

Influencing Health Choices: The Role of Social Media Influencers in Dry January Participation

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ABSTRACT,

The research examines the impact of social media influencers' trustworthiness and type on individuals' intention to participate in the health-related initiative "Dry January." An online survey carried out through Qualtrics was used with a quantitative approach, and 106 respondents. The study collected data on demographics, evaluated social media usage, influencer preferences, alcohol consumption patterns, awareness of Dry January, and the motivations behind participating in the latter. Data analysis included descriptive statistics, correlation analysis, ANCOVA tests, and linear regression models. According to the findings, the intention to engage in Dry January is positively correlated with the influencers' trustworthiness, whereas the type of influencer (micro, macro, or mega) had no apparent effect on the latter. The study offers suggestions for further research and emphasizes the critical role that trustworthiness plays in influencer marketing to promote health-related behaviors. as well as marketing strategies.

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Keywords

Social Media Influencers, trustworthiness, type, trust, motivation, Dry January, intention to participate, alcohol consumption

1. INTRODUCTION

The effect of Social Media Influencers (SMIs), who represent a new class of independent promoters that shape the opinions of their followers by posting content on blogs, tweets, and other social media channels (Freberg et al., 2011), on health-related behaviors, becomes more interesting in the digital world environment. Social media platforms have transformed movements for social change and collective action, reshaping their norms and practices (Priante, 2019). They provide easily accessible and affordable means of organizing, coordinating, and sharing information regarding group activity. Social media allows for quick campaign distribution and direct individual participation. The term "connective action" was introduced to characterize engagement enabled by social media. While some refer to online activism as "slacktivism," others highlight effective initiatives having the same impact as if it were offline (Priante, 2019).

Transitioning from this context, besides the buying behavior, influencers, the term referring to "those who have achieved recognition" (Gómez, 2019), may have an impact on our healthy habits (Powell & Pring, 2024), such as diet, exercise, mental health, smoking and drinking behavior, and wellness practices, by sharing their own everyday life and/or promoting a specific lifestyle. The health-related impact represents the main topic of interest of the following work since investigating how influencers' messages are received and acted upon can inform public health strategies and interventions and overall improve the quality of our lives.

Social media influencers (SMIs) and their impact on consumer behavior have received much attention in recent years (Gómez, 2019). The study aims to investigate the specific effects of social media influencers on individuals' health-related habits. Specifically, alcohol consumption and engagement in the "Dry January" movement will be explored, which represents a month-long program, encouraging people to voluntarily give up alcohol consumption. The program intends to transform negative perceptions of alcohol use, support brief abstinence from alcohol, and encourage healthier drinking habits. It is a part of larger initiatives to address alcohol-related issues through the spread of healthy practices across the public. It is frequently organized by numerous organizations and charities globally, including Alcohol Concern in the UK (De Visser et al., 2017). For health campaigns, it is important to know what factors influence people's intentions to engage in the described practice.

The study investigates how people's decisions to participate in "Dry January" are influenced by various SMI types and the perception of their trustworthiness. Through an analysis of the methods by which influencers shape attitudes and actions regarding alcohol consumption, this research seeks to contribute to the building of evidence-based approaches to promoting healthier lifestyles in the digital age.

Using prior research on the broader effects of social media on health behaviors along with studies looking at the particular effects of SMIs on food consumption and body image dissatisfaction, this study attempts to address a knowledge gap regarding the role of influencers on alcohol consumption behavior and "Dry January" participation.

1.1 Research objective and question

The primary objective of the study is to investigate the impact of social media influencers (SMIs) on individuals' intention to take part in the health movement known as "Dry January". The goal is to understand and identify which influencers have more, if any, impact on drinking habits and how much the trustworthiness of the influencer impacts someone's decision to engage in Dry January.

To ensure focused investigations and accurate conclusions, the main research topic and objective can be formulated through the following narrowed-down research question: ***"How does the type and trustworthiness of SM influencers impact individuals' intention to participate in "Dry January"?"***

By answering the above question, the study aims to showcase the relationship (if such) between the mentioned variables.

1.2 Academic and practical relevance

Earlier researches have explored the general impact of social media on consumers' health habits, while other studies also provide data on the particular effect SMIs have on individuals' health lifestyles. Exist both, older and more recent ones, while the majority of studies focused more on food-related topics, such as the effects of influencer marketing on dietary intake related to health or unhealthy foods, or the impact of influencer imagery on body image dissatisfaction (Powell & Pring, 2024). The studies also examined different age groups, ones focusing on children and their exposure to food marketing, while others covering young adults, and weight and body dissatisfaction. As Powell and Pring (2024) discovered in their research, children's decisions regarding what to eat are additionally affected by influencer lifestyle. When an overweight influencer recommended an unhealthy snack, they were more likely to choose the healthier option.

Additionally, several studies undercovered and highlighted the possible harm that social media messaging can cause, including negative consequences for eating disorders and mental health. Besides, it was also shown that there is the efficacy of social media influencers to impact audience opinions and actions in the direction of behavioral change. A popular trend in social media networking is the use of social media influencers as independent third-party marketers who can influence readers' and followers' opinions through their tweets, blogs, and other social media platforms (Ramlan et al., 2022).

Although past research has provided insight into the general effects of social media on the eating and fitness

habits of young adults (Ramlan et al., 2022), it has not particularly addressed the impact of influencers on alcohol consumption behavior. Thus, by diving more into this aspect of the subject, this research aims at addressing the knowledge gap.

After the research, it will be possible to translate the findings into practical suggestions and recommendations that can improve individuals' health conditions and enhance the overall quality of life. Research gap in terms of the impact of social media influencers on alcohol consumption healthy habits includes understanding how different types of influencers (micro, macro, and mega-influencers) impact different consumer generations' (age groups) intention to take a part of Dry January practice, the mechanisms underlying influencer impact on healthy habits, the way they are impacted and the effects of influencer marketing on behavior change. The research advances theoretical knowledge and understanding in the fields of consumer behavior, social media marketing, and consumers' health by filling up these gaps. It adds to the academic discourse about the role of social media influencers in encouraging healthy behaviors.

In studying the impact of social media influencers on intention to participate in the Dry January movement practical relevance involves the possibility of using influencer partnerships to effectively reach and engage target audiences by collaborating with SMIs who have substantial followings on platforms like YouTube, Instagram, or TikTok. These influencers have the ability to successfully engage with particular target audiences or demographic groups that might be more receptive to their messaging. Public health campaigns can strategically collaborate with influencers of a certain type to spread their messages and reach a wider audience, particularly if research findings show that these influencers have a greater impact on people's intentions to participate in Dry January. Influencers have the ability to share personal stories, produce content that highlights the advantages of taking part in Dry January, and inspire their followers to take up the challenge.

