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# **RESEARCH ARTICLE**

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# What's up with everyone?': The effectiveness of a digital media mental health literacy campaign for young people

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#### ABSTRACT

**Background:** In 2021, the Arts and Humanities Research Council commissioned a mass-media mental health campaign called "What's up With Everyone?" Here, innovative co-created messages were professionally storied and animated by an internationally recognized production company and focused on improving mental health literacy in five core areas: competition, social media, perfectionism, loneliness and isolation, and independence.

Aims: This study examines the impact of the "What's up With Everyone?" campaign on young people's mental health awareness.

**Methods:** Seventy-one (19 males, 51 females, M age = 19.20 years, SD = 1.66, range = 17–22) young people completed a one-sample, pre-post experiment to measure changes in knowledge, attitudes, confidence, and stigma of mental health struggles, as well as help-seeking for mental ill-health before and following exposure to animations.

**Results:** Paired and one-sample *t*-tests revealed that knowledge, attitudes, confidence, and willingness to seek support improved at post-test. There were also significant reductions in the stigma towards depression following the animations.

**Conclusions:** Continued long-term investment in campaigns such as "What's up With Everyone?" seems warranted given the impact on mental health awareness, help-seeking, and stigma.

**ARTICLE HISTORY** 

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#### **KEYWORDS**

Help seeking; digital media; mental health; youth

The mental health of young people is a pressing societal concern. In the United States, cohort studies of young people between 1976 and 2017 show marked increases in loneliness after 2011 (Twenge et al., 2019), anxiety (Duffy et al., 2019), depressed mood (Keves et al., 2019), self-harm (Mercado et al., 2017), and suicidal ideation (J. M. Twenge et al., 2019). These trends among young people are broadly similar in the United Kingdom, where anxiety, depression, and suicide are rising at a substantial rate (McManus & Gunnell, 2020; National Health Services, 2018) and have increased further into the coronavirus pandemic (Jia et al., 2020; Kwong et al., 2021) These are concerning trends and require support strategies that help educate young people on mental health issues and thus promote mental health literacy, defined as "understanding how to obtain and maintain positive mental health; understanding mental disorders and their treatments; decreasing stigma related to mental disorders; and, enhancing help-seeking efficacy" (Kutcher et al., 2016, p. 155). One such support strategy that has a widespread impact is digital media content, such as animations, videos, and interactive mobile applications. In this study, we test the effectiveness of one such digital media campaign: "What's Up With Everyone?"

# Digital video interventions and mental health

Worldwide, there have been many digital mass media health campaigns (Wakefield et al., 2010). For example, a BBC educational campaign aimed at adults, "Fighting Fat, Fighting Fit," found significant changes in fat and fruit and vegetable intake, physical activity, and weight after exposure to educational films (Miles et al., 2001). Another mass media campaign called change4life, which included a suite of health education animations encouraging physical activity and good diet, had similar effects on awareness (but awareness did not translate into health behavior; Croker et al., 2012).

Although existing digital mass media campaigns have focussed primarily on physical health (e.g. exercise and diet), mental health has seen reasonable uptake in recent years (Torok et al., 2017). A recent scoping review of studies suggested that digital media is an effective tool for mental health promotion, but there are several important considerations (Ito-Jaeger et al., 2022). First, there must be active involvement from end-users in the creation process (i.e. cocreation), that is, end-users need a say in what is presented and the resources that are offered. Second, the production

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quality must be high, and the information presented must be as relevant, informed, and practical as possible.

With these considerations in mind, a new digital media campaign called, "What's Up With Everyone?" (WUWE) was created. This campaign consists of several digital animations on various salient mental health themes, which were co-created by young people, and produced by an animation company with international repute. Details of how we cocreated the animated films with young people and information about the co-creators are described in Ito-Jaeger et al. (2022) and Ito-Jaeger et al. (in press). The short, socialmedia-friendly animations consist of anthropomorphic characters describing several mental health challenges faced by young people, with a focus on education and awareness. Education and awareness are important outcomes of such interventions since young people are more empowered to act when they can better identify the issues in their lives that are potentially causing problems. Indeed, there is good evidence that mental health awareness can be developed with such intervention and this has positive knock-on impacts for the community (see Jorm, 2012).

