Consumers' identities and compartmentalisation tendencies in alcohol consumption

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Abstract

This longitudinal study explored how consumers justify their alcohol consumption by compartmentalising or integrating their various drinking identities (i.e., description of one's drinking behaviours and extent to which these are part of person's overall identity). 31 participants were interviewed twice. The findings revealed identities are continuously altered/created according to context and social interactions. Consumers' movement between social fields generated different perceptions of what constitutes 'healthy' drinking, leading to displays of different identities. After interviewees compared their alcohol consumption perceptions with results from an online 14-day alcohol tracker, some consumers reported a 'newly perceived' drinking identity and displayed integration tendencies. Others denied their consumption results and continued to exhibit compartmentalised identities, justified by various social selves, roles and responsibilities. Social marketing and policy recommendations are discussed.

Keywords: alcohol consumption; compartmentalisation; drinking identity; integration; online alcohol tracker

Summary statement of contribution

Drawing from psychology, this paper introduces for the first time in the marketing literature Amiot *et al.*'s (2007) theory of integration of social identities, which includes the concept of compartmentalisation (Showers, 1992). This theory is used to explain how consumers rationalise their alcohol consumption patterns. Additionally, based on a longitudinal design involving a 14-day alcohol self-tracking activity, this study examines whether consumers display ongoing compartmentalisation or integration of drinking identities. Tailored recommendations for social marketing campaigns and policy makers are proposed.

Introduction

Previous research on alcohol consumption has included studies on younger individuals' motivations for drinking (Hackley *et al.*, 2013; 2015), their desires and intentions to drink responsibly (Fry *et al.,* 2014), the regulation of drinking (Lyons *et al.,* 2014) and anti-consumption within a drinking culture (Piacentini & Banister, 2009), amongst others. This body of research has advanced the understanding of alcohol consumption and behavioural responses to social marketing initiatives and public health policies. However, no prior research has examined alcohol consumption identities and compartmentalisation tendencies based on Amiot *et al.*'s (2007) theory of integration of social identities in the self, across age and gender groups. Therefore, this paper advances the frontiers in marketing theory and consumer behaviour research by building on the social psychology (compartmentalisation theory and social identities theory; Amiot *et al.*, 2007; Showers, 1992) and applied psychology (i.e. health behaviour/promotion) literatures to further the understanding of the motivations and justifications for consumers' alcohol consumption patterns. This paper also answers the call for further research into the role of identities/selves in alcohol consumption/anti-consumption and the challenges consumers face in their social lives (Piacentini & Banister, 2009).

Since Belk's (1988) work on *identities* and *the extended self*, there has been a growing interest within marketing research regarding how consumers' self-perceptions guide consumption choices. Consequently, the concept of *identity* and *the self* have continued to be examined in terms of their behavioural impacts and adapted to the digital world (Belk, 2013). Compartmentalisation of identities, found in the social psychology literature, which is defined as 'the tendency to organise positive and negative knowledge about the self into separate, uniformly valenced categories (self-aspects)' (Showers, 1992, p. 1036), is aligned with Belk's (1988) view that consumers hold multiple self-aspects or identities. The

difference is that Showers' approach (1992) focuses on the shedding of one identity and adoption of another one (Goulding *et al.,* 2002) to cope with various negative experiences or self-perceptions. This is due to the division of the self into positive and negative aspects (Bowlby, 1980).

In marketing and management research, the concept of compartmentalisation has been used rarely. Exceptions include the split of identities among rave consumers (Goulding *et al*., 2002), the compartmentalised practices of green behaviour (Bartiaux, 2008), and the compartmentalisation of the moral self among managers in the workplace/business context versus non-workplace context (Rozuel, 2011). However, the approach taken in these studies was not always fully aligned with Amiot *et al.*'s (2007) stages-model (detailed in the literature review), which acknowledges some individuals can hold compartmentalised identities which are created independently and could co-exist autonomously and in conflict. Amiot et al.'s (2007) model proposes that, at some point, for some individuals these identities can become integrated, to form a consistent and harmonious overall self-identity[1]. Reconciliation (i.e. integration) of identities may be important, for example, in the context of alcohol consumption as the conflicting behavioural tendencies associated with compartmentalised identities may lead to detrimental health implications (i.e., harmful alcohol consumption within the context of this study). Therefore, social marketing campaigns that allow consumers to reflect on their compartmentalised identities and motivate integration of identities may lead to a healthier lifestyle, within and outside the context of alcohol consumption.

Given that alcohol consumption is a unique and complex research area, grounded in the social context, and with both personal and health implications, an integrative and multifaceted framework is needed. Particularly, Amiot *et al*'s (2007) theory takes a

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[1] In this paper, the terms 'identity' and 'self-identity' are used interchangeably.

developmental approach to identity (Erikson, 1980, Phinney, 1993) and is deeply embedded in the social context. Therefore, Amiot *et al*'s (2007) theory of compartmentalisation/integration, represents a more appropriate theory for assessing how multiple drinking identities might co-exist, interact and influence consumers' drinking behaviours.

Drinking identity has been defined in health psychology or the wider applied social psychology literature as the degree to which alcohol is a central part of one's self (Conner, Warren, Close, & Sparks, 1999). In this paper specifically, the term 'drinking identity' is used to describe consumers' overall perceptions of drinking behaviours and patterns, across a whole range of contexts; in other words how they would describe their 'drinking self', whether this is a central or peripheral part of they overall identity (self). This approach to defining and using the term drinking identity is aligned with the focus of this research, which aims to examine how consumers with varying alcohol consumption patterns compartmentalise or integrate their identities, rather than focusing only on one segment of the population (e.g. binge drinkers and a single identity built around this specific alcohol consumption situation). This approach and study also advance awareness of how social contexts shape one's drinking identities, as identities may be compartmentalised or integrated from one context to another.

Particularly, this study seeks to answer two research questions. First, do individuals hold different drinking identities in relation to their alcohol consumption and how do these interact in various social contexts with other health and non-health identities in shaping future alcohol consumption? Second, how are individuals' drinking identities and alcohol-related behavioural patterns affected by consumers' reflections on their alcohol consumption? These research questions contribute to the wider social marketing literature targeting behaviour change with a focus on identities and provide practical implications for the design of health-

related social marketing campaigns, within and outside the context of alcohol consumption, motivating reconciliation of identities.

Literature review

Alcohol consumption statistics, trends and research

Even though the Office of National Statistics in the UK (2014) reports that alcohol-related death rates have decreased since 2008 (which was at its peak), the rate in 2014 is still higher than that observed 20 years ago. The financial costs associated with drinking health problems in the UK are estimated at £21 billion per year (Health and Social Care Information Centre, 2015). Sheron and Gilmore (2016) also report that the global recession and alcohol duty escalator have resulted in this recent decreasing trend of alcohol consumption observed between 2008 and 2013, and once 'income outstrips rises in taxation', alcohol-related deaths may rise again.

Additionally, there is a high degree of polarisation in alcohol consumption patterns of UK adults (Measham, 2008). Alcohol-related deaths in the UK in 2014 were the highest among 55 to 64 year olds (Office of National Statistics, 2014) and, contrary to previous years, women nowadays nearly equal men's alcohol consumption (Gallagher, 2016; Slade *et al.*, 2016). Also, contrary to the focus of alcohol-related academic research on young adults binge drinking (i.e. 'consuming eight or more units in a single session for men and six or more for women' even though tolerance levels differ from person to person; see http://www.nhs.uk/Livewell/alcohol/Pages/Bingedrinking.aspx), binge drinking was reduced by 3% from 2005 to 2013 ('at least once in the week before interview'; Health and Social Care Information Centre, 2015) among young adults. The Health and Social Care Information Centre (2015) also notes that more than one in five adults in the UK abstained from drinking in 2013, and specifically young adults (aged 16 to 24) were primarily

responsible for this change. Nevertheless, in 2015 there were higher alcohol-related hospital admissions of young adults compared to those in 2003. Therefore, the picture of alcohol consumption in the UK is a complex one and addressing drinking is still a high priority for the NHS and the British government. The Royal Society for Public Health (2016) urged the government to treat alcohol as harmful as Class A drugs.

Public health endeavours on alcohol consumption have been criticised for targeting mainly dependent or heavy drinkers (Public Health England, 2009), being patronising and asking consumers to adopt unrealistic alcohol consumption behavioural patterns, which are often rejected by young individuals[2] (Hackley *et al.*, 2013; 2015). Guidelines about healthy alcohol consumption have been criticised because they vary from one medical practitioner to another (Mosley, 2016) or even year by year; see the National Health Service (NHS) guidelines. For example, the present research study was aligned with the Department of Health's recommendation at the time of the data collection which specified a healthy daily alcohol units consumption level of 2-3 daily units for women and 3-4 daily units for men (NHS Choices, 2014). However, the guidelines changed in 2015 regarding what is 'healthy alcohol consumption' in terms of weekly units consumed and frequency (i.e., maximum 14 units per week, spread over 3 days or more, with several drink-free days) and have reduced slightly men's recommended alcohol intake (Department of Health, 2015). Most individuals do not have a good understanding of the terms 'alcohol unit'[3] and 'binge drinking' (including the controversy in defining the term *binge drinking* ranging from 'very drunk once a month' to 'drinking until unconscious' to 'heavy and sessional drinking' – see Hayward and Hobbs, 2007). Most people do not have either a good knowledge of how to adequately calculate the number of units in each drink (Mosley, 2016).