Additionally, the research findings will cover the idea of ways to assist and motivate social influencers in fostering an environment that would encourage people in their social network to be motivated to develop healthy behaviors. Lately, there has been a growing awareness of the significance of training social influencers to promote beneficial health practices, which has a great impact in terms of health practices marketing (Smit et al., 2022). According to researchers, a health intervention's effectiveness largely depends on how well individuals delivering the message are trained (Smit et al., 2022). Providing social influencers knowledge about the suggested health habits has been the main focus of the majority of social influencer training. Behavioral change models assume that engaging in healthy behavior requires more aspects than just skill or knowledge. As a result, while creating health programs, designers should consider

the reasons behind the social influencers' own health behavior as well as their reasons for encouraging the desired behavior among their social networks (Smit et al., 2022). Understanding the variety of ways in which the type of influencers impacts behavior could assist in creating customized training initiatives. Training programs can be developed to provide influencers with the necessary skills and information to effectively promote health behaviors within their social networks by identifying the traits and approaches that most resonate with audiences.

2. LITERATURE REVIEW AND HYPOTHESIS

2.1 Social Learning Theory

There do exist many typologies and classifications of the influencers, while for the following research "the classification of influencer status based on size of audience"(Gómez, 2019) will be used since the amount of an influencer's following on social media is widely thought to be a key factor in determining how appealing they are to businesses (Ouvrein et al., 2021). Based on this classification, there are three different types of influencers: micro, macro, and mega-influencers. Micro-influencers focus on particular niches and are viewed as genuine and accessible. They have small but highly engaged fan bases, usually between 5,000 and 100,000 followers. They are proficient at building close connections with their viewers, which encourages high levels of interaction with the content they provide. On the other hand, macro influencers - those with more than 100,000 followers - use their huge reach to make a professional path out of their digital presence by effectively using multiple platforms for cross-promotion. Mega influencers are the ultimate kind of social media celebrity, having millions or even tens of millions of followers. Their reach and influence are similar to that of traditional celebrities (Gómez, 2019).

To examine if the intentions of individuals to participate in Dry January would be significantly affected by the type of social media influencer (SMI) they follow, the first hypothesis for the research is being formulated:

Hypothesis 1: *Exposure to micro-influencers promoting Dry January will lead to a higher intention to participate in the movement compared to exposure to macro or mega-influencers.*

The hypothesis suggests that being exposed to different types of influencers - that is, micro, macro, or mega-influencers - will lead to varying levels of intention to take part in the Dry January initiative. Based on the hypothesis, those who are exposed to micro-influencers who promote Dry January will be more likely to participate than individuals who are exposed to macro- or mega-influencers. This assumption derives from the idea that smaller but highly engaged fan bases of micro-influencers cause them to be perceived as more

trustworthy and accessible. They are proficient at establishing strong connections with their audience, resulting in more engagement with the information they offer. Since micro-influencers are seen as relatable and genuine, consumers can therefore be more affected by their statements regarding Dry January. On the other hand, those who are exposed to macro- or mega-influencers may have a reduced intention to engage in Dry January. These influencers might be perceived as less reliable and more distant, which could decrease their ability to affect individual intentions to participate in the health movement.

As stated in the introduction part, influencers may have a great impact on individuals. Social Learning Theory (SLT) may explain this phenomenon. SLT suggests that people acquire knowledge through observing the behaviors of other individuals and through their interactions with each other in social settings. People are more likely to absorb and replicate those actions if they have favorable observational experiences or receive rewards. Imitation, in Bandura's perspective, is the reproduction of observed motor activities. SLT admits that learning is not always linked to a change in behavior and claims that learning happens through observation, imitation, and modeling. SLT includes three fundamental ideas: the observational learning process, the significance of mental states in learning (intrinsic reinforcement), and the chance that learning may not always result in behavioral change. In accordance with the study, individuals could observe behavior from SMIs who support or take part in "Dry January" and follow them. People are more likely to imitate the influencers' participation in the health movement if they consider them as trustworthy. Bandura recognized three models of observant learning: live models, verbal instructional models, and symbolic models. According to the article written by Nabavi (2012), successful modeling requires four things: attention, retention, reproduction, and motivation. In terms of the research question, attention is crucial, as individuals must pay attention to the behavior of SMIs promoting "Dry January." Attention to the model is needed, and it can be influenced by things like similarity or status. Retention implies remembering the observed behavior, and it can be improved with practice. The ability to reproduce the observed behavior is known as reproduction, which might be restricted by developmental readiness (Nabavi, 2012). Moreover, considering the research topic, reproduction may be influenced by factors such as the perceived similarity between the individual and the influencer. Lastly, motivation is crucial, as learners have to be motivated to show what they have learned, and reinforcement and punishment play a significant role in this step. Applying it to the research context, Individuals need to be inspired to get involved in "Dry January" by the model set by the influencers.

Thus, in the context of this study, the SLT helps to understand how individuals' intention to participate in

"Dry January" may be influenced by the type and trustworthiness of social media influencers (SMIs).

2.2 Trustworthiness

A key component of SMIs' credibility is trustworthiness, which affects the way they promote products. According to research, the behavior that comes next is significantly affected by one's perception of one's trustworthiness. In cases where SMI advertising lacks transparency, it may be interpreted as manipulative and dishonest, which reduces trust. Transparency improves advertising effectiveness and builds trust. Research has indicated a favorable relationship between followers' perceptions of brands and bloggers' trustworthiness. However, displaying advertising intent could cause negative emotional responses and hence lower trustworthiness (Balaban et al., 2022). Additionally, Ohanian (1990) defined trustworthiness as the degree to which consumers believe a message source can communicate statements that are true. When putting trust in someone, qualities like dependability, psychological security, and creating a friendly atmosphere are important, as Giffin noted in 1967. Since trustworthiness is considered the key factor affecting consumers' intention to purchase and their brand loyalty (Baig & Shahzad, 2022), this study will examine if it is to the same extent affecting one's intention to participate in healthy movements (implying changing one's behavior). Thus, the following hypothesis is formulated:

Hypothesis 2: *Perceived trustworthiness of influencers promoting Dry January will positively influence individuals' intention to participate in the movement.*

It suggests that the perceived trustworthiness of SMIs promoting Dry January will positively influence individuals' intention to participate in the movement. It stands for the idea that individuals who perceive influencers as more trustworthy will be more inclined to engage in Dry January compared to those who perceive influencers as less trustworthy. The foundation of the hypothesis lies in the belief that consumer behavior is significantly influenced by trust. People are more likely to be open to recommendations and messaging from influencers they trust. Those who believe that the influencers promoting the movement are sincere in their recommendations and who they trust will be more likely to participate in Dry January. Influencers who openly share their objectives and personal experiences for taking part in Dry January may be seen as more trustworthy by their followers.

