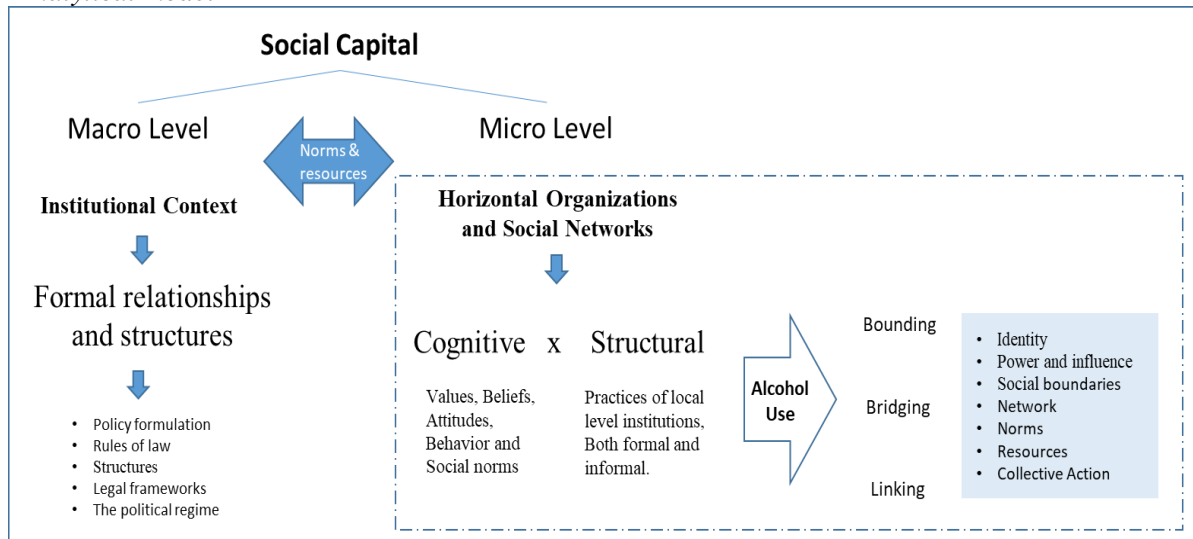
According to Cloud and Granfield (2008, p. 1977), social capital can be measured as "an interval-level variable, where zero is not the beginning but a point along a positive and negative continuum". Social capital can have positive and negative aspects. Positive social capital consists of the establishment of solidarity and trust, for instance, a drug addict with a non-substance-using network consisting of family and workmates represents a form of positive social capital that helps the former problem user stay clean, while drug-using friends represent a form of social capital that is predominantly negative (Morsut et al., 2021). Therefore, the aspects of group pressure to increase alcohol intake and not reduce it (Knibbe et al., 1993; Bruun, 1959) can be considered negative social capital (Demant & Jarvinen, 2009).

A rather broad operationalization of social capital distinguishes three forms, namely, bonding, bridging, and linking social capital, with distinct functions. Bonding social capital refers to close relationships between individuals, such as friends or family, and can be driven by culture, religion, ethnicity, and identity. Bridging social capital permits for horizontal linkages to external assets and draws individuals, groups, and communities closer to other individuals, groups, and communities (Morsut, et al., 2021), and linking social capital connects individuals, groups, and communities with those that hold positions of authority and power, such as politicians, public administrators, and so forth (Szreter, 2002; Szreter & Woolcock, 2004; Morsut et al., 2021).

These three types of links generate different benefits for individuals and the community. For example, bonding-type bonds are associated with greater ease for individuals to receive help from loved ones in difficult circumstances and higher levels of trust in the community (Aldrich & Meyer, 2015). Bridge type links facilitate the exchange of information about access to certain resources (Aldrich & Meyer, 2015), as well as job search (Granovetter, 1973), while the link type can help communities raise their concerns with governments. Therefore, it is important to consider all three types of ties when trying to measure social capital.

Based on the considerations and analysis carried out here, we present the analysis model utilized in this research (Figure 1).

**Figure 1**  
*Analytical model*



Note: Elaborated by the authors.

In the proposed model, in the opposite way that some scholars investigations try to explain how social capital influences alcohol drinking behavior (Fat et al., 2015; Child et al., 2017; Theall et al., 2009), we propose that alcohol drinking plays an important role in the individual level of social capital (Sadri et al., 2018; Albrecht, 2018; Dussailant & Guzmán, 2014; Yamamura, 2016; Morsut et al., 2021; Demant & Jarvinen, 2009), used as a means to achieve and leverage resources (Aldrich & Meyer, 2015), influence norms (Demant & Jarvinen, 2011; Williams & Nash, 2021), achieve power (Morsut et al., 2021; Liu, 2021), influence and authority (Bourdieu, 1977; Szreter, 2002; Szreter & Woolcock, 2004); define social boundaries (inclusionary or exclusionary) (Crown 2018); make new alliances, sense of belonging (Williams & Nash, 2021), share social identities (Douglas, 1991), achieve assets to be used outside the group (Morsut et al., 2021; Demant & Jarvinen, 2011), expand network (Liu, 2021), achieve trust, solidarity and reciprocity, creates mutual responsibility and obligations (Bain & Hicks 1998; Li, 2022), collective action and decision making (Bain & Hicks 1998), but also it's a product of the social norms and rules (Fat et al., 2015; Child et al., 2017; Theall et al., 2009; Spijkerman et al., 2004; van Schoor et al., 2008; Chawla et al., 2009).

Although inspired by a broader concept of social capital, we should point out that our analysis is micro-sociological and not focused on social capital from a macro perspective; our focus is to check if the participants deliberated drinking alcohol to leverage their individual social capital (microlevel analysis).

### 3. METHOD

#### 3.1. Demographic profile and sampling design

The field research, based on probability and stratified sampling, was composed of two samples of alcohol-drinking users, one in the city of Belo Horizonte and another in the city of Hanoi, Vietnam. We chose the city of Belo Horizonte to carry out the research because it is the capital that leads the ranking of alcohol consumption in Brazil (MINISTERIO DA SAUDE, 2021), it's the city recognized for having a strong bar culture, and the city of Hanoi in Vietnam has a strong alcohol culture tradition (Lincoln, 2016).

