## Impact case study (REF3)



Unit of Assessment: 4 – Psychology, Psychiatry and Neuroscience

Title of case study: Reducing alcohol-related harm through "Dry January"

Period when the underpinning research was undertaken: Jan 2014 – Aug 2019

Details of staff conducting the underpinning research from the submitting unit:Name:Role:Period employed by submitting HEI:Richard de VisserReader in PsychologySept 2004 – present

Period when the claimed impact occurred: Aug 2014 – Jul 2020

Is this case study continued from a case study submitted in 2014? N

## 1. Summary of the impact

Concern about the health and social impacts of alcohol use has prompted many efforts to help people to drink less. "Dry January" is a national, one-month alcohol abstinence challenge. Since 2014, Richard de Visser has conducted research that has shown that Dry January has significant and enduring benefits – better psychological and physical well-being; feeling more in control of drinking; and drinking less – and has highlighted how these benefits arise by identifying the underlying mechanisms. The research has had three key impacts:

- 1. contributing to the growth of Dry January in the UK
- 2. informing the development and promotion of its support for participants
- 3. shaping the decision to introduce Dry January in France.

### 2. Underpinning research

Dry January is a one-month alcohol abstinence challenge. It began in the UK in 2013 as part of leading alcohol charity Alcohol Change UK's mission to change people's relationships with alcohol (Alcohol Change UK was formed from the merger of Alcohol Concern and Alcohol Research UK in 2017). Richard de Visser's research examined the impact of the campaign on well-being and alcohol intake and explored the underlying mechanisms. Although other researchers have conducted qualitative studies of the experience of undertaking Dry January, no other published studies have used quantitative methods to assess these outcomes or mechanisms. Although the initial aims of Dry January were simply to challenge drinkers to have a month without alcohol, de Visser's research has shown that Dry January provides broad and enduring benefits: people who complete the challenge feel more in control of their drinking, drink less, and have better physical and psychological well-being. The research used surveys conducted annually since 2014:

- baseline surveys in December with samples of up to 7642 people
- follow-up surveys conducted every year in the first week after Dry January
- six-month follow-up surveys conducted to measure lasting impact.

These previous surveys (de Visser et al., 2016) primarily involved people registering for Dry January. But in 2019, de Visser conducted a parallel general population study to compare Dry January registrants to people trying Dry January without support, and people not trying to change their drinking [R1, R2, R3]. Validated measures of alcohol intake and health outcomes were used. Analyses accounted for non-random loss to follow-up. The results have four key foci:

### (1) Health and well-being

de Visser's research showed that undertaking Dry January as a registered participant leads to improvements in many aspects of health and well-being, with the largest gains found among those who stay dry for the whole month [R1, R2, R3]. For example, mean scores on the 5-point Warwick-Edinburgh Mental Well-Being Scale increased from 3.5 to 3.8 [R2]. Furthermore, the

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benefits were not seen among people trying Dry January without support or people not trying to change their drinking – i.e. results cannot be attributed to seasonal variation or self-directed attempts to change behaviour – and the benefits are significantly less likely among people who do not complete the challenge [R2]. Across the various studies: 80% feel more in control of their drinking; 63-88% save money; 52-67% have more energy; 49-57% have better concentration; 56-71% report better sleep; 50-70% have better general health; 38-57% lose weight; 52% report better skin.

## (2) Alcohol intake and control of drinking

The research showed that participation in Dry January leads to reductions in alcohol intake at six-month follow-up, with larger sustained changes found among people who do not drink at all during January [R1, R3, R4]. Again, these benefits are not apparent among people trying Dry January without support or among people not trying to change their drinking, so they cannot be attributed to seasonal variation or self-directed attempts at behaviour change [R3, R4]. The observed changes are sizeable: for example, the 2014 study found that six months after completing Dry January, people were on average:

- drinking one day less per week
- drinking 20% less alcohol on the days when they did drink
- getting drunk half as often as they did previously. [R1]

Dry January participants also record significantly lower scores on the World Health Organization Alcohol Use Disorder Test (AUDIT) at six-month follow-up - e.g. a 25% reduction in AUDIT scores among people who completed Dry January in 2019 [R1, R3, R4].