The themes for the WUWE campaign were derived from a systematic program of youth focus groups. In groups of between 6 and 12, young people discussed and ranked the major causes of their mental health struggles, and these were distilled into five themes: competition, social media, perfectionism, loneliness and isolation, independence. Although derived independently, these themes neatly map onto research showing their relevance. For example, there is evidence that perfectionism (Curran & Hill, 2019), loneliness and isolation (Twenge et al., 2021), social media use (Twenge et al., 2022), competition (Ramey & Ramey, 2010), and independence (Pottick et al., 2007) are on the rise and/or are significant risk factors for mental health problems.

Digital media like this is an extremely useful tool for mental health dissemination, especially for young people. It can be distributed widely, and content can be created in innovative ways that are particularly acceptable for a target audience who consumes most media this way. Indeed, young people's lives are increasingly lived online. Media campaigns like WUWE, which are created for an online audience, have a large potential for widespread impact. Research indicates that digital media, when presented in an understandable and accessible way, is an extremely useful modality for young people as compared to other comparable educational methods, such as a workshop, emails, and handbooks (Tuong et al., 2014).

# The present study

Although challenging, it is crucial to evaluate digital media initiatives, both to inform future program development and to establish value for money with the use of public funds. With this in mind, in this study, we aim to evaluate the effectiveness of WUWE using a one-sample, pre-post experiment. The specific aim is to understand what effect the campaign has on young people's mental health literacy (i.e. knowledge, stigma, and help-seeking efficacy). Not only are these important outcomes on their own terms, but they have also been linked to improved mental health (e.g. Christensen et al., 2004; Kitchener & Jorm, 2006).

# Method

The WUWE campaign was the largest ever mental health campaign commissioned by the Arts and Humanities Research Council and reached over 17 m people via social media (e.g. Instagram, Twitter, Facebook) within the first 3 months of launch in February 2021. It was co-created with and targeted at young people aged 17–21, since it is well-documented that this approach is both acceptable and accessible to this audience (Liverpool et al., 2020). The main message of the campaign was that mental health struggles are normal and are best tackled with small but important changes to the way young people face challenges in their daily lives. Full details of the project and access to the campaign animations can be found here: https://whatsupwitheveryone.com/.

# The logic of the campaign

The campaign aimed to initiate positive changes in mental health awareness, knowledge, stigma, and help-seeking efficacy. Consistent with this aim, it pulled from social learning theories such as the theory of planned behavior (Ajzen, 2011), and the health belief model (Becker, 1974). The campaign also drew on themes outlined by Dahl et al. in their health co-creation framework (Dahl et al., 2018). Hence animations targeted social modelling and were developed jointly through researcher-young person co-creation that involves both parties participating in decision making as part of the knowledge exchange. All animations provided short scenarios and easy-to-understand guidance for the self-management of mental health struggles in five core areas: competition, social media, perfectionism, loneliness and isolation, and independence. Each animation lasted no more than 1-minute (M length = 47.40 seconds, range = 41-52 seconds).

# Participants and procedure

Seventy-one (19 males, 51 females, M age = 19.20 years, SD = 1.66, range = 17–22) young people were recruited from high-school and university campuses in the United Kingdom by distributing flyers and posting the information on an online recruitment websites. Demographic information is presented in Table 1. Recruitment criteria required participants to be (1) English speaker living in the UK, (2) between the ages of 17 and 21 at the time of recruitment, and (3) with access to the internet and a computer, smartphone, or tablet. Before data collection, the research ethics committee of a British University provided ethical approval. Young people who were interested in participating in the study were asked to submit the Expression of Interest form. Then, participants were contacted to enquire about their

Table 1. Demographics of participants.