The research universe involves the adult population (18 to 65 years of age) in the city of Belo Horizonte, estimated at 2.530.70 (IBGE, 2019), of which 46% are men and 54% women. The city of Hanoi has 7.661.000 people, 49% men and 51% women (United Nations,

2019). To calculate the sample size ( $n$ ) (Cochran, 1977), we considered a 90% confidence interval with a 7% margin of error, resulting in a total of 300 respondents, 150 in each city.

### **3.2. Questionnaires**

The research allowed the elaboration of a collection instrument with 40 structured questions, derived from the conceptual model. Two blocks were part of the questionnaire. In the first, the questions were related to the characteristics of the participants. In the second, the questions sought information about the consumption of alcoholic beverages and the social capital of individuals, according to the two thematic dimensions of interest (group resources and norms). For content validation, the statements were based on the literature on individual social capital. Following Perrien et al. (1984), initially, the researchers used a representative number of closed question options in order to cover the answers. In addition, questions strictly related to the research topic were asked. The implications of the questions were considered in the tabulation and data analysis procedures.

### **3.3. Pre-test**

Subsequently, the authors performed a pretest for the data collection instrument. In this pretest stage, the authors considered the following aspects highlighted by Gil (2002): clarity and precision of terms; number of questions; the form of questions; the order of the questions; and the introductory text. Interviews with the telephone, carried out with 15 users, operationalized the pre-test. The number of respondents met the criteria suggested for the stage (Malhotra, 2011).

### **3.4. Data collection**

Users were contacted through an online platform operated by sending e-mails in addition to telephone surveys. The structured interviews took place between January and May 2023. It should be noted that confidentiality was maintained. Free and informed consent was established in the register on the virtual platform used in the study. The collection was carried out by a team formed by experienced professionals (Brazilians and Vietnamese), consisting of two researchers, one coordinator-supervisor, and three technicians. The following practices were carried out to verify the quality of data collection: i) audit of transcripts of electronic forms; ii) call the interviewees to confirm information; iii) assessment of complete completion of the forms, as recorded in the electronic research system.

### **3.5. Non-response and common method bias**

In order to verify the occurrence of common method bias, the single-factor Harman test was performed (Podsakoff et al., 2003). When the explained variance of the factor analysis does not exceed 50%, it appears that the common method used in data collection does not deserve concern (Podsakoff et al., 2003). Using the SPSS® v.25 software, the principal components extraction method and the unrotated factorial solution were adopted. The result showed a variance of 33,127%; therefore, no significant evidence of common method bias was found.

### **3.6. Measuring instruments**

The reliability of the scales was determined using Cronbach's Alpha Coefficient ( $\alpha$ ) (Malhotra, 2011). Landis and Koch (1977) establish that the internal consistency of the scales is acceptable at values above 0.61. In this research, the coefficient obtained was 0.72. In addition, researchers assessed the existence of missing data, suspicious response patterns, outliers, and linear response patterns (straight lining), which may indicate acquiescence bias (Podsakoff et al., 2003). To verify outliers, the univariate analysis admitted values greater than four standard deviations as a reference for characterizing an atypical observation (Hair et al.,



2017). The researchers developed indices to measure attributes that impact individual social capital in terms of leveraging resources and social rules, making it possible to verify whether alcohol use is used to leverage individual social capital. These indices were operationalized through questions on a Likert scale. The questions were grouped into seven key categories (Table 1).

**Table 1.**  
*Questions according to interest variables*

Categories	Questions
I1. Identity	P1. Alcoholic drink is part of who I am, how I identify myself in the world. P2. I drink alcohol because I identify with the social group I belong to. “They drink, I drink too”. P3. I share the identity of the group to which I belong.
I2. Power and influency	P4. I drink to have more influence in my social group P5. Drinking gives me authority over other people.
I3. Social boundaries	Q6. I drink to feel socially included Q7. If I don't drink, I feel socially excluded. Q8. I drink to be accepted/included in the group I belong to.
I4. Network	Q9. I drink to expand my network Q10. I drink to keep or make new alliances Q11. I drink to interact socially
I5. Norms	Q12. I drink because it is a rule to drink in my group. Q13. I feel compelled to drink socially Q14. If I don't drink, I won't be well seen by others
I6. Resources	P15. I drink because if I drink, I will have more chances of being promoted. Q16. I drink because by drinking I will have more changes in achieving professional or financial opportunities. Q17. I drink to look confident. Q18. I drink to trust me. Q19. I drink because I will have more changes to get some favor from colleagues and friends. Q20. Drinking was fundamental to getting a job or business opportunity Q21. I drink to increase my power and influence with important people in society (government leaders, officials, celebrities...).
I7. Collective action	P22. I drink because everyone drinks P23. I only drink when everyone else is drinking Q24. I always drink when everyone decides to drink

Note: Elaborated by the authors.

To compare the impact of alcoholic beverages on individual social capital between Belo Horizonte and Hanoi, the “alcohol social capital indicator” was developed and operationalized through Likert scale questions applied to drinking users. The questions were grouped into seven key variables, namely: identity, power and influence, social boundaries, network, norms, resources, and collective action. They were developed based on the theoretical framework.

The scale used was as follows: 1=“totally disagree”, 2=“partially disagree;” 3=“neutral, or indifferent;” 4=“partially agree;” and 5=“totally agree.” The values were converted into indices from -1 to +1, assigning -1 to 1, -0.5 to 2, 0 to 3, +0.50 to 4 and +1 to 5. The following equation was used:

$$Asc = \frac{\frac{\sum_k^p(11)}{n} + \frac{\sum_k^p(12)}{n} + \frac{\sum_k^p(13)}{n} + \frac{\sum_k^p(14)}{n} + \frac{\sum_k^p(15)}{n} + \frac{\sum_k^p(16)}{n} + \frac{\sum_k^p(17)}{n}}{7} \quad (1)$$

where: Asc= alcohol social capital indicator; I1, I2, I3, I4, I5, I6, I7=Likert-scale data; n=sample size; and k=the user (k=1, 2, ..., p).