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[2] Throughout the paper the terms 'individuals' and 'consumers' will be used interchangeably.

[3] One unit equals 10ml or 8g of pure alcohol, which is around the amount of alcohol the average adult can process in an hour. (cf. http://www.nhs.uk/Livewell/alcohol/Pages/alcohol-units.aspx)

Aside from these social marketing and public health initiatives, many academic theories have also been advanced to understand motivations for alcohol consumption, its health implications and how to encourage a reduction in consumption. Studies using social bond theory have examined people's connection to society, and the way they form social bonds in relation to drinking patterns, by examining elements of attachment, commitment, involvement, and beliefs (Durkin *et al.,* 1999). Alternatively, Peele and Grant (1999) propose a more comprehensive classification of the reasons for drinking, which include sociability, relaxation versus escape, celebration, framing of leisure (work versus non-work), making social boundaries (becoming part of the group), transcendence (in connection to religious beliefs), social credit (gift), signaling status, competitive drinking and creative drinking. Other studies have applied theoretical concepts such as consumers' lay beliefs, lifestyles, risk perceptions and conformity associated with alcohol consumption (e.g., Bearden *et al.*, 1994).

Another stream of research has examined the reasons for the failure of practitioners to elicit and consumers to engage in behaviour change. Earlier research used frameworks such deviance theories, which focus on whether people do/do not comply with medical advice (i.e., recommended alcohol intake) (Blaxter & Cyster, 1984) and the theory of psychological reactance, which explained the boomerang effect of alcohol warning labels among young people (Snyder & Blood, 1992). This was then followed by theories such as the knowledge-behaviour gap, which recognises that raising awareness about the negative consequences of alcohol consumption does not necessarily elicit behavioural change (Deshpande *et al.*, 2005), and neutralisation theory, which focuses on 'how people neutralise potential feelings of guilt and stigmatization regarding their alcohol consumption' (Piacentini *et al.,* 2012, p. 1).

More recent alcohol studies have chosen to focus on the consumption behaviour of specific consumer cohorts or make comparisons between consumer groups. For example, studies have looked at the practices of middle-aged women in regulating their drinking

(Lyons *et al.*, 2014) and university students' binge drinking behaviour and segmentation strategies for behaviour change initiatives based on values and expectancies (Deshpande &Rundle-Thiele, 2011). Other studies looked at gender differences in regards to alcohol intake and found men tend to consume more alcohol than women (Emslie *et al.*, 2012), although more recent evidence suggest that this is a diminishing gap today (Gallagher, 2016; Slade *et al.,* 2016). Still, there is room for further investigation into consumers' alcohol consumption patterns. This study specifically examines alcohol consumption in terms of consumers' identities and compartmentalisation tendencies.

Identities and consumption in marketing literature

Seminal research on identity and consumption in marketing (e.g., Sirgy 1982; Belk 1988; Fournier 1998; McCracken 1989 among others) suggests identity drives many consumer decisions and hence ongoing marketing research on identity and relevant concepts (see recent reviews by Oyserman, 2009; Reed *et al.*, 2012). As per Kettle and Haubl (2011, p.475) related terms used to describe this overall sense of self include 'self-identity,' 'identity,' 'self,' and 'self-concept' (e.g., Belk, 1988; Ellemers, Spears, & Doosje, 2002; Howard, 2000; Lewicki, 1984; Markus & Wurf, 1987; Roberts & Donahue, 1994; Rochberg-Halton, 1984; Segal, 1988).

Oyserman (2009) notes that identities may be described in the present, past or future tense, can be valenced (positive and negative), contain both social and personal identities, may vary in terms situational cues and can be formed without conscious awareness. In turn, Reed *et al.* (2012) flagged the lack of a clear consistent definition of identity, which they address by defining identity as 'any category label with which a consumer self-associates that is amenable to a clear picture of what a person in that category looks like, thinks, feels and does' (p. 310). According to Reed *et al*., (2012) there are five principles of identity: salience

(the amount of identity-processing depends on how active it is as a component of the self), association (non-conscious stimuli association with identity improves stimuli response), relevance (surroundings are evaluated based on the relevance to self-concept), verification (monitoring identity-behaviour consistency) and conflict (due to multiple-identities, identities may conflict). In this paper, identity is used to refer to all of the selves and identities and schemas associated with who a consumer is, following Kettle and Haubl (2011) identity concept and Reed's *et al.* (2012) principles of identity. The latter recognise the multiplicity of the self, that is the existence of multiple identities, which may conflict with one another (Reed *et al.*, 2012).

Past research has looked extensively at self-concept congruity with consumption activities to illustrate that consumers prefer consumption activities that are congruent with their identity and that consumers consciously or unconsciously reflect their identity through their consumption activities (e.g., Dolich, 1969; Sirgy, 1982) Thorbjørnsen *et al.*, 2007). More recently, research on identity has focused on understanding in-group identities and social identities compared to out-of-group and individual identities, respectively. Chan *et al.* (2012) found that consumers assimilate or otherwise conform to identity signalling of a group (group identity), while also simultaneously differentiate or distinguish themselves from the group (individual identity) for single-choices. Elliott and Wattanasuwan (1998) also consider that the individual self-identity and collective social identity are developed simultaneously and are interconnected.

While most marketing studies focused on the positive association between 'having' and 'being', some researchers criticised the endless consumption activities in enchaining consumers to 'the illusive sense of self' (Wattanasuwan, 2005, p.183). Thus, marketers have also recognised that identities may also lead to negative consumption activities, such as harmful alcohol consumption, and hence the importance of addressing questions such as

'How can communicators effectively shift in-group identity toward healthful lifestyles?' (Shavitt *et al.,* 2009). Thus, the present paper examines health and drinking identities related to alcohol consumption patterns and provides recommendations for social marketing and public health initiatives based on consumers' identities and compartmentalisation tendencies.

Health, drinking and other self-identities in alcohol consumption

Drinking, except pathological cases such as alcoholism, is largely regarded as a social activity and a well-established practice of the socialisation process. As mentioned in the introduction, in this paper, drinking identity describes consumers' 'drinking self' i.e., overall perceptions of drinking behaviours and patterns, across a whole range of contexts. The drinking identity can be either a central or peripheral part of the individual's overall identity (self).

Recently, drinking identity was found to act as a mediator of the relationship between drinking motives and heavy alcohol consumption, among young consumers (Foster, 2014). A wide range of motives have been linked to alcohol consumption such as coping, enhancement, conformity motives (Cooper, 1994) and social (Peele & Grant, 1999) (e.g. relaxation, celebration, making social boundaries) motives, which influence the extent to which an individual will see alcohol as part of their identity (Foster, 2014). This is aligned with the social identity theory/self-categorisation theory (Stets & Burke, 2000) stating social contexts are where an individual forms and displays his/her multiple identities. This theory highlights the importance of other people for an individual's self-identity, with people aiming to 'self-enhance the behaviour that will favour the in-group over the out-of group dimensions' (Johnston & White, 2003).

Moreover, the social fields of interaction and other individuals are key not only in shaping one's identities but also one's health-related identities. Health is regarded as a

socially constructed phenomenon by sociologists (Fox & Ward, 2006) and health identities relate to various aspects of the body and life such as 'exercising', 'slimming', 'ageing' and 'eating' (Fox & Ward 2008). Health identities are numerous and dynamic (Bisogni *et al.* 2002; Fox & Ward, 2008). The present study looks at drinking identities as a type of consumers' health identities.

Fox and Ward (2006, p. 474) consider that health identities could be 'located along a continuum from the expert patient to an independent consumer, operating outside medical guidance' and could be mapped using autonomy/dependence dimensions. However, they acknowledge that the categorisation of health identities and their emergence depends on context and, thus, further health identity dimensions could be identified. Similarly, new insights into and dimensions of drinking identities could be revealed by alcohol research with the identity concept at its core, as the present study.

Other consumption research, has pointed out the existence of multiple identities among women in relation to eating. Bisogni, Connors, Devine and Sobal's (2002) study found the participants had numerous identities related to eating, which differed in terms of number, type, and complexity. These identities appeared to be both stable and dynamic and driven by women's experiences. The participants also reported various levels of 'attention they paid to evaluation and monitoring of identities related to eating, the extent to which they enacted identities in eating, and how they managed identity conflicts' (Bisogni *et al*., 2002, p.128).