		N	%
Age	17	19	26.8%
	18	9	12.7%
	19	6	8.5%
	20	14	19.7%
	21	22	31%
	22	1	1.4%
Gender	Female	51	71.8%
	Male	19	26.8%
	Other	0	0%
	Prefer not to say	1	1.4%
Ethnic background	White: English/Welsh/Scottish/Northern	35	49.3%
	Irish/British Any other White background	r	2 80%
	Mixed/Multiple ethnic groups:	Z	2.070
	White and Black Caribbean	1	1.4%
	White and Black African	3	4.2%
	White and Asian	1	1.4%
	Asian		
	Indian	6	8.5%
	Pakistani	3	4.2%
	Bangladeshi	1	1.4%
	Chinese	1	1.4%
	Any other Asian background Black/African/Caribbean/Black British:	3	4.2%
	African	2	2.8%
	Caribbean	1	1.4%
	Any other Black/African/		
	Caribbean background	1	1.4%
	Other ethnic group:		
	Arab	2	2.8%
	Prefer not to say	3	4.2%
	Other	6	8.5%
Religion	None	35	49.3%
	Christian	15	21.1%
	Hindu	2	2.8%
	Jewish	2	2.8%
	Muslim	7	9.9%
	Sikh	2	2.8%
	Any other	2	2.8%
	Prefer not to say	6	8.5%
Highest level of	Level 1 <sup>b</sup>	3	4.2%
qualification <sup>a</sup>	Level 2 <sup>c</sup>	14	19.7%
(participant)	Level 3 <sup>d</sup>	29	40.8%
	Level 4 or above <sup>e</sup>	9	12.7%
	Other qualifications <sup>†</sup>	12	16.9%
	Prefer not to say	4	5.6%
Highest level of	No qualifications	7	9.9%
qualification <sup>a</sup>	Level 1 <sup>b</sup>	3	4.2%
(parent/guardian/carer)	Level 2 <sup>c</sup>	2	2.8%
	Apprenticeship	1	1.4%
	Level 3 <sup>d</sup>	5	7%
		21	20 (0/
	Level 4 or above <sup>e</sup>	21	29.6%
	Level 4 or above <sup>e</sup> Other qualifications <sup>f</sup>	21 15	29.6% 21.1%

<sup>a</sup>Qualifications levels (UK census).

<sup>b</sup>1–4 O levels/CSEs/GCSEs (any grades), Entry Level, Foundation Diploma, NVQ Level 1, Foundation GNVQ, Basic Skills.

<sup>c</sup>5+ O levels (passes)/CSEs (grade 1)/GCSEs (grades A\*-C), School Certificate, 1 A level/2–3 AS levels/VCEs, Higher Diploma, NVQ Level 2, Intermediate GNVQ, City and Guilds Craft, BTEC First/General Diploma, RSA Diploma. <sup>d</sup>Apprenticeship.

<sup>e</sup>2+ A levels/VCEs, 4+ AS levels, Higher School Certificate, Progression/ Advanced Diploma, NVQ Level 3, Advanced GNVQ, City and Guilds Advanced Craft, ONC, OND, BTEC National, RSA Advanced Diploma.

<sup>f</sup>Other vocational/work-related qualifications, Foreign qualifications.

willingness to complete an online experiment. If they agreed to take part, consent was sought for their participation in the first instance. Thereafter, an online experimental protocol was administered to participants using Gorilla. The protocol included basic demographic questions, a pre-animation battery of questions, the five animations presented in randomized sequential order, and a post-animation battery of questions. The whole protocol took approximately half an hour to complete.

# Instruments

# Willingness

Willingness to seek psychological support was measured using the five-item openness to seeking treatment for emotional problems sub-scale of the Attitudes Toward Seeking Professional Psychological Help Scale-Short Form (Elhai et al., 2008). This instrument assesses the degree to which individuals perceive an openness to seeking mental healthcare for one's emotional problems (e.g. "I would obtain psychological help if upset for a long time"). The scale is rated on a 4-point Likert scale ranging from 1 (*Disagree*) to 4 (*Agree*). This instrument has psychometric support in previous research with college students (Elhai et al., 2008). The items used in this study exhibited excellent internal reliability (pretest  $\alpha = .81$ ; posttest  $\alpha = .83$ ).

#### Reluctance

Reluctance to seek help was measured using the ten-item Self-Stigma of Seeking Help Scale (Vogel et al., 2006) This instrument assesses the degree to which individuals' self-stigmatize when seeking psychological help (e.g. "I would feel okay about myself if I made the choice to seek professional help"). The scale is rated on a 5-point Likert scale ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). This instrument has psychometric support in previous research with college students (Vogel et al., 2006). The items used in this study exhibited excellent internal reliability (pretest  $\alpha = .81$ ; posttest  $\alpha = .82$ ).

# Stigma

Stigma toward depression was measured using the nine-item openness to personal stigma subscale of the Depression Stigma Scale (Griffiths et al., 2004). This instrument assesses the degree to which individuals report stigmatizing attitudes toward depression (e.g. "Depression is a sign of mental weakness"). The scale is rated on a 4-point Likert scale ranging from 1 (*Disagree*) to 4 (*Agree*). This instrument has psychometric support in previous research with an online sample of adults (Griffiths et al., 2004) and in a sample of adolescents (Calear et al., 2011). The items used in this study exhibited excellent internal reliability (pretest  $\alpha = .86$ ; posttest  $\alpha = .82$ ).