Furthermore, the research established that "rebound effects" – i.e. drinking more after a period of abstinence – are uncommon (around 10% of participants), and are much less likely than sustained reductions in consumption (around 40%) [R1]. The research also showed that Drink-Refusal Self-Efficacy (DRSE) – people's feelings of control over their drinking – increases among Dry January participants, and that such increases are sustained at six-month follow-up, and are only found among people who complete Dry January as a registered participant [R1, R2, R3]. In summary, the research has shown that Dry January is a low-cost and low-risk way to increase people's capacity to reduce their alcohol intake.

#### (3) Importance of registering "officially" and the benefits of using support

The research showed that "official" participation in Dry January through registration via the website or app is linked to a significantly greater likelihood of successful completion of Dry January: 70% of people who register officially remain abstinent, compared to only 30% who do not register [R3]. Furthermore, among people who register for Dry January, those who make more use of the support provided (e.g. daily supportive emails) are significantly more likely to abstain during January, and therefore more likely to experience the benefits to health and well-being [R2]. For example, only 60% of people who read none of the supportive emails completed Dry January, compared to a significantly higher 68% success rate among people who read every email [R2]. These findings indicate that, each year, the supportive emails result in an additional 5000+ Dry January registrants completing the abstinence challenge. The research highlighted those elements of the support that were most effective, and identified participants' ideas for how such support could be improved [R2].

# (4) Understanding the mechanisms involved

The research identified the importance of key components of theories of health behaviour and processes of change consistent with de Visser's work on underlying mechanisms in various alcohol interventions [R5]. First, structural equation modelling highlighted how participation enhances DRSE, and that increases in DRSE sustained reductions in alcohol intake [R1]. Second, the benefits of participation noted in R1 and R2 highlighted the importance of using gain-framed messages (e.g. '80% feel more in control of their drinking') to promote Dry January, in line with de Visser's other alcohol intervention studies [R6]. This supports the theory-informed expectation that to encourage lasting behaviour change, it is more effective to use gain-framed messages than loss-framed messages.



#### 3. References to the research

- R1 de Visser, R.O., Robinson, E. & Bond, R. (2016). Voluntary temporary abstinence from alcohol during "Dry January" and subsequent alcohol use. *Health Psychology*, *35*, 281-289. https://doi.org/10.1037/hea0000297
- R2 de Visser, R.O. & Nicholls, J. (2020). Temporary abstinence during Dry January: predictors of success; impact on well-being and self-efficacy. *Psychology & Health*, *35*, 1293-1305. https://doi.org/10.1080/08870446.2020.1743840
- R3 de Visser, R.O. & Piper, R. (2020). Short- and longer-term benefits of temporary alcohol abstinence during "Dry January" are not also observed in the general population: prospective cohort study. *Alcohol & Alcoholism*, *55*, 433-438. https://doi.org/10.1093/alcalc/agaa025
- R4 de Visser, R.O. Robinson, E., Smith, T., Walmsley, M. & Cass, G. (2017). The growth of "Dry January": promoting participation and the benefits of participation. *European Journal of Public Health*, 27, 929-931. https://doi.org/10.1093/eurpub/ckx124
- R5 de Visser, R.O., et al. (2015) Using qualitative methods within a mixed-methods approach to developing and evaluating interventions to address harmful alcohol use among young people. *Health Psychology*, 34, 349-360. <a href="https://doi.org/10.1037/hea0000163">https://doi.org/10.1037/hea0000163</a>
- R6 Lockwood, N.C., de Visser, R. O. & Larsen, J.A. (2020) "Have a little less, feel a lot better": Mixed-method evaluation of an alcohol intervention. *Addictive Behaviors Reports*, *12*, 100306. https://doi.org/10.1016/j.abrep.2020.100306
- R2, R3 funded by Alcohol Change UK; R5 funded by MRC ('Alcohol refusal skills videos refinement and feasibility', PI: de Visser, £142,773, 01/2014-06/2014, MC\_PC\_13079); R6 funded by Drinkaware Trust. Total citations for R1-R6 = 60; average field-weighted citation index for R1-R6 = 1.7 (Scopus).