If the indicator is greater than 0, it will be confirmed that the use of alcohol has a positive impact on the individual's social capital; the higher the indicator, the greater the influence of alcohol on the individual's social capital. The indicator can be used to compare the two regions with different drinking cultures. Based on the data provided by the indicator, it was possible to carry out the t-test, which corresponds to univariate hypothesis testing and is utilized to compare means when the standard deviation is unknown (Malhotra, 2012).

### 3.7. Data analysis

The analysis involved multidimensional data (Hair et al., 2017). The data provided by the questionnaire were grouped according to analysis categories and based on questions structured on a Likert scale. The researchers employed statistical analysis of the aggregated results, as the total response is not entirely proportional to the population. The statistical tests and contrasts carried out in the subsequent phases of the analysis had levels of significance or degrees of precision determined from the data effectively obtained in the research, that is, disregarding "absent" answers, and according to the statistical techniques used and the established level of aggregation in each situation.

The researchers conducted normality tests, and then correlation tests between each category and the frequency of drinking, verifying statistical significance. Afterwards, multinomial logistic regression logistic regression analysis associated with the t-test were performed. The objective was to verify if the variables of interest explain the variations in drinking frequency. In this sense, the following hypothesis tests were adopted:

*H0* (t-test): The indicator for individual social capital is equal to zero ( $p > 0,05$ ).

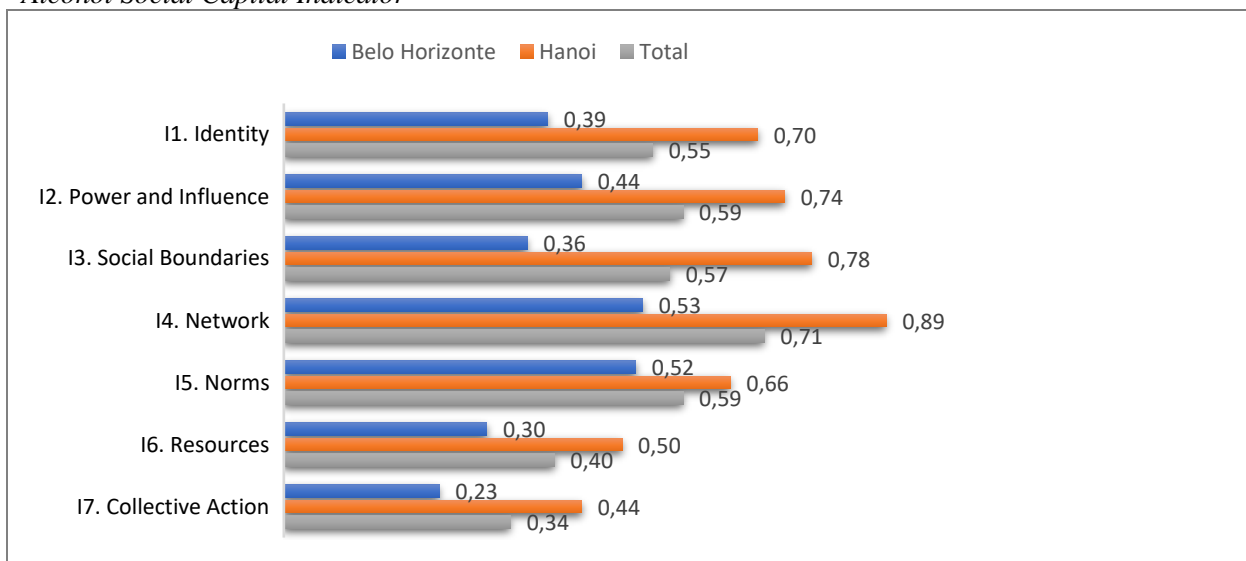
*H0* (Levene's test): The variance of the Hanoi's alcohol social capital indicator is equal to the variance of the Belo Horizonte's alcohol social capital indicator ( $p > 0,05$ ).

*H0* (t-test): The average of the Hanoi's alcohol social capital indicator is equal to the average of the Belo Horizonte's alcohol social capital indicator ( $p > 0,05$ ).

## 4. RESULTS

Figure 2 presents the results of the "alcohol social capital indicator" that comprise the perceived differences in identity, power, and influence, social boundaries, networks, norms, resources, and collective action between drinking users in Belo Horizonte and Hanoi.

**Figure 2**  
*Alcohol Social Capital Indicator*



Note: Elaborated by the authors based on the research data.

The data point to the indicator, where the variables network (0.71), power and influence (0.59), and norms (0.59) are emphasized for the Hanoi and Belo Horizonte samples. The higher the value, the greater the intention to use alcohol to leverage individual social capital among users. The sample of Vietnamese alcohol users showed a higher level of alcohol social capital rate when compared to the sample of Brazilians in all categories, but the ranking of the elements was different. While Vietnamese attributes focus on network (0.89), social boundaries (0.78), and power and influence (0.74), Brazilian attributes highlight network (0.53), norms (0.52), and power and influence (0.44).

Through the equation of the alcohol social capital indicator, the following values were obtained: 0.40 for the sample composed only of Brazilians and 0.67 for the sample composed only of Vietnamese, which indicates that, on a scale of -1 to 1, alcohol drinking plays an important and significant role in the individual level of social capital (Sadri et al., 2018; Albrecht, 2018; Dussaillant & Guzmán, 2014; Yamamura, 2016; Morsut, Kuran, Kruke, Nævestad, Orru, Hansson, 2021; Demant & Jarvinen, 2009). In order to assess the significance of the data, hypothesis testing was carried out (Table 2) to verify if the users adhered to alcoholic beverages as a means of leveraging individual social capital.

**Table 2**  
*T-test Individual Social Capital Indicator*

	One-Sample Test					
	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95%	
				Lower	Upper	
Identity	19,155	299	,000	,542	,49	,60
Power and Influence	21,257	299	,000	,593	,54	,65
Social Boundaries	21,334	299	,000	,570	,52	,62
Network	27,683	299	,000	,708	,66	,76
Norms	26,233	299	,000	,593	,55	,64
Resources	12,193	299	,000	,402	,34	,47
Collective action	7,279	299	,000	,332	,24	,42

Note: T-test considered  $p < 0.05$  for average different than 0.