Similarly, consumers can hold and express multiple drinking identities, which could be either constant or dynamic. Hence, there is a need for further research that uses a multidimensional and not fixed view of health identities. Therefore, the present research follows this multidimensional view and aims to explore the potential manifestation of identities related to alcohol consumption (drinking identities, health-related identities and

other self-identities) and to explore how these identities might interact within a social context based on consumers compartmentalisation and integration tendencies.

Compartmentalisation and integration of identities

As noted in the introduction, compartmentalisation has been defined in the psychology literature as 'the tendency to organize positive and negative knowledge about the self into separate, uniformly valenced categories (self-aspects)' (Showers, 1992, p. 1036), which allows individuals to activate positive self-aspects and reduce the access to negative information about the self. Showers's (1992) theory builds on identity theory, particularly the idea that individuals hold multiple self-aspects or identities, which are driven by various situations, roles, other people or goals. Moreover, some theorists (*e.g.* Cantor *et al.,* 1986) argue individuals tend to construct different selves in order to facilitate their inclusion in social groups or contexts. Some argue the very ability of individuals to cope with various negative experiences or self-perceptions is due to this division of the self into positive and negative aspects (Bowlby, 1980).

Compartmentalisation is a key element of Amiot *et al.*'s (2007) theory of integration of social identities in the self, which stems from social identity theory and self-categorisation theory. They propose a four-stage model that posits multiple social identities are developed independently and are, subsequently, integrated within one's self. Amiot *et al.*'s (2007) model includes: anticipatory categorisation, categorisation, compartmentalisation and integration. They propose that an individual's affiliation to different groups leads to an overall self-concept composed of multiple social identities. An individual in the compartmentalisation stage sees himself/herself 'as being a member of different social groups, the identities remain highly context dependent, and simultaneous identification is not yet possible' (Amiot *et al.,* 2007, p. 374). Additionally, multiple social identities are

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segregated and distinct within one's self, which leads to different attitudes and behaviours (Amiot *et al.,* 2007). Roccas and Brewer (2002) view compartmentalisation as accommodating multiple identities, all of which are important to the individual. The final stage, integration, 'involves the realization that intraindividual conflict between social identities can exist and that supplementary resources must be deployed to work these conflicts out, so as to truly integrate different social identities in the self' (Amiot *et al.,* 2007, p. 375), with the multiple identities not being anymore context-dependent. Zeigler-Hill and Showers (2007) believe social identity could range on a continuum i.e. compartmentalisation to integration, and this is dependent on one's allocation of positive and negative self-beliefs.

In the marketing literature, there are only a few studies that examined a phenomenon similar to the concept of compartmentalisation of identities, called fragmentation. Fragmentation is defined as per 'Firat and Venkatesh (1995, p. 253) … [as] literally, the breaking up into parts and erasing of the whole, single reality into multiple realities, all claiming legitimacy, and all decoupling any link to the presumed whole' (Goulding *et al.*, 2002, p.265). This interpretation is somewhat in conflict with some sociology views (e.g. Baudrillard, 1988; Jameson, 1990) that see compartmentalisation of identities as 'seeking compensation through the consumption' (Goulding *et al.*, 2002, p.263).

Goulding *et al.*'s study (2002) on rave community members describes concomitant existence of a raver identity and a working identity. This dichotomy is based on the need to escape the mundane and 'proper' daily life, with consumers not wanting to integrate these identities but compartmentalise them. Interestingly, unlike psychologists' views on compartmentalisation, they see this segregation as key to personal psychological wellbeing, and hence Amiot *et al.*'s (2007) stage of integration is thus not necessary. Raving experiences, like alcohol consumption experiences, can be in some cases harmful to consumers' health and life overall. Therefore, social marketers should acknowledge that

reconciliation and integration of drinking identities would be beneficial in the case of alcohol consumption as consumers could adopt, as a result of integrating various drinking identities, healthier alcohol consumption patterns. Nonetheless, these goals may not be shared by the consumers themselves, which raises some challenges for practitioners in regards to how to motivate such tendencies through social marketing campaigns.

Another marketing study that made reference to compartmentalisation is Bartiaux's (2008) research on compartimentalised practices of green behaviour. She identifies a segregation of consumers' practices and green values, which leads to the information/attitude-behaviour gap. Nonetheless, Bartiaux (2008) does not link the compartmentalised practices to people's identities. This is one of the gaps the present study is trying to fill by applying Amiot *et al.*'s (2007) theory of integration of social identities in the self. Rozuel (2011) also examined the self compartmentalisation among managers in the business context, with a particular focus on moral judgements and moral behaviour. She believes that allowing the personal self to be disassociated from the workplace self can impose a moral cost, with people being able to behave more immoral as employees than as individuals and consumers. However, Rozuel (2011) does not examine the aspects and drivers of integration in this context (as per Amiot *et al.,* 2007) and the study focuses on decisions made in a work context rather than a personal context with personal health implications, such as in the case of alcohol consumption.

Unlike some of the theories related to self and identity reviewed in earlier sections, Amiot *et al.*'s (2007) theory is a more integrative and complex framework that embeds the social context more deeply into the understanding of multiple identities. This approach is critical to marketing, where in numerous situations, like in the case of drinking, consumption happens in a social context. Moreover, the integration/compartmentalisation theory is trying to explain the intraindividual processes related to changes in identities and integration within

themselves, which other theories such as social identity theory and self-categorisation theory fail to do so on their own (Amiot *et al.,* 2007). Another strength of this theory is the fact that it takes a developmental approach by which various stages of changes/development within the individual are accounted for (Erikson, 1980, Phinney, 1993), and a transition is possible due to external factors.

Some of the marketing and management studies mentioned above have disregarded this developmental approach and focused only on one of the stages and did not examine if and under what circumstances integration of identities might happen within their respective contexts. This approach on examining transitional stages in individual identities and their links to the social groups/social context is critical and overlooked in consumer behaviour research.

Therefore, it is proposed that people have a certain perception of their health identity in relation to alcohol consumption but, given that alcohol is consumed in different social contexts, this leads to the manifestation of different and opposing drinking identities. Consequently, an examination of whether compartmentalisation or integration of identities occurs in relation to different constructed drinking identities (*e.g.* drinking on a night out with friends; drinking with work colleagues; drinking with family members) is needed, as well as an understanding of how these identities might impact future drinking habits.

The current research aims to explore the links between social contexts – drinking – health identities (*i.e.* in relation to compartmentalisation and integration) to understand how consumers rationalise their alcohol consumption patterns. In addition, this research examines how these identities may or may not change as a result of consumers comparing their initial alcohol consumption perceptions with the perceptions prompted by the results of a 14-day self-monitoring activity using an online alcohol tracker. This is part of the National Health Service (NHS) online social marketing endeavours aiming to encourage healthy/healthier

alcohol consumption patterns among the British public. In doing so, this study could offer a better understanding of why people do not respond or even resist public health endeavours encouraging healthy/healthier alcohol consumption patterns..

Online social marketing campaigns and tracking tools to encourage healthy/healthier alcohol consumption

Social marketing and public health campaigns are key approaches to promoting social good, health and well-being (Dibb, 2014) and have been extensively used in promoting attitude change and healthy/healthier alcohol consumption (e.g. Dietrich *et al*., 2015; Elliot *et al*., 1994; Kubacki *et al*., 2015). As noted in the introduction there are many reasons why these alcohol campaigns are usually unsuccessful. One of these reasons is that most individuals believe they have control over their alcohol consumption patterns (Hackley *et al*., 2015; Public Health England, 2009) and often hold false perceptions of their alcohol consumption patters.

Given that simple exposure to social marketing messages does not guarantee behaviour change, online social marketing campaigns that allow consumers to monitor and reflect on their regular alcohol consumption are a contemporary alternative to traditional campaigns. They are considered to 'elevate the sophistication of social marketing interventions, providing the means for both gathering behavioural data then implementing carefully targeted, tailored interventions on the basis of consumers' revealed behaviour' (Dibb, 2014, p. 1177). Digital campaigns that contain monitoring tools are regarded as a potentially effective behavioural change tool for substance abuse (Copeland & Martin, 2003).

However, most alcohol-related research with such online monitoring tools have mainly been descriptive in nature, focused mainly on university students and provide only 'general information on program evolution, application, acceptability, and usage' (White *et*

al., 2010, p. 3), rather than use psychological-sociological lenses to understanding drinking behaviours and perceptions of drinking identities, as in this paper. Additionally, research in the field of consumer behaviour and health (Berger & Rand, 2008) has shown that the framing of alcohol campaigns based on communicating a dissociative identity (i.e. separation from drinkers who were portrayed as sketchy; using the out-group identity principles) is more effective than information-based content (i.e. negative consequences to one's health). This confirms the importance of identities in designing social marketing campaigns. However, Berger and Rand's (2008) research was not longitudinal in nature, as is the present study in this paper, and looked at the impact of a poster campaign on alcohol consumption, rather than the effects of a self-tracking activity on compartmentalisation and integration of identities and alcohol consumption.