# 4. Details of the impact

Alcohol use is an important contributor to morbidity and mortality worldwide. It incurs substantial costs for treatment and healthcare, and it is related to social costs associated with crime and antisocial behaviour (Alcohol Change UK, 2020). Alcohol use increases the risk of: around 60 medical conditions, including several cancers; accidental injury or death; and being the perpetrator or victim of violence. It is therefore of concern that approximately 40% of adults in England exceed weekly alcohol intake guidelines. Interventions can be costly to health services, which helps to explain why fewer than 20% of dependent drinkers are undergoing treatment (Alcohol Change UK, 2020). There is a clear need to identify and refine cost-effective interventions that reduce alcohol intake and alcohol-related harm.

The UK's leading alcohol charity Alcohol Change UK first ran Dry January in 2013. The initial aims were simply to challenge drinkers to have a month without alcohol, and to reconsider their relationship with alcohol [C1]. Richard de Visser first contacted the organisers in 2013 because he was interested in exploring the impact of the campaign on well-being and alcohol intake, and the underlying mechanisms of change. de Visser's research helped to consolidate Dry January in the UK – by showing *that* it works and explaining *how* it works – and led to the establishment of Dry January in France. Three key impacts of Richard de Visser's research into Dry January are outlined below:

# 1. Contributing to the growth of Dry January in the UK

Alcohol Change UK has enhanced its promotion of the campaign and subsequently increased participation in Dry January, through using the findings of de Visser's research. His findings are cited prominently and repeatedly on the Dry January website and in Dry January Facebook posts [C1]. For example, statistics from the studies feature on the Dry January homepage, and on 13 other pages of the Dry January website [C1]. In addition, the research was referred to in 49 posts on the Dry January Facebook page over the last two years, and these posts drew 3700 responses from participants, with many of the comments affirming the message content, or noting how the message provided useful motivation [C1]. The testimonial letter from the Chief Executive of Alcohol Change UK notes that de Visser's research has "influenced our efforts to ensure that as many people as possible sign up to participate officially" [C2].



Evidence of the impact of Dry January from de Visser's research also prompted Public Health England to partner with Alcohol Change UK in 2015, and was used in a PHE marketing campaign to promote the benefits of participation [R4, C4]. The letter confirms that de Visser's research has helped Alcohol Change UK to increase participation from 4,000 (in 2013) to 100,000 registered participants in January 2020, with an estimated 4 million non-registered people taking part "unofficially" [C2]. The large number of people taking part and the wide range of benefits combined illustrate the social benefit of this impact.

## 2. Informing the development and promotion of support for participants

de Visser's research has also informed the development and revision of the messaging and support features designed to promote, facilitate and sustain participation in Dry January. As the research found, people who register for Dry January via the website or app are more than twice as likely to stay dry throughout January than people who attempt to have a dry month "unofficially", and registrants who make more use of the support messages are significantly more likely to be successful at Dry January than people who do not make use of such support. de Visser's research also highlighted those elements of the support that were most effective, and identified participants' ideas for how such support could be improved. These findings have influenced the ongoing revision of the nature, the content, and the amount of email and app support provided to the tens of thousands of Dry January participants every year [R2, C3, C4], as is confirmed by the CEO of Alcohol Change UK:

"The findings of Dr de Visser have helped us to promote the benefits of temporary alcohol abstinence. For example, the materials we use to promote participation in Dry January highlight the potential benefits in relation to better sleep, more energy, financial benefits, and weight loss... the support messages we send to participants during January – via email, the mobile phone app, and via social media – also highlight these benefits". [C2]

Furthermore, he refers to the value of evidence of the benefits of using the results of the research in supportive emails sent to participants, and on the Dry January website and Facebook pages "has helped us to identify those features of the support that are most helpful, and have helped us to identify areas for development [...] we are now better able to support people who take on the challenge" [C2].