2.3 Control Variables

Moreover, potential control variables that might affect the impact of social media influencers on health movement engagement intentions, such as (past) alcohol consumption behavior and demographic characteristics will also be examined to present a clearer picture in regards to the research topic.

2.3.1 Age

As for demographics, age represents an additional interesting subtopic, since groups of consumers based on their age use technological advances to a different extent, and the way generations are affected varies (Politte-Corn et al., 2023). It is interesting to explore if there is a tendency for influencers to have a greater impact on Generation Z and emerging adults' alcohol consumption habits than on older consumers' and why. As suggested by an article investigating the future research directions for technologies and consumers' well-being (Benvenuti et al., 2023), several age groups of consumers should be considered for the research, involving the youngest generations (such as Gen Alpha) who mostly rely on new technologies for their development, and elderly ones too.

2.3.2 Alcohol Consumption

Recognizing the relationship between social media usage, previous alcohol consumption patterns, and participation in "Dry January" is important. Social media has a significant effect on real-world drinking practices through the distribution of alcohol-related content on these platforms. Given that various age groups may react differently to social media, it is essential to consider the age differences. Understanding how social media shaped past drinking habits emphasizes the significance of examining how influencers may impact "Dry January" participation.

An article published by Westgate and Holliday in 2016 illustrates how social media and drinking are connected. Social media posts regarding alcohol have a direct correlation to actual drinking habits. Platforms like Facebook and MySpace were the main focus of earlier studies, while the newer platforms like Snapchat, Instagram, TikTok, and Twitter were given less attention, most likely due to the time gap between technological advancements and research being spread. Furthermore, there is a gap in understanding how age influences the relationship between social media use and drinking behavior. The majority of studies focused on younger populations, including emerging adults, college students, and teenagers, who may have diverse drinking and social media behaviors from older adults (Westgate & Holliday, 2016).

The randomized response technique (RRT) was applied in this study to measure the consumption of alcohol since it effectively maintains respondent anonymity while promoting honest responses. RRT provides strong statistical efficiency for delicate subjects like alcohol consumption. It was initially introduced by Warner in 1965 and has since been improved upon (Nuno & St John, 2015). In order to answer the forced-response RRT variation question in the survey in the context of this research, participants had to secretly flip a coin: heads indicated to answer honestly, while tails meant to select "Occasionally (2–3 times a week)." This technique

ensures more reliable statistics on patterns of alcohol intake by reducing self-reporting bias.

2.3.3 Motivation

The study conducted by Ramlan et al. (2022) investigated the "Impact of Social Media Influencers to promote Healthy Lifestyle behaviour" considering the Self-Determination Theory (SDT) perspective, which implies that behavior may be driven by extrinsic, intrinsic, or amotivated reasons. Researchers discovered that those with higher levels of autonomy are more likely to achieve long-lasting behavioral changes. Since choosing to consume media is voluntary, the assumption that motivation is mostly internal persists. At the same time, a study conducted in 2015 already had valid points for the topic, even though it was focused on the social media impact overall, not considering influencers as the main subject of the research. It looked into the connection between young adults' usage of social media, diet, and exercise (Vaterlaus et al., 2015).

The Self-Determination Theory (SDT) states that extrinsic motivation, intrinsic motivation, and amotivation represent the different forms of motivation that impact health habits. Intrinsic motivation encourages autonomy and sustainable behavior change, but extrinsic motivation could not have a significant effect on behavior. SDT highlights that in order to improve achievement of objectives it is critical to meet individual needs for relatedness, competence, and autonomy. According to research, people who are autonomously motivated are more likely to maintain a behavior change, highlighting the importance of psychological health and self-motivation. Based on SDT, relatedness, competence, and autonomy are intrinsic and universal psychological needs. Autonomy is defined as the need for self-control and free choice, competence as a social interaction skill, and relatedness as a connection with others (Ramlan et al., 2022). SDT offers a theoretical framework for understanding the ways in which different motivations impact behavior, particularly actions connected to one's health, such as participating in "Dry January." Within the framework of the research question addressing the impact of social media influencers on individuals' intention to take part in "Dry January," SDT emphasizes the significance of motivation in influencing behavioral change.

2.4 Conceptual Framework

Considering the previous sections, the following conceptual framework has been designed:

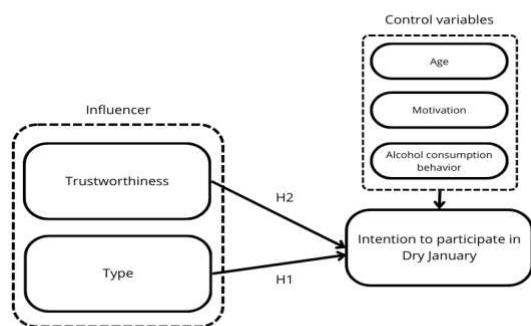


Figure 1 - Conceptual Framework

3. METHODOLOGY

3.1 Sample Selection

The research made use of a quantitative methodology, using a structured questionnaire conducted online via survey platform Qualtrics during the period of May 27 -June 13, 2024. This method (e.g over an interview) is chosen to collect data, in order to maintain standardization and make the data collection process among a large sample size easier (questionnaires allow for generalization of data). The predetermined questions can be used in this case, contributing to the consistency of analysis. Additionally, structured questions can effectively capture a broad range of responses from varied participants and are less subject to interviewer bias (Young, 2016).

The questionnaire, conducted in the English language, was distributed via two different social media platforms: Instagram and WhatsApp, as well as personal networks. The questionnaire was filled out anonymously in order to guarantee confidentiality. Of the total of 106 respondents, 85 of them filled out the questionnaire completely. Selected participants were different social media users(including Instagram, TikTok, Twitter, etc.) ensuring familiarity with influencer content and engagement with the latter. The sample includes participants above 18 years old since some questions are based on alcohol consumption. The approach used to get participants was the convenience sampling method. By sharing the survey link on my personal social media platforms(Instagram and WhatsApp) the respondents were chosen based on their accessibility and availability, which lies at the core of convenient sampling (Young, 2016). By taking this approach I mostly relied on those within my close social network to take part in the study rather than using random selection techniques.