Technological advancements such as the Internet have resulted in health-related knowledge being no longer just the property of health experts (Fox & Ward, 2008), and individuals can nowadays access a range of alcohol-related resources and tools via the Internet which can help them understand these terms, the consequences of unhealthy alcohol consumption, and monitor their drinking habits (White *et al.,* 2010). Nonetheless, one of the key issues of these innovations in engendering behaviour change is the fact that they assume technological determinism, whereas in practice, consumers who use them are probably intrinsically motivated. However, exposure to such tools compared to traditional ones such as TV or print social media campaigns can be regarded as more interactive and personal; hence the choice of the present research design.

Individuals are increasingly interested in information services provided by websites, which 'are trying to establish themselves as sources of medical information and gateways to link patients with physicians' (Gruca & Wakefield, 2004, p. 1025). Following this trend (see Gruca & Wakefield, 2004; Thakur, Hsu, & Fontenot, 2012) and aiming to educate the public

about safe alcohol consumption patterns (in terms of alcohol units), and motivate adherence to the recommended alcohol intake, the British National Health Service (NHS) is providing various information and tools on its website (http://www.nhs.uk/LiveWell/Alcohol/Pages/Alcoholhome.aspx). This includes, among others, an alcohol-tracking tool (http://www.nhs.uk/Tools/Pages/iphonedrinks.aspx; see also example provided in Figure 1). This can be downloaded from the NHS website onto a computer or used as a downloadable mobile app.

Recent research posits that in standard cross-section social surveys consumers can under-report up to 60% of their consumption (Boniface & Shelton, 2013); therefore better methodological tools should be employed for both self-reported behaviour and actual behaviour to compare consumer perceptions with their actual alcohol consumption. The alcohol tracker used in this present research is one of the cornerstones of online communications (see reviews of Damman *et al.,* 2009; Corina, 2010) that offer alternatives to consumption monitoring and self-monitoring. As people start to use such methods to life-log their various health-related practices (*e.g.* dieting, running) and to help improve their health and consumption (Lupton, 2014), it was considered that asking participants to use an online tracker to monitor their drinking behaviour would be more appealing than traditional methods. This assumption was based on recent evidence regarding the use of online tools in weight loss and which found that a smartphone application and a website, respectively, were more successful than a paper diary at encouraging individuals to self-monitor for a six-month period (Carter, Burley, Nykjaer, & Cade, 2013). Additionally, this method of using an online alcohol tracker is consistent with the recent interest by the NHS and the Health Secretary to promote the use of technology by disseminating the use of health apps, which can be linked to individuals' health records (BBC, 2016a).

Moreover, the use of the tracker provided a longitudinal dimension to the present research and offered the participants a more realistic picture of their drinking patterns, which can be then compared against their initial perceptions, beliefs and drinking motives. It also facilitated the assessment of whether or not providing consumers with more accurate information about their alcohol consumption patterns generates changes in relation to their possible multiple and conflicting drinking identities (i.e. in terms of integration or compartmentalisation of identities) and affects future alcohol-related behavioural patterns. This view on the more realistic data and superior accuracy offered by self-tracking tools versus regular consumer self-reports (e.g. via survey or pen and paper diaries) is supported by recent research. For example, Abril (2016) showed that mobile devices and PCs/Internet used in self-tracking of health-related activities are associated with higher frequency of tracking than using a medical device, paper and pencil, and memory. Moreover, technology-based tracking tools decrease recall bias in self-reporting (Tsai et al., 2007) and the technological features and add-ons of online trackers/apps generate and keep consumers' interest in monitoring and remind them of their health goals over extended periods of time (Klasnja & Pratt, 2012). A similar approach to the one used in the present paper, combining quantitative and qualitative data collection was used by Holmes, Lovatt, Ally, Brennan, & Meier (2016) who asked individuals to keep a one-week online drinking diary in order to produce a typology of drinking occasions in Britain.

Methodology

Study design

Following ethical approval from the researchers' University, the data collection for this study was carried out in three stages. The research combined personal interviewing and self-tracking (Lupton, 2014) as follows: 1) a preliminary in-depth interview stage, which explored

lay beliefs about lifestyle, socialising, drinking motivations, health and risk perceptions related to alcohol consumption, as a way to understand how consumers potentially rationalise their alcohol consumption through compartmentalisation of identities; 2) an online self-tracking stage, which asked the same participants from stage one, to download at home on their personal PC or mobile phone, the NHS alcohol online tracking tool and to track their alcohol intake over a 14-day period, which was used as a more accurate assessment of the participants' alcohol consumption than their initial perceptions and 3) a post-tracking stage, where each individual (the same from stages 1 and 2) was interviewed regarding the alcohol tracking experience and views on the tracker results, as a way to understand to what extent consumers altered or not their identities following the comparison between their initial alcohol perceptions and their self-tracking results.

At the end of stage one, each individual was provided with a hand-out containing information about how to download the tracker, how to save the daily information provided by the tracker and how to forward this information to the research team. The study design used 'private' and 'pushed' self-tracking (Lupton, 2014) as the tracking required each participant to track his/her own alcohol consumption patterns, without sharing this information with other participants, health organisations or commercial organisations. The alcohol tracking was done not to assess the efficacy of the tracker itself in changing behaviour but as part of the research design, in order to explore whether consumers compartmentalise and integrate potential multiple drinking identities.

In adopting this methodology, this study is one of the few alcohol-related studies, using behavioural measures, even though self-reported. This is different from the prevailing approach in marketing and consumer behaviour research, which uses cross-sectional designs. Once installed on the participant's computer, the tracker would automatically open when the computer was turned on, thus reminding the participants to log their daily consumption. The

tracker gave the participants the option to easily select the type, size and strength of each drink, and computed a daily unit amount, which was then saved and stored by the tracker software. Upon completion, the participants emailed the researchers the results of the online alcohol tracker, which contained the number of daily units, a graph for the two-week period and an overall summary of their drinking patterns. The tracker software automatically generated all this information so each person was asked only to copy it and send it to the researchers. It must be noted that although the tracker has collected daily information from the participants, Table 1 presents only the overall amount to facilitate comparison with consumers' perceptions before the tracking period.

It must be noted that the length of the tracking period has been restricted by the built-in features of the NHS tracker. Despite collecting self-reported information, the tracker provides a more accurate measurement of alcohol consumption than the consumers' perceptions (Abril , 2016; Klasnja & Pratt, 2012). The purpose of using the tracker was to examine to what extent consumers alter their identities. In doing so, this study offers a better understanding of why people do not respond or even resist public health endeavours encouraging healthy/healthier alcohol consumption patterns such as in the case of the NHS website on alcohol consumption, which included the tracker used in this research.

The data collection did not overlap with any major holiday or celebratory occasions in the UK that might have significantly influenced the level of alcohol consumption among participants. Moreover, as mentioned before, the focus of the study was on compartmentalisation and integration tendencies rather than changes in alcohol consumption. Voluntary informed consent was obtained from participants and a small financial reward was offered to participants for their contribution. While the financial reward may have motivated more some consumers to track their alcohol consumption, the focus of the study was on compartmentalisation and integration tendencies (not motivation to reduce unhealthy alcohol

consumption patterns). Therefore, the reward is expected to have had a minimal influence on the findings reporting compartmentalisation and integration tendencies.

Sample selection, characteristics and justification

A purposeful sample (Patton, 2002) of 31 interviewees, who were interviewed twice, was used in this study. The sample included individuals belonging to different age groups (18-26; 27-37; 38-49; and over 50), gender (16 males and 15 females) and with different occupations. It was aimed to include individuals with different levels of self-reported alcohol consumption and belonging to different social groups. Unlike previous alcohol-related studies which focused on one group (e.g., heavy drinkers, young people, females), the present study used a wider sample as drinking can be seen as social practice in Britain, irrespective of consumer demographics. Additionally, the information and online tools provided by the NHS are rarely tailored according to socio-demographic characteristics, but rather aimed at the general British public, given that the Internet is a low cost resource for most types of health information.

All the interviews in stage one (31 pre-tracking interviews) were conducted face-to-face. Most interviews in stage three (31 post-tracking interviews) were also conducted face-to-face with a few exceptions, due to unavailability of interviewees after the tracking period (stage two). Thus to avoid eliminating these interviewees from sample, an alternative phone interview was used for a few respondents (mostly students) during stage three of the research. The face-to-face interviews took place either at the participants' house or on campus. The choice of location was dictated by where the participants lived or worked and by their preferences in terms of location where they 'would feel empowered in their interaction with the researcher...and would feel comfortable to speak freely' (Elwood, & Martin, 2000, p. 656). All the interviews have been conducted in a private room, which ensured confidentiality, given the relative sensitive and personal nature of the interview topic. Both

interviews (stage one and three) followed a semi-structured format and were audio recorded and professionally transcribed verbatim. Confidentiality and anonymity was provided throughout all the phases of the research and pseudonyms are used for each individual as per Table 1.