It is observed that the p-value is less than 0.05 in all variables related to alcohol intention aspects, thus rejecting the null hypothesis. It is possible to assume, therefore, that alcohol drinking plays an important role in the individual level of social capital, used as a means to achieve and leverage resources, share social identities, achieve power and influence, define social boundaries, make new alliances and networks, influence norms, and achieve assets to be used outside the group, like solidarity and reciprocity, collective action, and creating mutual responsibility and obligations.

When likening the sample of Brazilians to the sample of Vietnamese, it is observed (Table 3) that the intention to use alcohol due to social boundaries is 116% higher compared to Brazilians, followed by collective action (91% higher), identity (79% higher), network (68% higher), power and influence (68% higher), resources (67% higher), and norms (27% higher).

**Table 3**  
*Comparative alcohol social capital indicator*

Category	Belo Horizonte	Hanoi	Delta %
I1. Identity	0.39	0.70	79
I2. Power and Influence	0.44	0.74	68
I3. Social Boundaries	0.36	0.78	116
I4. Network	0.53	0.89	68
I5. Norms	0.52	0.66	27
I6. Resources	0.30	0.50	67
I7. Collective Action	0.23	0.44	91

Note: Elaborated by the authors based on the research data.

Regarding the percentage of people who use alcohol to leverage social capital, 89% of the sample in Hanoi and 67% in Belo Horizonte agreed with the use of alcohol to share common identities; 90% in Hanoi and 72% of the sample use alcohol to increase power and influence; 88% in Hanoi and 61% in Belo Horizonte drink to be accepted or keep a sense of belonging (social boundaries); 100% in Hanoi and 83% of the people use it to expand networks, create alliances, or improve interaction; 89% in Hanoi and 77% in Belo Horizonte drink due to group norms and roles (social convention); 78% in Hanoi and 61% in Belo Horizonte, to reach some resource having the benefit of reciprocity and trust, 77% in Hanoi and 61% in Belo Horizonte drink to support collective action.

Levene and t-tests were used to determine whether the difference is statistically significant, and the results are shown in Table 6 that the difference is significant ( $p < 0,05$ ) for all the variables.

**Table 6**  
*Independent Samples Test*

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Identity	Equal variances not assumed	8,549		-5,770	283,437	,000	-,310	,054	-,416	-,204
Power and Influence	Equal variances assumed	,215	,643	-5,644	298	,000	-,300	,053	-,405	-,195
Social Boundaries	Equal variances not assumed	15,995		-8,810	273,157	,000	-,420	,048	-,514	-,326
Network	Equal variances not assumed	31,960		-7,603	193,898	,000	-,357	,047	-,449	-,264
Norms	Equal variances assumed	,642	,424	-3,140	298	,002	-,140	,045	-,228	-,052
resources Trust	Equal variances not assumed	19,611		-3,025	283,386	,003	-,197	,065	-,325	-,069
Collective action	Equal variances not assumed	28,728		-2,321	287,683	,021	-,210	,090	-,388	-,032

Note: Levene's test considers  $p < 0,05$  when equal variances are not assumed, and  $p > 0,05$  for equal variances assumed; t test considers  $p < 0.05$ .

The method of multinomial logistic regression was used to verify whether the categorical variables predicted oscillations in the frequency of drinking, obtaining a mathematical model of this relationship. The model's output variable (dependent) was frequency of drinking, and the predictor variables (independent) were identity, power and influence, social boundaries, network, norms, resources, and collective action. In order to have a valid model, some requirements for logistic regression were checked. First, we checked if there is multicollinearity in the data, and SPSS showed that there is no presence of multicollinearity in the diagnosis of collinearity.

The model fitting information was significant [ $X^2(48) = 93,074$ ;  $p < 0.001$ ,  $R^2_{Nagelkerke} = 0.310$ ]. The goodness of fit showed a chi-square with  $P > 0.05$  with Pearson with  $sig = 0,222$  and deviance with  $sig = 0,161$ , which indicates a good quality of the model.

The Likelihood Ratio Tests (Table 4) shows the variables that has statistically significant effect on the drinking frequency, the variables that has p-value<0.5 were identity, power and influence, social boundaries, network, resources and collective action.

**Table 4**  
*Likelihood Ratio Tests*

Effect	Model Fitting Criteria		Likelihood Ratio Tests	
	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept	165,461a	,000	0	.
I1. Identity	178,988	13,527	6	,035
I2. Power and Influence	185,935	20,473	9	,015
I3. Social Boundaries	178,285	12,823	6	,046
I4. Network	188,748	23,287	9	,006
I5. Norms	168,726	3,265	3	,353
I6. Resources	183,455	17,994	6	,006
I7. Collective Action	183,513	18,051	6	,006

Note: The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

Thus, despite the positive rate on the indicator for norms (Table 3), which indicates that norms affect alcohol drinking intention, at a statistical significance level of 0.05, we can't assume that norms variable affects the frequency of drinking. Therefore, the other variables have significantly affected drinking frequency and drinking intention.

## 5. DISCUSSION

The research findings corroborate the proposition that alcohol plays an important role in leveraging individual social capital (Wang & Liu, 2022; Morsut et al., 2021; Demant & Jarvinen, 2009), cementing relations of mutuality between individuals within families and groups (Lobnibe, 2018; Dueppen & Gallagher, 2021), in different cultures (Gong et al., (2022)). The alcohol social capital indicator demonstrates that Hanoi's sample has a higher level of alcohol consumption to leverage social capital, compared to Belo Horizonte, but the results show that in both samples, alcohol has been used to reinforce a common social identity (Douglas, 1991), a sense of belonging (Williams & Nash, 2021), increase social interaction, expand networks, define social boundaries, and increase reciprocity between individuals (Williams & Nash, 2021).

The indicator also shows that alcohol beverages are mostly used to expand social networks (Liu, 2021), with the highest score in both cities, used to sustain solidarity and support, and as a way to maintain or gain power, which corroborates the propositions of Bain and Hicks (1998) and Li (2022).

The social boundaries rate (0.78 in Hanoi and 0.39 in Belo Horizonte) also demonstrates that the alcohol users have a strong sense of bonding social capital (Crown 2018, Manton, Pennay, & Savic, 2013), and the Anova test indicates that even if there is an importance of drinking to masculine identities (Visser & Smith, 2005), there is not a significant difference between man and woman regarding the importance of the identity for drinking intention. Thus, the sense of identity is the same for women and men in the sample investigated.