Alcohol Change UK commissioned and funded de Visser's studies of Dry January in 2018 and 2019. This allowed Alcohol Change UK to monitor a broader range of aspects of the campaign, and to gather information used to enhance the provision of support for participants. The value of the research evidence in promotional materials has also been noted by participants in Dry January. For example:

Do you think any of these figures influenced your decision to participate in any way? Yeah, I definitely think they positively influenced my choice to participate because I'd done some reading about Dry January and I'd seen all the statistics, and that definitely encouraged me to give it a proper go. [C3]

The two points just described show how de Visser's elucidation of the psychology of Dry January has supported Alcohol Change UK's mission to make it easier for hundreds of thousands of people to reduce their alcohol intake. In particular, the research has identified drink-refusal self-efficacy as a key mechanism of change that Dry January have worked to enhance [R1], and much use has been made of data highlighting the benefits of participation in "gain-framed" messages designed to encourage and support participation [R1, R2].

#### 3. Shaping the decision to instigate Dry January in France

Following an invited presentation at the Santé Publique France (SPF) conference in 2019, de Visser had numerous meetings and email exchanges with SPF and relevant charities in France as part of their investigations into establishing Dry January in France. The information de Visser shared with SPF and key charities included published papers about Dry January [R1, R2], papers that were under review [R3, R4] and evaluation reports commissioned by Alcohol Change UK [C3, C6, C7, C8].

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SPF was convinced by evidence of the impact and value of Dry January in the UK. However, after a high-profile campaign by French wine producers, SPF decided not to initiate Dry January in France. Instead three charities – La Société Française d'Alcoologie, l'Association Nationale de Prevention en Alcoologie et Addictologie, and Fédération Addiction – combined to launch Dry January France (#LeDéfiDeJanvier) in January 2020. In its first year, nearly 10,000 people registered, but the campaign is expected to grow rapidly – as it did in the UK – especially given widespread media coverage similar to that seen in the early years of Dry January in the UK [C6]. Key representatives of the charities that launched Dry January France affirm the importance of de Visser's research in their decision [C6, C7, C8]. For example, the President of the French Society of Alcohology noted:

"The positive results of the evaluation of the UK alcohol abstinence challenge 'Dry January' were critical to push the different French non-governmental associations to work together to launch the "Dry January à la française" despite the non-support of the French government." [C6]

The President of the National Association for Prevention in Alcohology & Addiction noted:

"We also made many references to de Visser's research on the website and Facebook pages of "Dry January France #LeDéfiDeJanvier". This included highlighting the various benefits of taking part, and also informing people that they are more likely to complete the challenge if they register for Dry January and use the support that is available." [C7]

As in the UK, much use has been made of de Visser's research findings in "gain-framed" messages designed to encourage participation and to maintain motivation. Following the successful launch of Dry January in France in 2020, the organisers have committed to continuing to run it for at least three more years [C6, C7, C8]. As in the UK, in France, Richard de Visser's research has helped – and will continue to help – thousands of people to reduce their alcohol consumption.

# 5. Sources to corroborate the impact

- C1 Compilation of evidence from the <u>Dry January (UK) website</u> and Facebook pages (2018-2020) demonstrating use of the research in materials designed to encourage participation, and to motivate and support people who register officially.
- C2 Testimonial from Chief Executive Officer of Alcohol Change UK (2020) highlighting the value of Richard de Visser's research for demonstrating the impact of Dry January and helping to improve the form and content of support provided to participants.
- C3 de Visser, R.O. & Lockwood, N. (2018). *Evaluation of Dry January 2018*. Alcohol Change UK.
- C4 Alcohol Change UK (2020) <u>The Dry January Story</u> (accessed 27 Sep 2020); GOV.UK (Dec 2014) <u>Public Heath England encourages people to sign up to Dry January</u> (accessed 10 Mar 2021).
- C5 Compilation of evidence from <u>Dry January France website</u> and Facebook pages (2019-20) demonstrating use of the research in materials designed to encourage people to participate, and to motivate and support people who register to take part. [French]
- C6 Testimonial from Président of la Société Française d'Alcoologie (2020) emphasising the influence of the research on the decision to launch Dry January in France, and the use of the findings to promote the campaign and support participants.
- C7 Testimonial from Président of l'Association Nationale de Prevention en Alcoologie et Addictologie (2020) acknowledging how the research influenced the decision to launch Dry January in France, and how it was used to motivate and support participation.
- C8 Testimonial from Déléguée Générale Fédération Addiction (2020) emphasizing the influence of Richard de Visser's research on the decision to launch Dry January in France, and the use of his findings to promote the campaign and support participants.