This table also summarises the sample and drinking levels reported: pre-tracking based on perceptions; post-tracking as the fortnightly alcohol units calculated by the tracker (self-reported, but a more accurate measurement of alcohol consumption than perceptions); and post-tracking perceptions of the alcohol consumption. The participants were not always aware of the number of units consumed pre-tracking or even post-tracking. The number of units provided in the brackets is an estimated value calculated by the researchers, based on the information provided by each interviewee at stage one and stage two.

Table 1: Participants' characteristics and alcohol consumption

Participant	Age	Occupation	Status	Self-reported pre-tracking perceptions of drinking	Fortnightly alcohol unit calculation by self-reported tracker data	Self-reported comparison between perceptions (pre-tracking) and tracking results of drinking
Group age 18-26						
Peter	21	Student	Single	10 units on a night out; 'very little...try not to go over'	25.5 units (including a binging episode with 8.5 units)	He reports low alcohol consumption and does not admit the binging.
George	21	Student	Single	1-2 pints in a pub; 'I drink rarely'	19.7 units (including one binging episode with 8.5 units)	He admits that is not the self-reported 'tea-total' guy and acknowledges tracker results.
Rob	21	Student	Single	20 units a week minimum with rare binging episodes	103 units for 2 weeks; multiple binging episodes	He acknowledges he drank more than expected and mentions one episode of binge drinking (25 units) but not the other episodes.
Mike	23	Student	Single	Maximum 2-3 units/day but 'more when I go out'	45 units in total for 2 weeks	The level of drinking was what he expected but he was surprised by the differences in the size or types of drinks he had.
Florence	23	Student	Single	1 G&T, 2 pints of cider, 1 glass of wine [9 units] 'It is a healthy amount'	18.9 units total but all consumed in one day	She feels that she has previously underestimated her drinking. She acknowledges her behaviour but tries to justify it.
Jack	23	Student	Single	Not specified but 'same as peers'	He didn't use the tracker 'given the very irregular and low intake'	n/a – he did not use the tracker
Julia	24	Office administrator	Single	'Average; less than peers'	13.3 units with two days over the limit	The results are as she expected. She admits there were days when she went over the recommended limit.
Monica	19	Student	Single	'Average; less than some friends' 1 binging episode per week	31.5 units with binging on 5 days	She acknowledges she drank more than expected but she does not report all the binging episodes.
Iris	19	Student	Single	Not specified. 'More than girls but definitely less than guys'	18.4 units in total but all consumed in one day	She admits binging but she is happy with average over 2 weeks.
Group age 27-37						
Marge	29	Secretary	Married	'I drink only a few drinks ... wine and G&T'	54 units with 5 binging episodes	She acknowledges the results are higher than what she reported initially and feels embarrassed.
Nicola	35	Office administrator	Married	Not specified but 'very low'	26 units	She admits drinking more than what she expected.
Alex	31	Economist	Married	'About 9 drinks a week which are about 20 units a week'	40.1 units (including one binging episode with 9.4 units)	He acknowledges the results and that he might have drunk less due to self-monitoring. He justifies the results with being on holiday.
Brian	37	Software developer	Single	10 beers and 2 whiskies/week [27 units] 'Average and similar to my friends'	40.56 units (with two 2 binging episodes – 8.63 and 13.63 units)	He acknowledges results but does not classify the binging episode as such. He admits having drunk less due to self-monitoring.
Tom	28	Assistant engineer	Partnership	'5 pints of beer last time I went out at a beer festival' [12.5 units]	66 units (including 5 binging episodes)	He justifies his drinking via different social events but acknowledges that he underestimated his drinking, particularly the ones had with meals.

William	33	Business developer	Married	'3 to 5 pints in one session which might be just a bit more the recommended average... but I don't binge' [7.5-12.5 units]	68.9 units; 3 days of binging	He acknowledges that there were days when he drank above limit
Phillip	33	Scientist	Single	'No more than a beer once a month' because of martial arts training [2-3 units]	0 units	n/a – he did not comment
Roxanne	28	Communication officer	Married	4-5 cocktails or at least 1 bottle of wine on a weekend night out; plus glasses of wine over the week [19 units]	33 units in total (including 2 binging episodes)	She acknowledges she underestimated her drinking.
Richard	27	Data analyst	Single	6-8 beers or 1 bottle of wine with a meal/week [29 units] 'Overall don't drink too much'	32.9 units (including one day of binging with 17.9 units)	He acknowledges he drank more than he initially estimated but he justifies it with attending a social event.
Vicky	33	Secretary	Married	1 glass of wine 'but not every night, rarely' [3 units]	0 units consumed	She admits she did not drink and this confirms what she initially assumed.
Group age 38-49						
Karen	46	University teaching fellow	Single	1 full bottle of wine at the weekend and 'during the week it varies but less' [9 units]	54.1 units in total (including 2 binging episodes of 6.3 and 12.6 units)	She acknowledges she had a lot more than estimated and justifies it with being on holiday.
Jessica	43	Administrator	Single	8-10 pints on one night and then nothing for 2-3 weeks. [20-25 units] 'I am a binge drinker'	7 units in total	She considers the results are as expected.
Dorothy	40	Nurse	Single	'below average and within the recommended limits'	24.5 units (including 2 days of binge drinking)	She still considers she drinks within limits and confesses to only one day of binging.
Allison	44	Administrator	Married	'I drink more at the weekends and beer festivals...it averages out during the dry weekdays'	7.1 units	She considers the results are as expected.
Colin	42	Teacher	Married	'Above the limit'	70 units (including 1 day of binging)	He thinks his average is above limit but he is pleased that it is not as high as he estimated.
Group age 50+						
Pamela	52	Administrator	Single	'Above average...I abuse at times at weekends'	23 units	She considers the results are as expected but explains she had more during the week because she was on holiday.
Paul	51	Cleaner	Single	1 glass of wine/month [3 units]	4.2 units	He thinks the results are as expected.
Judith	59	Retired	Married	2 glasses of wine or 2 G&T/week [8 units]	9.8 units	She considers the results a bit more than what she originally expected.
Lee	62	Technician	Married	2-3 bottles of wine/week [18-27 units]	24.9 (including 1 binging episode)	He still believes his drinking habits are healthy. He does not try to justify it.
Hayden	69	Retired	Married	Maximum 1-2 pints or glasses of wine/week [2.5-5 units]	9.2 units	He acknowledges there were days when he drank above limit but overall the average matches his initial estimation.
Spencer	64	Retired	Married	'Monthly consumption is within the guidelines'	31.6 units	He thinks he was within the limits but acknowledges it is slightly higher than expected. He reckons it would even up over a period of 3 months.
Edward	57	GP (general practitioner)	Married	'Within the limits'	47 units (including one day of binging with 9.8 units)	He admits it is more than expected but tries to justify it.

Findings

Initial perceptions of drinking within a social context and compartmentalisation tendencies

This section first reports the findings from stage one (i.e., prior to the use of the online tracker) and illustrates consumers' perceptions of drinking, risks and social contexts. This is followed by findings illustrating how individuals rationalise their alcohol consumption and the role of compartmentalisation tendencies in this process. Most respondents claimed they had accurate perceptions of their drinking and that their consumption was within the 'healthy' or recommended or socially acceptable limits, even though this was contradicted when comparing their perceptions with the guidelines for alcohol intake at the time of the data collection (as discussed in the introduction of the paper, alcohol guidelines have recently changed but in this study perceptions were compared against the guidelines at the time of the data collection). Most participants also noted that their perceptions have never been set against any type of consistent and more accurate drinking assessment (e.g., written record) than relying on their perceptions.

Although most of the interviewees said they were familiar with the term 'units', only a few were aware of the number of alcohol units in specific drinks or what was the NHS recommended daily allowance at the time of the data collection (i.e., 2-3 daily units for women and 3-4 daily units for men; NHS Choices, 2014). Most participants were also unaware of the correct definition of binging and thus underestimated associated health risks.