The indicator presented a positive rate of 0.67 in Hanoi and 0.40 in Belo Horizonte. This deviation shows that the intention to use alcohol can have a different trend in different cultures (Gong et al., 2022). Nonetheless, regarding the level of drinking, the likelihood ratio test on the logistics regression model shows that both samples surveyed have a significant positive rate for all the variables, except norms, which indicates that, despite being significant for drinking

intention (Demant & Jarvinen, 2011; Williams & Nash, 2021), the norms of the alcohol groups are not a significant factor that influences the level of drinking.

Regarding achieving power (Morsut et al., 2021; Liu, 2021), the indicator shows a positive rate (0.74 in Hanoi and 0.44 in Belo Horizonte), which means that the alcohol is used to have influence and authority (Bourdieu, 1977; Szreter, 2002; Szreter & Woolcock, 2004).

In terms of accessing resources to be used outside the group, the indicator also demonstrates a positive rate for Hanoi (0.50) and Belo Horizonte (0.30), which corroborates Morsut et al. (2021) and Demant and Jarvinen (2009). The collective action also has a positive rate for Hanoi (0.44) and Belo Horizonte (0.23), which demonstrates that the decision to drink and the moment of drinking are influenced by the decisions made by the group (Bain & Hicks 1998).

The alcohol social capital indicator can also be associated with the operationalization of social capital in its three forms (bonding, bridging, and liking). Regarding bonding, the indicator elements (identity and social boundaries) have a rate of 0.70 and 0.78 in Hanoi and 0.39 e 0.39 in Belo Horizonte, respectively, which indicates that alcohol is used to leverage the group identity and the cohesion of the group, identities, solidarity, and reciprocity among social entities. The bridging social capital that permits horizontal linkages to external assets and draws individuals, groups, and communities closer to other individuals, groups, and communities (Morsut, et al., 2021) and the linking social capital that connects individuals, groups, and communities with those that hold positions of authority and power, such as politicians, public administrators, and so forth (see Szreter, 2002; Szreter & Woolcock, 2004; Morsut et al. 2021) can be associated with the dimensions of network, resources, and power and influence with a degree of 0.89, 0.50 e 0.74 in Hanoi 0.53, 0.30 e 0.44, respectively. All of these attributes scored significantly on the statistical tests.

## **6. CONCLUSION**

### **6.1. Theoretical and methodological implications**

This study presents important contributions. By associating two approaches to social capital, the normative approach and the social resource approach, to measure and analyze the individual social capital of alcohol users with a set of totally original indicators, this article helps to fill gaps associated with the current lack of work on social capital at the individual level, which is still relatively unexplored (Sadri et al., 2018).

Indeed, by expanding the analyzes beyond the traditional way of some scholars investigation try to explain how the social capital influences the alcohol drinking behavior (Fat et al., 2015; Child et al., 2017; Theall et al., 2009), this article inserts a new point of view, that alcohol drinking plays an important role in the individual level of the social capital, used as means to achieve and leverage resources, influence norms, achieve power, influence and authority, defines the social boundaries, make new alliances, sense of belonging, share social identities, achieve assets to be used outside the group, expand network, achieve trust, solidarity and reciprocity, creates mutual responsibility and obligations, collective action and decision making.

This article allows for a more integrated understanding of the variables that influence the drinking intention and social capital of the individuals, and shows, with the alcohol social capital indicator, that the intention to use alcohol can have a different trend in different cultures; in which network, social boundaries, and power and influence are the most influential factors to drink, and the norms, besides having a positive rate, have no significative influence on drinking frequency in the two samples investigated.

## **6.2. Practical implications**

Initially, this article emphasizes the importance of a better understanding of the drinking intention factors and whether alcohol beverages are used to leverage individual social capital. The proposal of a model that integrates several variables, as proposed here, can help them in this direction. Indeed, knowledge of these variables and their relationship with individual social capital can help managers formulate strategies to enhance markets and services oriented toward alcohol users. In addition, by demonstrating that the network is the main factor that influences drinking intention, this study sheds light on the relevance of individual social capital and the relationship with customer behavior, which are still little explored. Finally, the indicator to measure individual social capital proposed here can be a useful tool for researchers to measure the variables regarding social capital, like bounding, bridging, and linking.

## **6.3. Implications at the level of public policies**

Alcohol consumption is a concern in many societies, especially when the consumption carries negative externalities of the social capital, reflecting in overconsumption, alcohol addiction, violence, other behaviors. Thus, this study shows the main factors related to alcohol consumption, which is a way that people leverage their individual social capital, and according to the research, the major reason to drink is to keep or expand networks and to have social integration. Therefore, these findings can support public policies to reduce alcohol's negative externalities.

## **6.4. Limitations**

This study is not without limitations. The first is related to the cross-sectional analysis of alcohol intention and individual social capital. The study addresses the immediate returns of alcohol and the intention to leverage the social capital investigated here. However, the intention to consume alcohol can have a long-term effect, the results of which can be better observed over a longer time horizon than that understood in this work. Another limitation is presumed causality. It was hypothesized that alcohol beverages can be used to leverage individual social capital; however, reverse causality cannot be ruled out. That is, the individual's social capital may have leveraged alcohol consumption. Thus, this study confirms the association between the variables, not their causality. Finally, the absence of a qualitative research approach that could enable the establishment of a deeper explanation of the impacts caused by alcohol on the social context.

## **6.5. Suggestions for future research**

New research could, for example, investigate the relation between the individual's social capital and other habits, like smoking, commensally, and traditional rituals. In addition, some variables, such as norms, have no significant influence on the frequency of alcohol consumption, representing research opportunities. As such, as social capital appears to have changed over long-term horizons, longitudinal studies are shown to be necessary.