3.2 Method

To test the hypotheses and answer the research question of this thesis, quantitative data was gathered via online questionnaire. The survey questions are adapted from existing literature and are measured using multiple

choice questions as well as a five-point and six-point Likert scale (1 = strongly disagree, 5 = strongly agree, 6 standing for Not Applicable). Regarding the control variables, age was measured as an ordinal categorical variable with four distinct age ranges assigned a numeric code to facilitate analysis, relying on the Settersten and Mayer (1997) research. Alcohol consumption was treated as a sensitive question as recommended in the article by Nuno, A., & St. John, F. A. (2015), and to examine motivation, existing scales from previous research by Tremblay et al. (2009) were used. The questionnaire, based on the operationalization table in Table 1, can be found in the Appendix (9.4 Survey).

The survey consisted of seven parts. After verifying the respondent's consent to participate, the first part began with a demographic question to understand the participant's age group. The second part focused on social media engagement, asking respondents about their frequently used platforms and types of interactions with social media influencers. The third part explored influencer preferences, inquiring which types of influencers (micro, macro, or mega) the respondents most frequently followed and engaged with. The fourth part assessed alcohol consumption habits. Participants were instructed to privately flip a coin and respond to a question about their weekly alcohol consumption based on the coin result. The fifth part examined respondents' familiarity and participation in the "Dry January" health movement. Participants were asked about their awareness and involvement in Dry January, and their likelihood to participate in the future. In the sixth part, the survey covered influencer trustworthiness. Participants rated their trust in social media influencers promoting health-related habits on a Likert scale and provided their level of agreement on several statements regarding influencers' trustworthiness. The survey concluded with a section on motivations for participating in Dry January, where respondents rated their reasons for participation on a Likert scale, reflecting factors such as personal health goals, curiosity about the effects, and influence from social media influencers.

Table 1 - Operationalization Table

Variable	Source	Number of items
Intention to Participate (DV)	Hwang and Kim (2015)	1*: "Please indicate your level of agreement with the following statement: I am likely to participate in Dry January"
Type of influencer (IV)	Kim T. (2020)	1: "Which type of social media influencers do you most frequently follow? (Select one)"
Trustworthiness (IV)	AlFarraj et al. (2021)	2* : "Please rate your level of trust in social media influencers"

promoting health-related habits using the following scale” (5 statements); “Please indicate your level of agreement with the following statement: The influencers I follow are trustworthy when promoting health-related behaviors.”

Age (CV)	Settersten and Mayer (1997)	1 Ordinal categorical variables
Alcohol consumption behavior (CV)	Hughes et al. (1997); Nuno and St John (2015)	1**: “How often do you consume alcohol in a typical week?”
Motivation for behavior change (CV)	Tremblay et al. (2009)	1*: “Please rate the extent to which each statement below reflects your potential reasons for participating in Dry January, using the scale provided” (9 statements)

* Measured on a Likert-scale

** RRT question

3.3 Analysis

In order to maintain the accuracy of the data, respondents who did not consent to participate in the survey will be excluded. The dependent variable (DV), “Intention to Participate” (Intention_Part), and the independent variables (IV), “Trustworthiness,” calculated as the mean of several trust-related questions, and “Type of SMI” (Type) will be defined. The following control variables will also be defined: age, motivation, and alcohol consumption (AC). To guarantee valid analysis, missing values in numerical columns will be treated accordingly. A single table containing the mean, standard deviation, minimum, maximum, and other descriptive statistics for the DV and IV will be created. A correlation matrix will be used to look at the correlation between the variables and ANCOVA test will be conducted to treat categorical variable in the correlation analysis. Lastly, models of linear regression will be created in order to evaluate the hypotheses. There will be three types of models: one with only control variables, another with both independent and control variables, and the third with logarithmically transformed variables. These models will be analyzed to determine the relationship between the intention to participate in Dry January, trustworthiness, and type of SMIs, controlling for age, alcohol consumption, and motivation.

4. RESULTS

The analysis began by importing survey data from RStudio. After initial data inspection, columns unrelated to the study were removed, and a unique respondent ID was assigned. Respondents who consented to participate were retained, and missing values were addressed by imputing zeros for numeric variables. Descriptive statistics were computed for variables of interest, revealing insights such as a mean Intention to Participate score of 2.93 with a standard deviation of 1.18. Correlation analysis highlighted significant relationships (Kronthaler & Zöllner, 2021) between Intention to Participate and Trust(Trustworthiness of SMI) (0.36) and minimal impact from the demographic variable. Linear regression analysis further explored predictors of Intention to Participate, emphasizing Trust as a key factor. This process provided a structured approach to understanding the factors influencing participants’ intentions to participate in Dry January based on the survey responses.

4.1 Descriptive Analysis

Table 2 presents the descriptive statistics for the independent variable “Trustworthiness” and the dependent variable, while “Type of SMI” being a categorical variable is explored using a frequency table, calculating mode, and printing the bar chart based on it(See Appendix 9.2, Figure 1).

The table reveals the average score of roughly 2.925 for Intention_Part. This score indicates that respondents have a moderate intention or interest in taking part in Dry January. The average standard deviation of 1.178 points suggests that there was an average variation of 1.178 points in the responses around this mean score. The respondents’ mean scores on several characteristics for trust in the social media influencers they follow varied from 1.000 to 4.833. These results show the range in respondents’ assessments of the trustworthiness of the influencers they follow. For these “Trust” items, the standard deviation of roughly 0.699 indicates that responses tended to vary by approximately 0.699 points from the corresponding mean scores.

Further, the most popular social media influencers among the surveyed population are Type 2 influencers, demonstrated by the bar chart (attached to Appendix 9.2, Figure 1), who are classified as macro influencers according to the survey question. This result emphasizes how macro influencers are prevalent in the digital space. However, Hypothesis 1 centers on micro-influencers and suggests that they may have a stronger impact on health-related behaviors like participating in Dry January. The majority of respondents selected macro-influencers, who usually have greater followings and appeal to a wider audience, which stands in contradiction to this notion. As the study aims to understand how various influencer types might effectively engage audiences to promote particular health behaviors, evaluating the potential influence of micro-influencers in

light of the prevalence of macro-influencers presents a challenge.