Drinking was associated with a normal lifestyle across gender and age groups, and was regarded as a pleasure- and relaxation-inducing activity (see also Peele & Grant, 1999) that elicits positive emotions and in some situations, diminishes negative emotions (Mikulak, 2012).
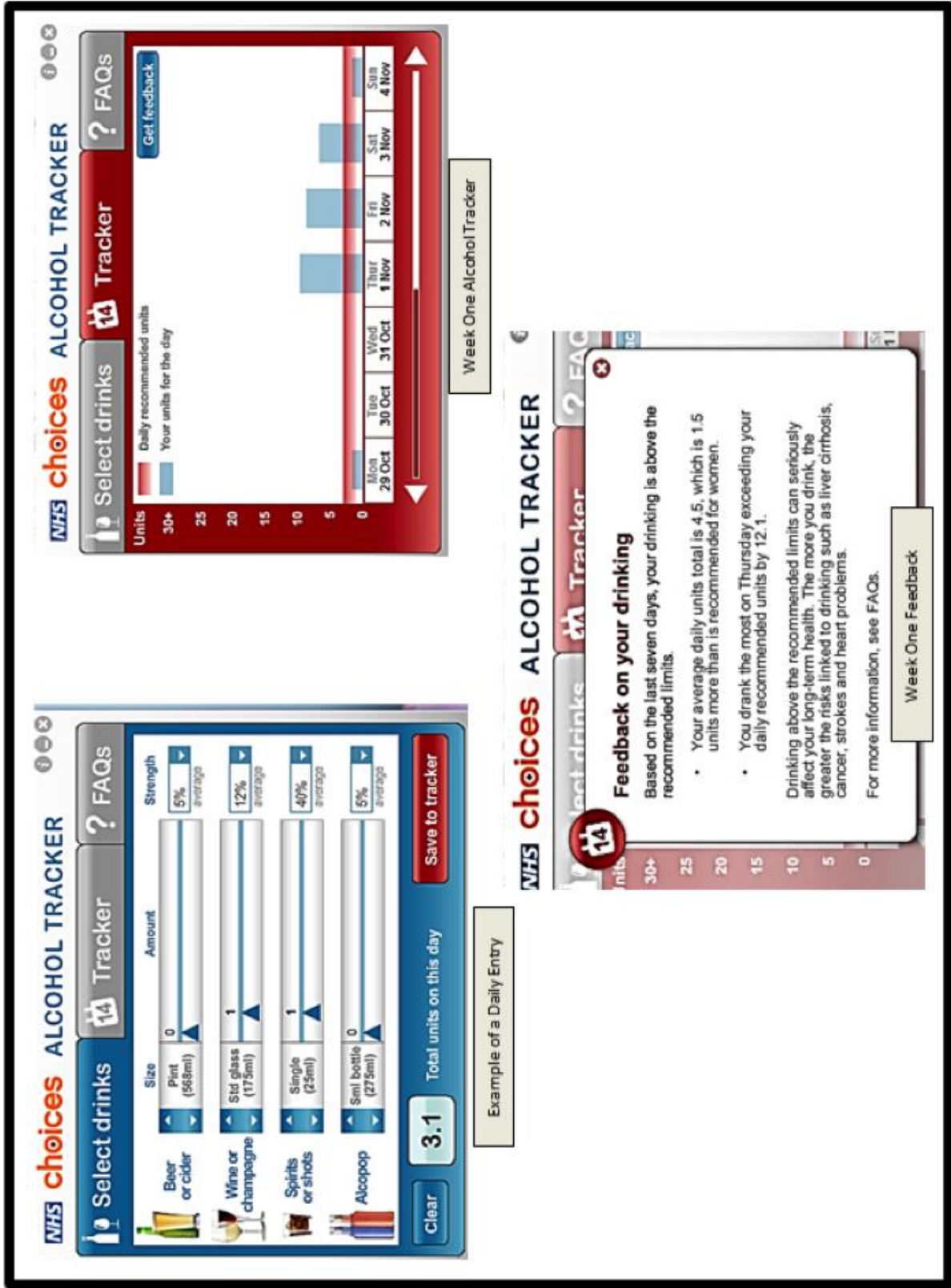
Figure 1: Alcohol tracker results for interviewee Monica

I suppose…alcohol helps you to relax…. If you are there [in town] [and] sort… of not

drinking, I suppose you don't really have as much fun as someone else. (Florence)

Unlike men, women seemed to be more aware of and concerned with adjacent risks of

harmful alcohol consumption such as weight increase (Roxanne; Allison; Brian), wrinkles,

and eczema (Nicola):

[Drinking] could affect my eczema, and I have suffered with that since I was

teenager...so that's something I have to bear in mind when I drink. (Nicola)

I know there's a lot of calories in beer, I'm quite conscious that I don't want to put on

weight. It's just a general feeling you get to keeping to a certain level rather than not

over indulging very often. (Allison)

Weight management appeared to be the concern of only a limited number of participants,

even though local policy makers and the Royal Society for Public Health believe that this is a

greater health risk for a wider range of the general public and that calorific-labels should be

enforced for alcoholic drinks, as alcohol is 'contributing to the obesity crisis' (BBC, 2016b).

Drinking was associated by the majority of the interviewees with social practices and

social bonding (c.f. Lyons *et al.,* 2014)

It's social, it's relaxing, it's just nice to go to...like to be with friends and have a drink,

relaxing a little bit and, you know I don't get drunk. (Marge)

and some social occasions or gatherings implied more alcohol consumption than others:

I did [consume more alcohol than usual] but only because there were events that

involved drinking in the period of time that I was using the drink tracker… a beer

festival and meeting up with friends from school (Tom)

Usually, occasions that involve drinking with other adults tend to 'demand' more alcohol

consumption than those individual drinking sessions, as individuals strive to be part of in-

groups (Chan *et al.,* 2012).

Lifestyle patterns and the family life cycle also dictate drinking patterns and how these are linked to socialising. Interviewees with young children were less likely to engage in unhealthy alcohol consumption given their family commitments and limited relaxation and socialising time. This is similar to Lyons *et al.* (2014) who found mid-life responsibilities and expenditures limit women's drinking.

> …it's getting babysitting that sometimes is a bit tricky... Sometimes when we meet friends we like to do board games, things like that... (Nicola)

One's friends were found to have an 'invisible' social influence on consumption, which resulted in varying alcohol consumption patterns that become difficult to monitor.

> I suppose some friends do drink more... I suppose you are more inclined to have an alcoholic drink with some friends who drink...so that you are not the odd one... so I suppose it depends on what your friends you're drinking with. (Peter)

As each interview developed, it became clear that various social contexts and bonds are linked to or even dictate various drinking patterns (see also Hackley *et al.,* 2015). In turn, these drinking patterns correspond to different health identities that individuals, either consciously or unconsciously, hold. Thus, a connection between one's social identities and drinking identities was revealed and the movement between different social fields is accompanied by the changes in the individual's perceptions of what 'healthy', 'normal' or 'conventional' drinking levels are. These perceptions varied across age groups as one's maturity, experience and interaction with other social groups resulted in different perceptions and drinking habits.

> I suppose there's family socialising such as visiting other family... Then I socialise with friends, the thing with my friends is having different groups of friends, I like life in boxes in that sense, so I might have friends through music groups, or friends from

university, friends that have known for a long time, and perhaps do slightly different things with them... Just depends who the people are. (George)

Every Wednesday we try and go to the cinema, that's with my housemates just cos that's our own little thing... I've got my work friends which are completely separate and I don't like to really mix between them both but that's when I'll go out with them drinking a lot more... With people from work I...go to the pub, have a few beers... Our student night out is on a Thursday, that's when I usually go out with people from the university... (Monica)

This compartmentalisation tendency is similar to the one reported by Goulding *et al.*, (2002, p. 280), where there is separation of practices 'but also a social segregation whereby there was little integration or social interaction between working colleagues and weekend friends'. Some individuals displayed a compartmentalisation tendency, which was connected to their social identities, roles and responsibilities. They connected their alcohol consumption to different selves, which dictated consumption or anti-consumption (e.g., avoiding alcohol for ideological or moral reasons – Piacentini & Banister, 2009). In the interviews, various selves were mentioned such as the social self, the religious self, the 'pleasing of others' self, the weight/health-aware self, the responsible self, the wine connoisseur self, the professional self, etc.

I think [drinking] it's become an important part of it. I'm [British born] Iranian and there's a lot of events I go with the family and when I'm with them I don't drink...but it's like a different atmosphere in a university... it's almost like alcohol plays a central role in it...you'll have an absolutely horrible time if you're sober. (Iris)

Another example related to compartmentalisation is that of Edward who is a GP by profession, and therefore has high objective alcohol-related knowledge. During the first interview he reported how his different drinking identities are related to his social identities

and, thus, talked about: drinking with family, drinking with friends, drinking when attending whole-day wine tasting events and drinking advice he gives while acting as a GP. He admitted the last two could be seen as conflicting identities by others, but not by him. The examples above show the compartmentalisation tendency is not restricted to a certain age or gender group.