## **6.6. Concluding remarks**

This article has sought to answer two fundamental questions that have been little explored in the literature: specifically, if alcohol is used to leverage individuals' social capital, and if the individual's social capital affects the frequency of drinking. Field evidence allows us to conclude that: i) Alcohol consumption plays an important role in the individual level of social capital, used as a means to achieve and leverage resources, expand networks, define social boundaries, and gain power and influence; ii) Regarding the frequency to drink, all the factors investigated have affected the drinking level, except the group norms, which, besides having a

positive rate on drinking intention, have no significant influence on drinking frequency in the two samples investigated.

## REFERENCES

- Albrecht, F. (2018). Natural Hazard Events and Social Capital: The Social Impact of Natural Disasters. *Disasters* 42(2), 336–60. <http://10.1111/disa.12246>
- Aldrich, D., & Meyer, M. (2015). Social Capital and Community Resilience. *American Behavioral Scientist*. 59(2), 254-269. <http://dx.doi.org/10.1177/0002764214550299>
- Alpkan, L., Bulut, C., Gunday, G., Ulusoy, G., & Kilic, K. (2010). Organizational support for intrapreneurship and its interaction with human capital to enhance innovative performance. *Management decision*, 48(5), 732-755, <https://doi.org/10.1108/00251741011043902>
- Arnold, B. (1999). Drinking the Feast: Alcohol and the Legitimation of Power in Celtic Europe. *Cambridge Archaeological Journal* 9 (1), 71–93. <https://doi.org/10.1017/S0959774300015213>
- BarNir, A. (2012). Starting technologically innovative ventures: reasons, human capital, and gender. *Management Decision*, 50(3), 399-419, <https://doi.org/10.1108/00251741211216205>
- Bain, K., & Hicks, N. L. (1998, April). *Building social capital and reaching out to excluded groups: The challenge of partnerships*. Paper presented at CELAM Meeting on the Struggle Against Poverty Toward the Turn of the Millennium. Washington, DC: The World Bank.
- Bourdieu, P. (1977). Outline of a Theory of Practice. Translated by Richard Nice. Cambridge University Press. 16(1). <https://doi.org/10.1017/CBO9780511812507>
- Bourdieu, P. (1986). The forms of capital. In J.G. Richardson (Ed.), *The handbook for theory and research for the sociology of education*. New York: Greenwood Press, 241–258.
- Blaine, S. K., & Sinha, R. (2017). Alcohol, stress, and glucocorticoids: From risk to dependence and relapse in alcohol use disorders. *Neuropharmacology*. 122, 136–147. doi: 10.1016/j.neuropharm.2017.01.037
- Bruun, K. (1959). *Drinking behavior in small groups*. Helsinki: The Finnish Foundation for Alcohol Studies.
- Cochran, W. G. (1977). *Sampling Techniques*, 3rd edn. Wiley. New York.
- Capron, J. (1973). *Communautés villageoises bwa (Mali – Haute Volta)*. Muséum national d'Histoire naturelle, Paris, 371.
- Chang, K.C. (1977). *Food in Chinese Culture: Anthropological and Historical Perspectives*. Yale University Press, New Haven.
- Chawla, N., Neighbors, C., Logan D., Lewis M.A., & Fossos N. (2009). Perceived approval of friends and parents as mediators of the relationship between self-determination and drinking. *Journal of Studies on Alcohol and Drugs*, 70(1), 92–100. <https://doi.org/10.15288/jsad.2009.70.92>
- Cloud, W., & Granfield, R. (2008). Conceptualizing recovery capital: Expansion of a theoretical construct. *Substance Use and Misuse*, 43(12), 1971–1986. <https://doi.org/10.1080/10826080802289762>.
- Coleman, J.S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, S95–S120.
- Crown, P.L. 2018. Drinking performance and politics in Pueblo Bonito, Chaco Canyon. *American Antiquity*, 83, 387–406. <https://doi.org/10.1017/aaq.2018.12>
- Child, S., Stewart S., & Moore S. (2017). Perceived control moderates the relationship between social capital and binge drinking: longitudinal findings from the Montreal Neighborhood



- Networks and Health Aging (MoNNET-HA) panel. *Annals of Epidemiology*, 27(2), 128-134. <https://doi.org/10.1016/j.annepidem.2016.11.010>.
- Demant, J. & Järvinen, M. (2009). Constructing Maturity through Alcohol Experience: Focus Group Interviews with Teenagers. *Addiction Research & Theory*, 14, 589-602. <https://doi.org/10.1080/16066350600691683>.
- Demant, J.J., & Järvinen, M. (2011). Social capital as norms and resources: Focus groups discussing alcohol. *Addiction Research & Theory*, 19(2), 91–101. <https://doi.org/10.3109/16066351003725776>
- de Visser, Richard & Smith, J. (2007). Alcohol Consumption and Masculine Identity among Men. *Psychology & Health*, 22(5), 595-614. <https://doi.org/10.1080/14768320600941772>
- Diego, M.A., Field T.M., & Sanders, C.E. (2003) Academic performance, popularity, and depression predict adolescent substance use. *Adolescence*, 38(149), 35-42.
- Dietler, M. (2006). Alcohol: Anthropological/Archaeological Perspectives. *Annual Review of Anthropology*, 35 (1), 229–249. <https://doi.org/10.1146/annurev.anthro.35.081705.123120>
- Dietler, M. (2019). Alcohol as Embodied Material Culture: Anthropological Reflections on the Deep Entanglement of Humans and Alcohol, in Kimberley Hockings, and Robin Dunbar (eds), *Alcohol and Humans: A Long and Social Affair*, Oxford. <https://doi.org/10.1093/oso/9780198842460.003.0008>
- Dietrich, O., Heun, M., Notroff, J., Schmidt, K., & Zarnkow, M. (2012). The role of cult and feasting in the emergence of Neolithic communities. New evidence from Göbekli Tepe, south-eastern Turkey. *Antiquity*, 86(333), 674–695. <https://doi.org/10.1017/S0003598X00047840>
- Douglas, M. (Ed.). (1991). *Constructive drinking: perspectives on drink from anthropology*. Cambridge: Cambridge University Press.
- Dueppen, S.A., & Gallagher, D. (2021). Alcohol, ancestors, and the house: Exploring ritual use of beer at Kirikongo, Burkina Faso. *Journal of Anthropological Archaeology*, 64, 101353. <https://doi.org/10.1016/j.jaa.2021.101353>.
- Durkheim, E. (1972). Anomie and the moral structure of industry, and the social bases of education. In A. Giddens (Ed.), *Emile Durkheim: Selected writings*. London: Cambridge University Press. Cambridge University Press. <https://doi.org/10.1017/CBO9780511628085.010>.
- Dussaillant, F., & Guzmán E. (2014). Trust Via Disasters: The Case of Chile's 2010 Earthquake. *Disasters* 38(4), 808–32. <https://doi.org/10.1111/disa.12077>
- Fat, L.N., Scholes S., Mindell J., Jivraj, S. (2015). PP45 The relationship between social capital and drinking pattern among men and women; findings from a national survey in England, *J Epidemiol Community Health*, 69(A72). <http://dx.doi.org/10.1136/jech-2015-206256.142>
- Feeley-Harnik, G. (1994) G. *Feeley-Harnik The Lord's Table: The Meaning of Food in Early Judaism and Christianity*. Smithsonian Institution Press, Washington, DC.
- Feeley-Harnik, G. (1995). Religion and food: an anthropological perspective. *Journal of American Academy of Religion*, 63 (3), 565-582. <https://doi.org/10.1093/jaarel/LXIII.3.565>
- Field, J. (2008). *Social Capital*. Abingdon, UK: Routledge. (2nd ed.). <https://doi.org/10.4324/9780203930519>
- Fulkerson, G.M., & Thompson, G.H. (2008). The evolution of a contested concept: A meta-analysis of social capital definitions and trends (1988–2006). *Sociological Inquiry*, 78(4), 536–557. <https://doi.org/10.1111/j.1475-682X.2008.00260.x>
- Gil, A. C. (2002). *Como Elaborar Projetos de Pesquisa*, 4a., Atlas, São Paulo.