Table 2 – Descriptive statistics

	Min	Max	Mean	SD
Intention to Participate	1.000	5.000	2.925	1.177
Trustworthiness	1.000	4.833	3.097	0.699

4.2 Correlation

The relationships between the variables were examined using a correlation matrix that was generated. The correlation matrix is shown in Table 3 and illustrates the relationships between the three main variables: motivation, trust (trustworthiness), and intention_part (intention to participate), since Age and Type are categorical, an additional ANCOVA test was conducted to assess the relationship between these variables and the numeric dependent variable (Intention to Participate), with results attached in the Appendix.

There are several significant relationships presented in Table 3. The first finding in the correlation matrix is that the Intention to Participate has a perfect correlation of 1.00 with itself, as expected (Kronthaler & Zöllner, 2021). Trustworthiness demonstrates a moderate positive correlation with Intention to Participate (0.36) and a similar strength correlation with motivation (0.34). Intention to Participate and Motivation show a weak positive correlation (0.17). These findings provide quantitative insights into the relationships between the variables under analysis, providing a comprehensive overview of the interaction between the variables. Refer to Table 5 and 5.1 in Appendix 9.3 for an extensive look that includes ANCOVA test results.

Table 3 - Correlation

Variable	Intention to participate	Trustworthiness	Motivation
Intention to participate	1.000	0.357	0.169
Trustworthiness	0.357	1.000	0.344
Motivation	0.169	0.344	1.000

**Each cell in the table displays the correlation coefficient between two variables. Values near 1 indicate a strong positive relationship, while values near -1 indicate a strong negative relationship. Values near 0 suggest a weak or negligible relationship.*

4.3 Hypotheses testing

The following analysis presents the regression outcomes assessing factors influencing participants' intention to participate (Intention_Part) in the context under study. Table 4 details the regression results, incorporating Age, AC (Alcohol Consumption), Motivation, Trust, and Type of SMI(macro- and mega-influencers, with micro- being the reference category) as predictors. The adjusted R-squared for the models indicates how much of the variability in Intention_Part is

explained by the included variables. In order to improve the robustness and interpretability of the results, a modified model (Model 2 transformed) was developed by log-transforming the Trust variable in order to address any problems with its distribution.

4.3.1 Hypothesis 1

The first hypothesis suggested that compared to exposure to macro- or mega-influencers, exposure to micro-influencers promoting Dry January would result in an increased desire to participate. However, this theory was not supported by the analysis. The macro-influencer type (0.025, SE = 0.316) and mega-influencers (-0.444, SE = 0.421) coefficients in Model 2 were not significant. Likewise, the coefficients for macro-influencer type (0.196, SE = 0.306) and mega-influencer type (-0.485, SE = 0.409) in the transformed model remained non-significant.

4.3.2 Hypothesis 2

The second hypothesis suggested that the intention of individuals to participate in Dry January would be positively influenced by their perception of the trustworthiness of the influencers promoting the campaign. Trust did not show a significant relationship based on Model 2's regression analysis (Estimate = 0.169, SE = 0.178). Nevertheless, the transformed model (Log_Trust: Estimate = 1.956, SE = 0.782) showed a significant positive relationship when Trust was log-transformed, consequently validating Hypothesis 2.

4.3.3 Control variables

The research included Age, AC, and Motivation as control variables. Model 1 demonstrated that the Intention_Part was influenced by Age, AC, and Motivation in varying extents. Age and Motivation variables did not show significant effects across models, while AC2 had a significant positive impact in Model 2 (Estimate = 0.926, SE = 0.397). A positive impact was still seen in the modified model for AC2 (Estimate = 0.646, SE = 0.444), however, it did not prove statistically significant.

Table 4 – Regression results

	Model 1	Model 2	Model 2 transformed
(Intercept)	1.502	1.306	-1.163
	(0.516)	(0.591)	(1.159)
Independent variables			
Trust		0.169 (0.178)	1.956 (0.782)
Macro-influencer		0.025 (0.316)	0.196 (0.306)
Mega-influencer		-0.444 (0.421)	-0.485 (0.409)
Control variables			

Age: 21-24	0.124 (0.364)	0.131 (0.384)	0.205 (0.388)
Age: 25-27	1.007 (0.633)	0.937 (0.652)	0.738 (0.642)
Age: 28-30	0.059 (0.577)	0.034 (0.579)	0.130 (0.567)
AC2(Rarely)	0.920 (0.391)	0.926 (0.397)	0.646 (0.444)
AC3 (Occasionally)	0.523 (0.443)	0.519 (0.447)	0.418 (0.495)
AC4 (Frequently)	0.692 (0.648)	0.763 (0.660)	0.093 (0.716)
Motivation	0.176 (0.099)	0.103 (0.124)	0.197 (0.167)
Fit statistics			
R2	0.127	0.162	0.229
R2 Adj.	0.044	0.044	0.103

4.4 Summary of the results

This research examined the variables that affected individuals' intention to take part in Dry January. Intention to Participate scores ranged from 2.925 to 1.177 on average, according to descriptive data. Correlation analysis demonstrated that Intention to Participate and Trustworthiness of SMI had a strong positive relationship (0.36), with Type of SMI having no effect.

Hypothesis 2 was validated by regression analysis, presented in Table 4, and demonstrates that Trust significantly predicts higher Intention to Participate in the modified model (Log_Trust: Estimate = 1.956, SE = 0.782). However, as the transformed model illustrates, the Type of social media influencer had no significant effect on participation intention (estimate = 0.196, SE = 0.306), failing to support Hypothesis 1.

The control variables (motivation, age, and AC) demonstrated varying effects. Model 2 (Estimate = 0.926, SE = 0.397) illustrated positive effect of AC2, however, this impact was not significant in the modified model (Estimate = 0.646, SE = 0.444). Across models, motivation did not show any apparent impacts.

Overall, these results indicate the limited impact of demographic characteristics and influencer type and emphasize the crucial role that trustworthiness plays in affecting participation intentions in health-related activities supported by social media influencers.