#### Knowledge, attitudes, willingness, and confidence

Improvements in the knowledge of mental health issues, attitudes toward mental health, willingness to seek professional help, and confidence to help others were assessed using four single items constructed for this study (e.g. my knowledge of mental health issues after watching these animations is"). The items are rated on a 7-point Likert scale ranging from 1 (Much Worse) to 4 (No Different) to 7 (Much Better).

# Analytic strategy

To test for differences in willingness, help-seeking reluctance, and stigma from pretest to postest, three paired-samples *t*-tests were performed, one for each outcome. For the single-item measures of knowledge, attitudes, willingness, and confidence, we conducted four one-sample *t*-tests, one for each item, to test if the results are statistically different from the midpoint. Since we conducted seven separate inferential tests, the p-value for statistical significance was adjusted using the Bonferroni method. This adjustment resulted in a critical *p*-value of .007 (i.e. 0.05/7). Hence, tests with *p* < .007 were considered statistically significant.

# Results

#### Paired-sample t-tests

Results of the paired-samples t-tests are reported in Table 2.

#### Willingness

Mean willingness to seek professional psychological support differs before watching the animations (M = 3.03, SD = 0.67) and after watching the animations (M = 3.21, SD = 0.62) at the .007 level of significance (t = 3.89, df = 70, n = 71, p = .0002, 95% CI 0.09 to 0.27,  $r^2 = .18$ ). On average willingness to seek professional psychological support was 0.18 higher after watching the animations.

#### Reluctance

Mean help seeking reluctance differed before watching the animations (M = 2.33, SD = 0.68) and after watching the animations (M = 2.18, SD = 0.67) at the .007 level of significance (t = -3.19, df = 70, n = 71, p = .002, 95% CI -.24 to -.06,  $r^2 = .13$ ). On average reluctance to seek help was 0.15 lower after watching the animations.

#### Stigma

Mean depression stigma differed before watching the animations (M = 1.49, SD = 0.53) and after watching the animations (M = 1.36, SD = 0.42) at the .007 level of significance (t = -3.21, df = 70, n = 71, p = .002, 95% CI -.21 to -.05,  $r^2 = .13$ ). On average depression stigma was 0.13 lower after watching the animations.

 Table 2. Descriptive statistics and paired-sample t-test results for willingness, reluctance, and stigma.

	Pretest		Posttest			05% CL for			
Outcome	М	SD	М	SD	n	mean difference	r	t	df
Willingness	3.03	0.67	3.21	0.62	71	0.09, 0.27	.42	3.89*	70
Reluctance	2.33	0.68	2.18	0.67	71	-0.24, -0.06	.36	-3.19*	70
Stigma	1.49	0.53	1.36	0.42	71	-0.21, -0.05	.36	-3.21*	70

# **One-sample** *t*-tests

Results of the one-sample *t*-tests are reported in Table 3.

#### Knowledge

A one-sample *t*-test was conducted to determine whether knowledge of mental health issues was different from the scale mid-point, defined as a score of 4.0 (i.e. no difference). The mean knowledge score (M = 4.77, SD = 0.87) was greater than the no difference score of 4.0, a statistically significant mean difference of 0.77, 95% CI 4.57 to 4.98, t(70)= 7.54, p < .007,  $r^2 = .45$ ).

# Attitudes

A one-sample *t*-test was conducted to determine whether attitudes toward mental health were different from the scale mid-point, defined as a score of 4.0 (i.e. no difference). The mean attitudes score (M = 5.01, SD = 1.04) was greater than the no difference score of 4.0, a statistically significant mean difference of 1.01, 95% CI 4.76 to 5.24, t(70) = 8.20, p < .007,  $r^2 = .49$ ).

#### Willingness

A one-sample *t*-test was conducted to determine whether the willingness to seek professional help was different from the scale mid-point, defined as a score of 4.0 (i.e. no difference). The mean willingness score (M = 4.77, SD = 1.03) was greater than the no difference score of 4.0, a statistically significant mean difference of 0.77, 95% CI 4.53 to 5.02, t(70)= 6.33, p < .007,  $r^2 = .36$ ).

#### Confidence

A one-sample *t*-test was conducted to determine whether confidence to help others was different from the scale midpoint, defined as a score of 4.0 (i.e. no difference). The mean confidence score (M = 5.28, SD = 1.00) was greater than the no difference score of 4.0, a statistically significant mean difference of 1.28, 95% CI 5.04 to 5.52, t(70) = 10.77, p < .007,  $r^2 = .62$ ).