- Granfield, R., & Cloud, W. (1999). *Coming clean: Overcoming addiction without treatment*. New York: New York University Press.
- Granovetter, M. S. (1973). The Strength of Weak Ties. *American Journal of Sociology*, 78(6) 1360- 1380.
- Gong, J., Xu, Z., Wang, S. X., Gu, M., Ong, P. C. & Li, Y. (2022). Established and nascent entrepreneurs: comparing the mental health, self-care behaviors and wellbeing in Singapore. *Frontiers in Sociology*, 7, 843101. <https://dx.doi.org/10.3389/fsoc.2022.843101>
- Guerra-Doce, E. (2014). The Origins of Inebriation: Archaeological Evidence of the Consumption of Fermented Beverages and Drugs in Prehistoric Eurasia. *Journal of Archaeological Method and Theory*, 22(3), 751–782. <https://doi.org/10.1007/S10816-014-9205-Z>
- Hair, J.F., Hult, G.T.M., Ringle, C.M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. 2nd Edition, Sage Publications Inc., Thousand Oaks, CA.
- Hastorf, C. (2017). Hastorf The Social Archaeology of Food: Thinking about Eating from Prehistory to the Present, *European Journal of Archaeology*, 21(02), 302-305. <https://doi.org/10.1017/eea.2018.3>
- IBGE - INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA. (2019). *Panorama Minas Gerais*. Disponível em <https://cidades.ibge.gov.br/brasil/mg>, acesso em 22 fevereiro, 2023.
- Jennings, J., Antrobus, K. L., Atencio, S. J., Glavich, E., Johnson, R., Loffler, G., et al. (2005). Drinking beer in a blissful mood. *Current Anthropology*, 46(2), 275–302.
- Joffe, A. H. (1998). Alcohol and social complexity in ancient Western Asia. *Current Anthropology*, 39(3), 297–322. <https://doi.org/10.1086/204736>
- Knibbe, R.A., van de Gaar, I., & Drop, M.J. (1993). Contextual influences on young people's drinking rates in public drinking places: An observational study. *Addiction Research and Theory*, 1, 269–278.
- Landis, J.R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33(1), 159–174. <https://doi.org/10.2307/2529310>
- Levine, Harry G. (1978). The Discovery of Addiction: Changing Conceptions of Habitual Drunkenness in America. *Journal of Studies on Alcohol*. 15 (1): 493–506. <https://doi:10.15288/jsa.1978.39.143>
- Liu, L. (2021). Communal drinking rituals and social formations in the Yellow River valley of Neolithic China. *Journal of Anthropological Archaeology*, 63(1). <https://doi.org/10.1016/j.jaa.2021.101310>
- Liu, L., Wang J., Rosenberg D., Zhao H., Lengyel G., & Nadel D. (2018). Fermented beverage and food storage in 13,000 y-old stone mortars at Raqefet Cave, Israel: Investigating Natufian ritual feasting. *J. Archaeolog. Sci.: Rep*, 21(1), 783-193. <https://doi.org/10.1016/j.jasrep.2018.08.008>
- Lincoln M. (2016). Alcohol and drinking cultures in Vietnam: A review. *Drug Alcohol Depend*, 1(159), 1-8. <https://doi.org/10.1016/j.drugalcdep.2015.10.030>.
- Lobnibe, I. (2018) Drinking pito: conviviality, popular culture and changing agricultural production at the rural–urban interface in Brong Ahafo, Ghana. *African Geographical Review*, 37(3), 227-240. <https://doi.org/10.1080/19376812.2016.1253489>
- Malhotra, N. K. (2011). *Pesquisa de Marketing: Uma Orientação Aplicada*, Bookman.
- Manton, E., Pennay, A. & Savic, M. (2014). Public drinking, social connection and social capital: A qualitative study. *Addiction Research and Theory*. 22. <https://doi.org/10.3109/16066359.2013.812202>.