5. DISCUSSION

The purpose of this study was to investigate the relationship between the intention of individuals to take part in Dry January and the type and trustworthiness of SMIs. Two theories were used to approach this goal. Regression analysis did not show statistically significant results for the first hypothesis, which proposed that exposure to micro-influencers promoting Dry January would result in higher levels of participation compared to exposure to macro- or mega-influencers. This highlights the complexity involved in analyzing the various impacts

of several categories of social media influencers. According to the study, individuals' intentions to take part in Dry January were not significantly influenced by the type of influencer. The survey results did not support the theoretical expectation that micro-influencers would have more influence because of their perceived closeness to audiences (AlFarraj et al., 2021). According to descriptive data, respondents most frequently followed and interacted with macro-influencers. This difference suggests that macro influencers still have a greater overall audience engagement and influence than micro influencers, despite the latter's potential for niche appeal and credibility.

The second hypothesis, which suggested that individuals' intention to participate in Dry January would be positively impacted by their perception of the influencers' trustworthiness, was supported and validated by significant results in the regression analysis. According to research results, it was demonstrated that participants who considered influencers as trustworthy were more likely to indicate they intended to participate in Dry January. This result was further supported by the correlation matrix, which showed a moderately positive correlation between trust and participation intention. This suggests that people are more likely to participate in health-related activities like Dry January when they have greater trust in influencers who promote healthy habits.

Alcohol consumption, age, and motivation were the control variables used in the regression models. Age was considered as an ordinal categorical variable. Across all age groups, age did not significantly affect participants' desire to engage in Dry January, indicating that participants' behaviors toward health-related initiative promoted by influencers were not consistently influenced by age within the examined demographic range.

Additionally, alcohol consumption variable in one of the models of regression analysis had a significant positive impact, implying that people who consumed more alcohol were more likely to participate in health-related events like Dry January. This demonstrates that participation intentions in health programs are largely shaped by one's behaviors and motivations rather than demographic characteristics like age.

6. CONCLUSION

The primary focus of this research is centered on the question: "How do the type and trustworthiness of social

media influencers impact individuals' intention to participate in "Dry January" ?". The results demonstrate a significant positive relationship between participants' intention to participate in Dry January and their perception of the trustworthiness of SMIs, even though the type of SMI did not significantly affect participation intentions. This indicates that increased trust in influencers may increase the likelihood of people participating in health-related events like Dry January. These findings emphasize the significance of trust in influencer marketing techniques meant to encourage healthy lifestyle choices

and the need of building authentic connections between influencers and their audiences in order to encourage meaningful interaction.

The thesis will be concluded in Section 6.1, which will include the study's theoretical and practical implications. Section 6.2 discusses the study's limitations and suggestions for additional future research.

6.1 Implications

This study examines how social media influencers affect one's engagement in health-related activities like Dry January, making a substantial theoretical contribution. Prior studies have mostly examined the impact of influencers on domains including eating habits and body image (Powell & Pring, 2024; Ramlan et al., 2022). However, the impact of influencers on alcohol consumption behaviors has received less attention. This study highlights the significance of trustworthiness in influencer marketing tactics that encourage healthier behaviors by revealing that trustworthiness is a crucial factor in influencing intentions to participate in Dry January. Although the study did not identify any statistically significant differences across influencer types (micro-, macro-, and mega-influencers) in this particular context, it does illustrate the complex nature of influencer impact and the critical roles that factors like content alignment may play.

In practical terms, this research indicates that influencer collaborations can be strategically used by public health initiatives to better target and engage particular demographic groups. Influencers on social media platforms such as Instagram, TikTok, or YouTube have the capacity to authentically communicate the advantages of taking part in Dry January, which in turn inspires their followers to adopt healthier lifestyles. The results of this study can also be used to inform the creation of influencer training programs, which will increase the efficacy of these programs in encouraging healthy behaviors among their social networks.

6.2 Limitations and future research

Interpreting the study's results a number of limitations should be considered. First, individuals' intentions to engage in Dry January were not directly measured by the research in relation to the different types of social media influencers (SMIs). Instead, it assessed whether people who follow micro-, macro-, or mega-influencers have an intention to participate in the campaign. This approach limits the ability to determine causal conclusions regarding the impact of various SMI types. An experimental methodology, where respondents are exposed to various types of influencers and their impact on involvement is measured, would be a better way to effectively explore the effect of influencers' type.

Moreover, the survey covered a broader range of data than what was analyzed in this research. The questionnaire included questions related to which social media platforms are most frequently used, the types of

interactions people have with SMIs (such as viewing content, commenting on posts, sending direct messages, forwarding, and reposting content), and how people rank social media platforms based on usage frequency. These data points were not used here, whereas could offer insightful information about the relationship between social media usage and involvement in health campaigns. Furthermore, no investigation was conducted into how participation in Dry January was influenced by intrinsic vs extrinsic motivation. This component was not explored, despite the fact that the survey asked questions that could reveal whether internal or extrinsic motivation is more important. Gaining insight into the motivational drivers could improve the creation of targeted measures and campaigns.

A potential bias is also introduced by the study's use of the Randomized Response Technique to collect data on the consumption of alcohol. In RRT, participants report their weekly alcohol consumption depending on the outcome of a private coin flip. Although it is intended to reduce social desirability bias, its efficacy is dependent on participants accurately following the instructions, which may add biases to the results that are presented.

Additionally, the participants were chosen using convenience sample method, which can reduce the degree to which the sample represents the general population. The majority of respondents came from the researcher's social networks, which included friends, relatives, fellow students, and people invited to participate via friends. The survey was posted on the researcher's Instagram account, drawing followers from the Netherlands, Moldova (researcher's homeland), and other nations. More research is necessary to determine whether nationality influences attitudes toward SMIs and participation in Dry January.

Addressing these limitations and expanding the scope of the research through experimental designs, in-depth data analysis, and longitudinal studies can facilitate the development of more comprehensive and evidence-based health promotion methods.