Overall, several factors contributed to the development and changes in drinking identities: the need to fit in with various groups; conflicting information about recommended alcohol intake (which enables individuals to justify their contradictory behaviour and multiple drinking patterns); hedonic and self-gratification needs; movement through the lifecycle stages; tendency to succumb to peer pressure and trying to deal with stressful situations (e.g., work pressure). Alternatively, other individuals could reduce their alcohol consumption (i.e., drinking identity) because they do not want to damage their other health identities (e.g., related to weight, conceiving or skin health).

'Newly perceived' identities, compartmentalisation and integration tendencies
The findings below are based on results of stage two and three, which allowed participants to compare perceptions of their alcohol consumption with results of the tracker, as a way to explore the extent to which compartmentalisation and integration tendencies were affected and resulted (or not) to newly perceived identities. As expected, the tracker data (i.e., daily and total alcohol units) showed most participants underestimated their consumption as reported during stage one (see Table 1).

In the post-tracking interviews, the interviewees confessed mostly positive attitudes towards drinking but displayed various perceptions of their drinking patterns and drinking identities (Table 1). This led to a continuum of integration of identities, ranging from a lack of integration (i.e., ongoing compartmentalisation of identities) to high levels of integration.

Some people acknowledged their drinking identity was different from their initial perceptions and this acknowledgement prompted their willingness to reduce alcohol intake and adhere to NHS's recommended levels. Thus, these individuals realised the existence of a conflict between the initial drinking identity (pre-tracking) and the 'newly perceived' drinking identity (post-tracking) and stated the desire to reconcile this by reducing future consumption. Different levels of the integration (cf. Amiot *et al.,* 2007) of drinking health identities were observed among these individuals.

I went above what I originally said, because I hadn't realised exactly how much a unit was really... I was a bit embarrassed and it made me think 'do I drink too much?' Now I am a bit more conscious of what I drink since doing that, and I am a bit more careful...[for] health reasons really. (Marge)

At times this decision was tightly linked to other health identities (i.e., weight health identity), which some people prioritised more than the drinking health identity. For example:

I realised I drink more regularly during the week. I would like to cut this down a bit to help me lose weight. ...It [the tracker] has shown me that the occasional glass or two in the evenings after work soon adds up. (Roxanne)

Though most of the individuals who displayed various levels of integration were women, given the size of this study's cohort, it cannot be clearly concluded that women have a stronger tendency to integrate identities than men. However, these women belong to different age groups, suggesting that age may not be a determinant of integration of health identities.

At the other end of the continuum, some individuals retained their positive attitude towards drinking after tracking but they denied their actual consumption or refused to internalise results. This denial ranged from partial to full, thus highlighting the complexity of perceptions and responses to the alcohol tracking experience. Typically, they tried to justify

the results of the tracker and argued these were not representative of their regular behaviour, but rather influenced by external factors. Thus, these individuals did not readjust their perceptions of their drinking identity, which continued to be compartmentalised (e.g., 'me drinking at social events' vs. 'me drinking on holidays' vs. 'me drinking on normal days'), with drinking remaining greatly context-dependent and with multiple drinking identities co-existing as a result of this (cf. Amiot *et al.,* 2007).

> No, we are students we're not here to be taking life seriously. Like this is the only times... we've not got responsibilities like work and mortgages and like our own family...I'm never gonna have this chance to drink like this...In the future, when am I gonna go out on a Wednesday night?... I'm not gonna cut down like for the next two years and then I'll like sort my life out. (Iris)

> Probably a bit more [drinking] because it was a friend's birthday the first weekend; then my birthday the second weekend…so it was, probably not that often I drink heavily two weekends on a row... I think if I was worried that it was a problem then I would [reduce my drinking], but I don't think I've got any problems… (Richard)

> ...it [total units] was actually more. I'm sure it's more than I would normally…you know, if you took a three month snapshot. I think I drank more cos it's just the way it worked out... I drunk more through the period of testing than I normally drink so it's rather funny isn't it and you'd think I'd try to drink less trying to show you how good I am... Oh I didn't thought much about it…for me, I don't have a problem drinking… (Spencer)

These participants' ongoing compartmentalisation of drinking identities (as opposed to integration) was enabled by their denial and justifications. The short timeframe of the

online tracking might also explain the lack of unaltered attitudes and intentions regarding alcohol consumption:

I think if I was doing it [tracking]...all the time, then yes, I do believe it would change your attitude towards drinking. However, you're just doing it in a short term. (Pamela)

However, a way to change people's perceptions of their drinking and drinking identity could be to appeal to other health identities which might be more salient for some individuals:

The female [celebrities], you can see them saying that how [drinking] it's gonna affect your skin and the aging process. (Pamela)

Moreover, this justification process can represent coping mechanisms (Bowlby, 1980) used to manage the negative self-aspects related to one's drinking identity that are in conflict with the positive aspects. This is consistent with the theory of compartmentalised identities. Those individuals who displayed signs of compartmentalisation and appealed to justifications have also shown very limited willingness to reduce alcohol consumption in certain social contexts or to stay within the NHS recommended levels.

This reappraisal of the drinking identity in light of the information provided by the alcohol tracker is in line with the idea of a reflective identity where new knowledge can lead to alterations of one's perceptions of the body and identity (Williams & Calnan, 1996). However, the novel perspective here is that this knowledge can be used to integrate or compartmentalise drinking identities.

Another finding is that drinking identities did not manifest themselves in isolation but were tightly connected with other health identities (e.g., eating and exercising identities). A type of compensation or balancing between different health identities was revealed. This contributes to the persistence of the compartmentalisation of drinking identities even in the

post-tracking stage. For example, some individuals' 'heavy' or binge drinking identity was compensated by a healthy eating identity and an exercising identity.

> I think [mine] it's not [a healthy alcohol intake]. But you can counteract it…like I eat well, have vitamin tablets, do exercise, stuff like that, there's obviously not going to have the same effect than if you're just doing it [drinking] and having kebabs and stuff every night. (Rob)

Additional insights: Consumers' reflections on the use of the tracker

Even though the tracker itself was not the focus of this study, but used as a methodological tool, consumers did reflect on its use. The tracker was described by the interviewees as 'easy to use' with clear features, 'interesting', requires 'small effort to fill in' (Alex), and having good reminder and motivational features as it 'keeps popping up on my desktop, disturbing me every time I log in' (George) and '[made me feel] guilty for going out once' (Nicola). The feedback features of the tracker were also valued as consumers 'liked the graphics that were good to compare over the two-week period' (Brian).

Linked to some of the findings on integration and compartmentalisation presented above, it appeared that not all participants found the tracker particularly useful or expressed desire to use it again in the future. Below are some mixed views from one of the male interviewees:

> I think I might need the motivation of an external source to do it [again in the future]. I think it might be something that I might try in in a year. I don't know though for sure… it might be that there needs to be some catalyst like something external like an illness to prompt me to that but I think I've got benefit from doing the exercise…I think it will make me think more carefully in general terms (Colin)

The interview data also highlighted the fact that the tracker would be a useful tool for social marketing alcohol campaigns and could encourage healthier alcohol consumption, but this would be mostly for consumers who do not have strong a compartmentalisation of their drinking identities, who are not as reluctant to acknowledge their conflicting nature and who do not strongly believe they drinking is within the recommended limits.

Nonetheless, consumers also reported some issues with using the tracker such as no access in absence of the Internet and issues with installing and using some features on Apple Mac computers. Despite these issues, the majority of the participants used the computer tracker and, when asked about using an app version in the future, some interviewees dismissed this option because of interfering with the hedonic nature and social conventions related to drinking:

...I normally use alcohol something to relax... I don't want pressure of knowing (Mike)

…but I don't know how applicable it would be cause you're not gonna sit at the pub and then sort of say: 'One second guys, let me just add this up!'… but I think it might good for the morning after (Iris)

Moreover, despite the interactive nature of the tracker, some participants complained about the limited variation in the strengths and types of drinks to choose from. Additionally, a few participants criticised the two-week timeframe of the tracker as being too short. They used this also as a justification of their 'unhealthy' drinking and to highlight the data captured is not necessary representative of their regular drinking habits. This was then used to justify disregard for conflicting or unhealthy drinking identities:

[The tracker graph] is biased towards the weekend or biased if it's the time I am out for a social gathering. (William)

I did go on holiday, so that probably increased drinking [compared to what I] normally would do over that two-week period. (Alex)

A few other participants highlighted lack of *kcal* equivalent for the alcohol intake, which was a concern for those who saw their drinking identity interconnected with their other health identities. For example, those consumers who had concerns about the consequences of drinking for weight ('all beer is quite fattening'- Phillip) or conceiving. Such concerns are aligned with current policy makers' views and the need to impose calories labels due to the contribution of alcohol to the obesity crisis (BBC, 2016b). Therefore, such adjustments to the information provided by the alcohol tracker would be beneficial.