#### Discussion

The WUWE campaign appears to be a useful tool for improving the mental health literacy of young people. After watching the campaign animations which had been co-created with and for young people, participants reported

Table 3. Descriptive statistics and one-sample *t*-test results for knowledge, attitudes, willingness, and confidence.

	Score			95% CL for			
Outcome	М	SD	n	Mean Score	r	t	df
Knowledge	4.77	0.87	71	4.57, 4.98	.67	7.54*	70
Attitudes	5.01	1.04	71	4.76, 5.24	.70	8.20*	70
Willingness	4.77	1.03	71	4.53, 5.02	.60	6.33*	70
Confidence	5.28	1.00	71	5.04, 5.52	.79	10.77*	70

\*p < .007.

increased willingness to seek support for mental health problems, knowledge of mental health issues, better attitudes toward depression and mental health, and more confidence in helping others. As well, they reported reduced stigma towards depression and a lower reluctance to seek support. These findings further support work to date on the effectiveness of digital media in health education (e.g. Ito-Jaeger et al., 2022;; Tuong et al., 2014), theory on the benefits of health co-creation (Dahl et al., 2018), and go beyond this evidence and theory to show their specific value in advancing mental health literacy among young people.

These findings are encouraging. Digital mass media campaigns have tremendous potential to change attitudes and beliefs at the individual level and, by extension, change behavior by affecting decision-making. For this to be successful, however, the media and messaging must be effective. Our results appear to indicate that, on this count, the messaging seems to be effective in changing the attitudes and beliefs that it targets. This is not just important for young people experiencing mental health challenges, but also for young people who are at risk of future struggles. Campaigns like WUWE have the potential to reach young people before the onset of mental health problems, which is especially important for this population who are at especial risk of developing serious mental illness (World Health Organization, 2017). As such, WUWE appears important to broader prevention efforts in the area of mental health.

WUWE seemingly increases knowledge and enhances awareness of mental health-related issues. However, whether this knowledge and awareness will lead to actual behavior change is unknown. Mass media campaigns are typically very good at changing attitudes and beliefs, but evidence that they promote behavior change is less convincing (e.g. Cavill, 1998; Flay & Burton, 1990; Van Wechem et al., 1997). Behavior change appears to be most successfully achieved when campaigns include several elements in addition to mass media, for example, combining media broadcasts with community activities and support (e.g. Farquhar et al., 1985; Van Wechem et al., 1997). It may be, therefore, that level of exposure, repeat exposure, and community engagement will be crucial for the success of WUWE Overall, the ongoing monitoring of WUWE will be required to ascertain to what extent the success in changing attitudes and beliefs translates into meaningful changes in mental health.

# Limitations

This study has several limitations. Notably, the recruitment resulted in a sample consisting of mostly female participants (51 females, 19 males), in a targeted age range of 17–21. Therefore, this and other necessarily limited parameters of recruitment such as being an English speaker living in the UK and access to technology, mean the results can only be indicative. Furthermore, the pre-post experimental design also meant there may be learning effects that impacted the changes observed in the data analyses. Future research might seek to employ a control group to remove such a confound. We also relied on self-report measures of attitudes and beliefs that are subject to social desirability and common-method bias, and we have no data on mental health and wellbeing, as well as their history of seeking support. Future research could employ observational tools or use diagnostic criteria to measure mental health symptoms and/or literacy.

Although the experimental protocol did not allow participants to spool the videos, it is nevertheless the case that lack of attention may also introduce error to the study. Future research should seek to replicate these findings in a controlled environment and conduct attention checks. Finally, there was no follow-up in this study. As such, it is unclear whether the changes endure beyond the immediate period following the viewing of the animations. More research will be needed to investigate whether these changes are lasting and acceptable and accessible to the target population.

# **Conclusions and recommendations**

Overall, WUWE appears to yield improvements in mental health knowledge, awareness, stigma, willingness to seek help, and confidence in helping others among young people aged 17–21 years. This is particularly important given the nature of these common challenges during an important and often stressful transition phase for young people from school and college into the university or the workplace. There is now a clear need for more granular and comparative research into the mechanisms or active ingredients in animated stories that drive these positive results.

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What's Up With Alex (WUWA)? Animated Storytelling for Mental Health Literacy Among Young People.

# **Ethical approval**

Ethical approval reference: CS-2019-R30 (University of Nottingham).

# **Disclosure statement**

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