8. REFERENES

- AlFarraj, O., Alalwan, A. A., Obeidat, Z. M., Baabdullah, A. M., Al-Dmour, R., & Al-Haddad, S. (2021). Examining the impact of influencers' credibility dimensions: attractiveness, trustworthiness and expertise on the purchase intention in the aesthetic dermatology industry. *Review of International Business and Strategy*, 31(3), 355–374. <https://doi.org/10.1108/ribs-07-2020-0089>
- Balaban, D. C., Mucundorfeanu, M., & Naderer, B. (2022). The role of trustworthiness in social media influencer advertising: Investigating users' appreciation of advertising transparency and its effects. *Communications*, 47(3), 395–421. <https://doi.org/10.1515/commun-2020-0053>
- Baig, F., & Shahzad, S. U. (2022). IMPACT OF SOCIAL MEDIA INFLUENCER'S CREDIBILITY DIMENSIONS ON CONSUMER BEHAVIOR [Master Thesis]. In Ulf Aagerup, Master Thesis in Business Administration. <https://hj.diva-portal.org/smash/get/diva2:1687888/FULLTEXT01.pdf>
- Benvenuti, M., Scarpi, D., & Zarantonello, L. (2023). Information Technologies and Consumers' Well-Being: Latest research and Future research Directions. *Journal of Interactive Marketing*, 58(2–3), 109–114. <https://doi.org/10.1177/10949968231161722>
- De Visser, R. O., Robinson, E., Smith, T., Cass, G., & Walmsley, M. (2017). The growth of 'Dry January': promoting participation and the benefits of participation. *European Journal of Public Health*, 27(5), 929–931. <https://doi.org/10.1093/eurpub/ckx124>
- Freberg, K., Graham, K. M., McGaughey, K., & Freberg, L. A. (2011). Who are the social media influencers? A study of public perceptions of personality. *Public Relations Review*, 37(1), 90–92. <https://doi.org/10.1016/j.pubrev.2010.11.001>
- Gómez, A. R. (2019). Digital Fame and Fortune in the age of Social Media: A Classification of social media influencers. Dialnet. <https://dialnet.unirioja.es/servlet/articulo?codigo=6785540>
- Hughes, K., MacKintosh, A. M., Hastings, G., Wheeler, C., Watson, J., & Inglis, J. (1997). Young people, alcohol, and designer drinks: quantitative and qualitative study. *BMJ. British Medical Journal*, 314(7078), 414. <https://doi.org/10.1136/bmj.314.7078.414>
- Hwang, H., & Kim, K. (2015). Social media as a tool for social movements: the effect of social media use and social capital on intention to participate in social movements. *International Journal of Consumer Studies*, 39(5), 478–488. <https://doi.org/10.1111/ijcs.12221>
- Kim, T. (2020). Understanding factors affecting influencer advertising effectiveness: The role of influencer type (micro vs. megainfluencer), product placement, product involvement, and consumer gender (Doctoral dissertation, The University of Georgia). <https://www.proquest.com/openview/06f85b32eb116f5d4e96250bbde9eadf/1?pq-origsite=gscholar&cbl=18750&diss=y>
- Kronthaler, F., & Zöllner, S. (2021). Data analysis with RStudio. An Easygoing Introduction, 7-131.
- Nabavi, R. T. (2012). Bandura's social learning theory & social cognitive learning theory. *Theory of Developmental Psychology*, 1(1), 1-24. https://www.researchgate.net/publication/267750204_Bandura's_Social_Learning_Theory_Social_Cognitive_Learning_Theory
- Nuno, A., & St. John, F. A. (2015). How to ask sensitive questions in conservation: A review of specialized questioning techniques. *Biological Conservation*, 189, 5-15. <https://doi.org/10.1016/j.biocon.2014.09.047>
- Ouvrein, G., Pabian, S., Giles, D., Hudders, L., & De Backer, C. (2021). The web of influencers. A marketing-audience classification of (potential) social media influencers. *MM. Journal Of Marketing Management/Journal Of Marketing Management*, 37(13–14), 1313–1342. <https://doi.org/10.1080/0267257x.2021.1912142>
- Politte-Corn, M., Nick, E. A., & Kujawa, A. (2023). Age-related differences in social media use, online social support, and depressive symptoms in adolescents and emerging adults. *Child and Adolescent Mental Health*, 28(4), 497–503. <https://doi.org/10.1111/camh.12640>
- Powell, J., & Pring, T. (2024). The impact of social media influencers on health outcomes: Systematic review. *Social Science & Medicine*, 340, 116472. <https://doi.org/10.1016/j.socscimed.2023.116472>
- Priante, A. (2019). Tweet your #mo and save a bro: Micro-mobilization dynamics and outcomes of online social movement campaigns. <https://doi.org/10.3990/1.9789036547222>
- Ramlan, A. F., Ridzuan, A. R., Mohideen, R. S., & Yasnoriza, I. (2022). Impact of Social Media Influencers to Promote Healthy Lifestyle behavior: A Review from the Self-Determination Approach. *Journal of Business and Social Review in Emerging Economies*, 8(3). <https://doi.org/10.26710/jbsee.v8i3.2419>
- Settersten, R. A., & Mayer, K. U. (1997). The measurement of age, age structuring, and the life course. *Annual Review of Sociology*, 23(1), 233–261. <https://doi.org/10.1146/annurev.soc.23.1.233>
- Smit, C. R., Bevelander, K. E., De Leeuw, R. N. H., & Buijzen, M. (2022). Motivating social influencers to engage in health behavior interventions. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.885688>

- Tremblay, M. A., Blanchard, C. M., Taylor, S., Pelletier, L. G., & Villeneuve, M. (2009). Work Extrinsic and Intrinsic Motivation Scale: Its value for organizational psychology research. *Canadian Journal of Behavioural Science*, 41(4), 213–226. <https://doi.org/10.1037/a0015167>
- Vaterlaus, J. M., Patten, E. V., Roche, C., & Young, J. A. (2015). #Gettinghealthy: The perceived influence of social media on young adult health behaviors. *Computers in Human Behavior*, 45, 151–157. <https://doi.org/10.1016/j.chb.2014.12.013>
- Westgate, E. C., & Holliday, J. A. (2016). Identity, influence, and intervention: The roles of social media in alcohol use. *Current Opinion in Psychology*, 9, 27–32. <https://doi.org/10.1016/j.copsyc.2015.10.014>
- Young T. J. (2016). Questionnaires and Surveys. In Zhu Hua, Ed. *Research Methods in Intercultural Communication: A Practical Guide*. Oxford: Wiley, pp. 165-180. https://www.researchgate.net/publication/316228107_Questionnaires_and_Surveys