Discussion

This research investigates consumers' compartmentalisation and integration tendencies in relation to alcohol consumption, by applying Amiot *et al.'s* (2007) theory to marketing research. This advances understanding of how consumers rationalise their drinking behaviour and, ultimately, how compartmentalisation or integration tendencies affect consumers' healthy versus unhealthy drinking patterns. This paper also extends prior studies on alcohol consumption (e.g., May, 2001; Piacentini *et al.,* 2012,) and responds to Fox and Ward's (2006) and Bisogni *et al.*'s (2002) call for further research on health identities and specifically related to alcohol consumption. This is timely in light of the UK Government's recent Alcohol Strategy and increasing NHS alcohol-related hospital admissions and costs.

As expected, the majority of participants underestimated their alcohol consumption and the associated health risks when drinking above the recommended amount. Drinking was confirmed as a key aspect of social life and, for some individuals, an essential component of psychological wellbeing. The findings revealed a complex picture of drinking identity and other identities, which are continuously altered and created according to the social context

and interactions. The individual's movement between social fields led to different perceptions about what healthy drinking is and, thus, the same individual can display different drinking health and other identities, depending on social circumstances.

Drinking identities, as well as other health identities and social identities were compartmentalised according to various social selves, roles and responsibilities. This is consistent with other research that acknowledges the plurality, fluidity and continuous construction on one's self in various contexts (Lawler, 2008) and could explain why prior public health interventions, pushed by government and other regulatory bodies, using a prescriptive downstream social marketing approach were unsuccessful in motivating health alcohol consumption patterns (Cherrier & Gurrieri, 2014), as they were designed as a 'one-size-fits-all' solution across social contexts and situations. Additionally, Amiot *et al.*'s (2007) theory of integration of identities examined in this paper also offers additional insights as to how this compartmentalisation of identities and these drinking behaviours could be replaced with integrated identities that lead to healthy alcohol consumption.

Specifically, the findings of this study illustrate that public health initiatives and alcohol-related social marketing campaigns should acknowledge the existence of multiple drinking identities and use narratives or scenarios in their campaigns that recognise the fact that consumers display different drinking identities according to various social contexts. Specific identities can be used to target audiences that engage in harmful alcohol drinking rationalised by one of their other identities (e.g., going out self) and to motivate them to integrate this identity with others that lead to healthier alcohol consumption patterns (e.g., relaxing self at home).

Social marketing campaigns could also emphasise consumers' self-identification or strive for a 'healthy self' and explain how this is dependent on the adoption of healthy identities across the border (e.g., eating, drinking, exercising) and that one identity and

respective type of healthy behaviour will not necessary offset the effects of another 'unhealthy identity' such as one's drinking identity. Thus, connecting behaviours that lead to healthy identity such as alcohol and weight management could be a potentially beneficial strategy.

Additionally, based on the present findings and past research about how identity-based campaigns might improve consumer health (Berger & Rand, 2008), social marketing campaigns could emphasise that risky behaviours – such as unhealthy drinking – can be in conflict with the broader positive social identity an individual might want to portray to others (i.e. can be perceived negatively or judged by individual's various social groups), which could then lead consumers to make healthier choices. This could be linked to current healthiness trends. However, given that the social groups and context will vary from one age group to another, the above recommendation might not apply to all consumers. Therefore, social marketing campaigns should be further personalised by employing an audience and context-based segmentation strategy (i.e., campaigns and messages that are tailored based on the audience's age and places where they socialise) to ensure this is achieved.

The aforementioned strategies would encourage integration of drinking identities rather than support compartmentalisation, and thus lead to healthier drinking identities and healthy alcohol consumption patterns. Social marketing should also acknowledge and target specific reference groups (e.g., friends, family, colleagues), which is aligned with the mid-stream social marketing approach (Lee & Kotler, 2011) that acknowledges such groups are highly influential. Alcohol campaigns should also be promoted in social settings (e.g., at work, in bars/pubs, private parties, wedding venues, hotels) too as this is where and when consumers express their various compartmentalised drinking identities. This is because compartmentalisation means the individual will be more likely to focus on the 'most positive' aspect of the self i.e., the 'healthiest' drinking identities or other health identities that might

compensate for their harmful drinking. Alternatively, a series interventions would be needed to tap into different drinking identities.

Our findings reveal that drinking identities can be defined by different dimensions, which extends previous research on the mapping dimensions of health identities (see Fox & Ward, 2006). The drinking identity can, therefore, be defined by dimensions such as: social contexts; compartmentalisation or integration tendencies; stability or dynamism throughout one's lifecycle; compensation and balancing with other health identities; perceptions of health risks and concerns by gender (male vs. female); openness to technology-driven prophylactic measures; and health management (i.e., via self-monitoring/tracking) and age. The findings on the multi-dimensionality and compartmentalisation of drinking identities are aligned with current views which consider that 'identities are never unified and, in late modern times, increasingly fragmented and fractured; never singular but multiply constructed across different, often intersecting and antagonistic, discourses, practices and positions' (Hall, 2000, p. 17).

In the present research study, by employing a two-week online alcohol tracker, the participants were able to compare their drinking perceptions with the more accurate results of the tracker, and to reflect on their behaviour and drinking identities. This provided insights into consumers' use of compartmentalisation and integration tendencies. By using the tracker as a methodological tool, this study has also contributed to the literature about the role of technology in consumers' health-related decisions and the health industry (Gruca & Wakefield, 2004; Thakur, Hsu, & Fontenot, 2012). The results indicated that an online tracking method as part of an alcohol and health campaign could be beneficial for some individuals, but not for the ones with strong compartmentalisation tendencies. For these consumers, a longer tracking period than the one examined here (14 days), should be also complemented with contact with and feedback from an expert such as a nurse or a GP, to

increase the success of forming 'healthier' drinking identities. These experts could communicate that compensation between health identities is not a treatment for alcohol overconsumption. Also, some individuals recognised a new drinking identity after the alcohol self-tracking experience, which was assessed as being in conflict with their previous drinking identity. This realisation was followed by the desire to integrate and reconciliate these identities, which meant an increase in individual's intentions to reduce and control future drinking. This shows that social marketing campaigns, which encourage the use of personalised, online alcohol tracking tools that include visual and written feedback, could be successful at encouraging the formation of 'healthier' drinking identities. Finally, our study used a more consistent and accurate behavioural measures of alcohol consumption unlike traditional marketing and alcohol research, which often used cross-sectional approaches and behavioural intentions measures to infer actual behaviour.

Limitations, future research and concluding remarks

Some caveats must be acknowledged regarding the present study. A relatively small sample was used and future studies should use a large cohort that is more representative of the entire UK population (though not everyone might have access to a computer/smartphones or the Internet). Additionally, more variation in the sample and differences across other socio-demographic characteristics (e.g., education, professional background, income, ethnicity, ICT knowledge and usage) could be considered in terms of capturing a wider range of identities and contexts and in order to examine the influence of these demographics on consumers' drinking identities and compartmentalisation or integration.

Moreover, the length of the alcohol tracking was restricted to 14 days and some participants used this as a justification for their alcohol consumption results. Therefore, a tracking tool monitoring alcohol consumption for a longer period at various intervals and

which could enable the insertion of information related to the social context and occasion connected to daily consumption episodes would provide a more comprehensive and realistic picture of individual alcohol consumption. One related limitation of the present findings, is that the guidelines regarding alcohol intake have been recently changed, and differ from the ones advocated now via the NHS website (see the introduction section). Future research should investigate if these new guidelines have been noticed and how they are perceived by consumers.

Additionally, because the first interview was carried out before the tracking phase and because the tracking was self-reported, some participants might have adjusted their alcohol practice or under-reported their consumption as a result of the research itself. In this study, the aim was not to examine the efficacy of the tracker in changing alcohol consumption behaviour but to examine consumers' drinking identities and their compartmentalisation and integration tendencies. Therefore, we argue that the self-reported nature of the tracker did not affect significantly the findings. Lastly, the use of the online tracking tool was motivated, in the case of some participants, by the offered financial reward. Thus, outside the context of this study some individuals might not be motivated to use it and, thus, both the NHS and social marketers should not assume a technological determinism and spontaneous adoption by consumers. They should rather engage with each other as well as academics to better understand what strategies and tools can be used to encourage consumers' integration of drinking identities and healthier consumption. Additional work is needed to offer a more comprehensive understanding of this phenomenon and the complex psychological mechanisms underpinning identities and their compartmentalisation and integration. Similarly, future work could explore the initial findings reported here on the mapping dimensions of health identities.

In conclusion, this paper uses the concept of compartmentalisation of identities (Amiot *et al.*, 2007; Showers, 1992) for the first time in marketing and consumer behaviour literatures to offer a more comprehensive view on consumers' alcohol consumption and how this might be motivated by the existence multiple drinking identities. The findings have valuable implications for designing social marketing and public health alcohol campaigns that could encourage, more successfully than past ones, a 'healthier' approach to drinking across various consumers groups and social contexts.

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