- Mauss, M. (2006). *Techniques, Technology, and Civilization*. Schlanger, N. (Ed.). Durkheim Press/Berghahn Books, New York.
- McGovern, P. E. (2009). *Uncorking the past: the quest for wine, beer, and other alcoholic beverages*. University of California Press.
- McGovern, P. E., Zhang, J., Tang, J., Zhang, Z., Hall, G. R., Moreau, R. A., et al. (2004). Fermented beverages of pre- and proto-historic China. *Proceedings of the National Academy of Sciences*, 101(51), 17593–17598. <https://doi.org/10.1073/pnas.0407921102>
- Min, L. (2022). Libation ritual and the performance of kingship in early China. *Journal of Anthropological Archaeology*, 65, 101370. <https://doi.org/10.1016/j.jaa.2021.101370>.
- MINISTERIO DA SAUDE. (2021). *Vigitel Brasil*. Disponível em <https://www.gov.br/saude/>, acesso em 29 fevereiro, 2023.
- Morsut, C., Kuran, C.H.A., Kruke, B.I., Nævestad, T-O., Orru, K., & Hansson, S. (2021). A critical appraisal of individual social capital in crisis response. *Risk, Hazards & Crisis in Public Policy (RHCPP)*, 13. <https://doi.org/10.1002/rhc3.12236>
- North, D. C. (1990). *Institutions, institutional change, and economic performance*, Cambridge, Cambridge University Press.
- Paulette, T. (2021). Inebriation and the early state: Beer and the politics of affect in Mesopotamia. *Journal of Anthropological Archaeology*, 63, 101330. <https://doi.org/10.1016/J.JAA.2021.101330>
- Perrien, J., Chéron, E. J., & Zins, M. (1984). *Recherche En Marketing: Méthodes et Décisions*. Gaëtan Morin, Montréal.
- Pearson, M., Sweeting H., West P., Young R, Gordon J. & Turner K. (2006). Adolescent substance use in different social and peer contexts: A social network analysis, *Drugs: Education, Prevention and Policy*, 13(6), 519-536. <https://doi.org/10.1080/09687630600828912>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.Y., & Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Portes, A. (1998). Social Capital: Its Origins and Applications in Modern Sociology. *Annual Review of Sociology* 24, 1– 24. <https://doi.org/10.1146/annurev.soc.24.1.1>
- Putnam, R. D. (1993). The prosperous community. *The American Prospect*, 4(13), 35–42.
- Putra, N. T. B., Wulandari, D., & Narmaditya, B. S. (2019). Social Capital and Community Business Development. *KnE Social Sciences*, 958-966.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi S., Fu, T.C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. *Soc Psychiatry Psychiatr Epidemiol*, 56, 1221– 32. <https://doi.org/10.1007/s00127-020-02002-8>
- Olson, M. (1982). A Political Theory of Regulation with Some Observations on Railway Abandonments. *Public Choice*, 39(1), 73-106. <https://doi.org/10.1007/BF00242149>
- Reimer, B., Lyons, T., Ferguson, N., & Polanco, G. (2008). Social capital as social relations: The contribution of norma-tive structures. *The Sociological Review*, 56(2), 256–274. <https://doi.org/10.1111/j.1467-954X.2008.00787.x>
- Rush, B. (1805). *Inquiry into the Effects of Ardent Spirits upon the Human Body and Mind*. Philadelphia: Bartam.
- Sadri, A. M., Ukkusuri, S., Lee, S., Clawson, R., Aldrich, D., Nelson, M., Seipel, J. & Kelly, D. (2018). The role of social capital, personal networks, and emergency responders in

- post-disaster recovery and resilience: a study of rural communities in Indiana. *Natural Hazards*, 90, 1-30. <https://doi.org/10.1007/s11069-017-3103-0>.
- Spijkerman, R., Overbeek, G., Engels, R. (2007). The impact of peer and parental norms and behavior on adolescent drinking: The role of drinker prototypes. *Psychology and Health*, 22, 7–29. <http://dx.doi.org/10.1080/14768320500537688>
- Sterckx, R. (2006). Sages, cooks, and flavours in Warring States and Han China. *Monumenta Serica*, 54(1), 1-46. <https://doi.org/10.1179/mon.2006.54.1.001>
- Szreter, S. (2002). The State of Social Capital: Bringing Back in Power, Politics, and History. *Theory and Society* 31(5), 573– 621. <http://dx.doi.org/10.1023/A:1021300217590>
- Szreter, S., & Woolcock, M. (2004). Health by Association? Social Capital, Social Theory, and the Political Economy of Health. *International Journal of Epidemiology*, 33(4), 650– 67. <https://doi.org/10.1093/ije/dyh013>
- Theall, K.P., DeJong, W., Scribner, R., Mason, K., Schneider, S.K., & Simonsen, N. (2009). Social capital in the college setting: the impact of participation in campus activities on drinking and alcohol-related harms. *J Am Coll Health*, 58(1), 15-23. <https://doi.org/10.3200/JACH.58.1.15-25>.
- Uphoff, N. (1996). *Learning from Gal Oya*. IT Publications.
- UNITED NATIONS. (2019). *Results of the Population and Housing Census 01/4/2019*. Available in: <https://vietnam.un.org/en/28931-results-population-and-housing-census-0142019>, access, Jan, 2023.
- Van Schoor, G., Bot, S.M., & Engels, R.C.M.E. (2008). Alcohol drinking in young adults: The predictive value of personality when peers come around. *European Addiction Research*, 14(3), 125–133.
- Van der Veen, M. (2003). When is food a luxury? *World Archaeology*, 34(3), 405-427 <https://doi.org/10.1080/0043824021000026422>
- Wang, J., Friedman, R., & Baba, M. (2021). Predynastic beer production, distribution, and consumption at Hierakonpolis, Egypt. *Journal of Anthropological Archaeology*, 64,101347. <https://doi.org/10.1016/j.jaa.2021.101347>
- Wang, J., & Liu, L. (2022). Introduction: Alcohol, rituals, and politics in the ancient world, *Journal of Anthropological Archaeology*, 65, 101397. <https://doi.org/10.1016/j.jaa.2022.101397>.
- Wilson, T. M. (2005). *Drinking cultures: alcohol and identity*. New York: Berg.
- Williams, P. R., & Nash, D. J. (2021). Consuming Kero: Molle Beer and Wari social identity in Andean Peru, *Journal of Anthropological Archaeology*, 63, 101327. <https://doi.org/10.1016/j.jaa.2021.101327>.
- Yamamura, E. (2016). Natural Disasters and Social Capital Formation: The Impact of the Great Hanshin–Awaji Earthquake. *Papers in Regional Science*, 95(1), 143– 64. <http://dx.doi.org/10.1111/pirs.12121>