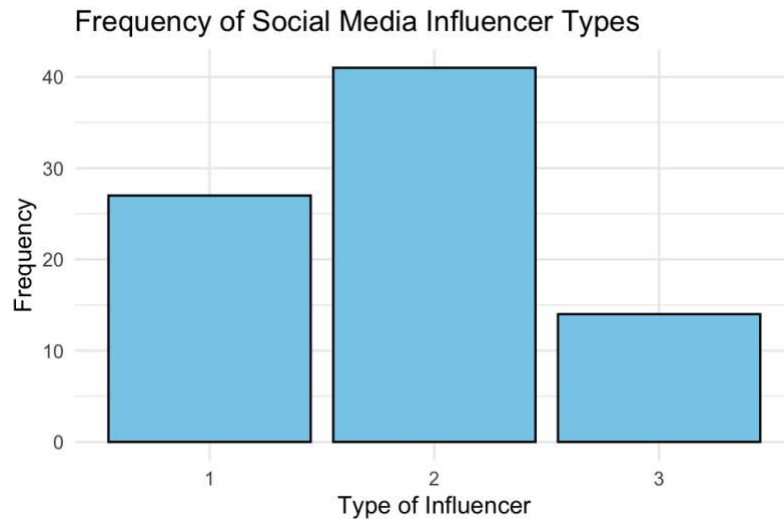
9. APPENDIX

9.1 AI disclaimer

During the preparation of this work Valeria Belozub used ChatGPT in order to help with formulating research question, re-phrase and make the text sound more “academic”, summarize some papers and help with writing and interpreting R-code; QuillBot for re-phrasing and searching for synonyms; and Grammarly in order to check the grammar. After using this tools, Valeria Belozub reviewed and edited the content as needed and takes full responsibility for the content of the work.

9.2 Descriptive statistics

Figure 1 – Frequency of SMI Types



9.3 Correlation Analysis

Table 5 – ANCOVA Results for Intention to Participate with Type and Age as Predictors

	Estimate	Std. Error	t - value	Pr(> t)
Intercept	2.673	0.335	7.973	1.46e-11 ***
Type 2	0.22070	0.29758	0.742	0.461
Type 3	-0.54110	0.40098	-1.349	0.181
Age 2	0.28336	0.34245	0.827	0.411
Age 3	0.74647	0.60367	1.237	0.220
Age 4	0.08909	0.53366	0.167	0.868

Table 5.1 –Additional ANCOVA statistics

Statistic	Value
Residual standard error	1.174
Multiple R-squared	0.068
Adjusted R-squared	0.005
F-statistic (p-value)	1.087 (0.375)

9.4 Survey



Welcome!

You are invited to participate in a research study conducted by Valeria Belozub from the Faculty of Behavioural, Management and Social Sciences at the University of Twente.

This survey aims to explore social media and health behaviors, including alcohol consumption. Your responses can help understand factors influencing individuals' intentions to engage in health-related behaviors and contribute to promoting healthier lifestyles.

Your participation is voluntary, and all responses will be kept confidential, you may choose to quit at any time or decide not to participate at all. There are no right or wrong answers. There are no anticipated risks to participating. However, as with all online activities, there is a slight risk of a data breach. Rest assured, the measures to safeguard your information are implemented. Please note that any personal information is NOT collected, and this is an anonymous survey.

Participating in this survey may require approximately 15 minutes of your time. Your responses will be kept confidential and used for research purposes only.

If you have any questions or concerns, please feel free to contact Valeria at v.belozub@student.utwente.nl

How old are you?

☐ 18-20 years old

☐ 21-24 years old

☐ 25-27 years old

☐ 28-30 years old

Thank you for your cooperation.

By continuing with the survey, you confirm that you are at least 18 years old and indicate your consent to participate in the research.

☐ Yes, I agree to participate

☐ No, I do not agree

This section focuses on social media engagement. Indicate the platforms used frequently and the nature of interactions with influencers.

Which social media platforms do you use frequently? (Select all that apply)

☐ Instagram

☐ Facebook

☐ Twitter (X)

☐ TikTok

☐ YouTube

☐ Other (please specify):

What types of interactions do you usually have with social media influencers? (Select all that apply)

☐ Viewing their content

☐ Commenting on their posts

☐ Sending them direct messages (DMs)

☐ Forwarding their content to others

☐ Reposting their content

Please rank the following social media platforms in terms of how often you interact with social media influencers, from the one you use most frequently to the one you use least frequently. Drag and drop to arrange the platforms in order of your usage.

Instagram

Facebook

Twitter

TikTok

YouTube

Other (please specify)

Which type of social media influencers do you most frequently follow? (Select one)

Micro-influencers

- ☐ *Niche-focused with smaller but highly engaged audiences (5,000 - 100,000 followers).*

Macro-influencers

- ☐ *Have large followings (100,000+ followers) and engage in cross-platform promotion.*

Mega-influencers

- ☐ *Social media celebrities with millions of followers, similar to traditional celebrities.*

Which type of social media influencers do you most frequently engage with ? (Select one)

☐ Micro-influencers

☐ Macro-influencers

☐ Mega-influencers

A few questions about alcohol consumption habits will follow.
Please follow the instructions provided for accurate responses.

Instructions:

Privately flip a coin.

If the coin shows heads, answer the question truthfully.

If the coin shows tails, always select "Occasionally (2-3 times a week)."

How often do you consume alcohol in a typical week?

☐ Never

☐ Rarely (once a week or less)

☐ Occasionally (2-3 times a week)

☐ Frequently (4-6 times a week)

☐ Daily

At this section we will explore your familiarity and participation in Dry January, a health campaign promoting abstinence from alcohol in January.

Are you familiar with the health movement called "Dry January"?

☐ No

☐ Yes

Dry January is a public health campaign that encourages people to abstain from alcohol for the entire month of January to promote healthier lifestyles and raise awareness about the effects of alcohol.

Have you ever participated in Dry January?

☐ No

☐ Yes

Please indicate your level of agreement with the following statement:

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
I am likely to participate in Dry January in the future.	☐	☐	☐	☐	☐

Please rate your level of trust in social media influencers promoting health-related habits using the following scale:

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
1. I trust social media influencers who promote health-related habits to provide accurate and reliable information.	☐	☐	☐	☐	☐
2. Influencers' posts about health-related habits make me feel more confident in adopting healthier behaviors.	☐	☐	☐	☐	☐
3. I believe that social media influencers who promote health-related habits care about their followers' well-being.	☐	☐	☐	☐	☐
4. Seeing influencers discuss their experiences with health-related habits increases my trust in their recommendations.	☐	☐	☐	☐	☐
5. I am more likely to consider adopting health-related habits if they are endorsed by social media influencers I trust.	☐	☐	☐	☐	☐

Please indicate your level of agreement with the following statement:

The influencers I follow are trustworthy when promoting health-related behaviors.

To conclude, let's explore your potential motivations for participating in Dry January.

Please rate the extent to which each statement below reflects your potential reasons for participating in Dry January, using the scale provided:

[illegible]

8. Alignment with
personal values and
goals.

☐☐☐☐☐☐

9. Influenced by social
media influencers.

☐☐☐☐☐☐