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Evaluating the effectiveness of a short video series for social media ("Warna-Warni Waktu") to improve body image among young Indonesian women

Submission date
11/04/2022

Recruitment status
No longer recruiting

Registration date
27/04/2022

Overall study status
Completed

Last Edited
04/04/2023

Condition category
Mental and Behavioural Disorders

[ ] Prospectively registered
[X] Protocol
[ ] Statistical analysis plan
[X] Results
[ ] Individual participant data

Plain English summary of protocol
Background and study aims
Body dissatisfaction is a global issue, especially among girls and women. Programmes to help reduce body dissatisfaction exist primarily in higher-income countries, such as the United Kingdom, the United States, and Australia. However, body dissatisfaction is a problem for adolescent and young women in Indonesia, but no local and culturally appropriate programmes or tools exist to address it. The aim of this study is to evaluate the effectiveness of "Warna-Warni Waktu" (WWW), a fictional six-video series with activities that is designed to improve body satisfaction amongst Indonesian young women that will be shared on social media.

Who can participate?
Indonesian girls and young women between the ages of 15 and 19 years can participate. They need to have their own mobile phone and already access Facebook or Instagram every day. They cannot participate if they follow Girl Effect (Springster) on social media or have previously accessed the Springster website. Parental consent is required for those 15-17 years.

What does the study involve?
The study involves 2000 young Indonesian women. At the beginning of the study (Day 1), all participants complete online questionnaires that assess their body satisfaction, how important they think beauty standards are, mood, and satisfaction with their their skin shade. Then, on Day 2, they are randomly split into two groups: half of them are chosen to engage with WWW and half them are not. On Day 3, the group chosen to engage with WWW receives a link every day for six consecutive days (Days 3-8) that includes a WWW video (4-5 minutes long) and its activities (1-5 short activities). Before and after each video, participants are asked one question about their body satisfaction and one question about their mood. On Days 9 and Days 36, both groups complete the same online questionnaires. On Day 37, all participants receive a certificate of participation and a document explaining the purpose of the study, that also includes contact for mental health support. The group that did not engage with WWW, receive a link to access WWW's videos and activities.

What are the possible benefits and risks of participating?
During the development of the video series, Indonesian girls and young women between 15-19 years found the videos to be entertaining and helpful, so participants may have the same positive experience. Participants may also benefit from having the opportunity to share how they feel in a safe and confidential way. The researchers do not foresee or anticipate any significant risk to participants. If participants require any support during or after watching the videos, participating in the activities, or completing the surveys, they have the contact information of the research team in Indonesia, in addition to information for local mental health resources.

Where is the study run from?
The University of the West of England (UWE Bristol) is managing the study. Researchers at UWE Bristol guide and coordinate with a research agency in Jakarta, Indonesia who recruits participants and shares the links to the questionnaires and WWW. All information shared in the questionnaires comes directly to researchers at UWE Bristol.

When is the study starting and how long is it expected to run for?
October 2019 to December 2021

Who is funding the study?
Unilever (Dove Self-Esteem Project)

Who is the main contact?
Heidi Williamson
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Additional identifiers

EudraCT/CTIS number
Nil known

IRAS number

ClinicalTrials.gov number
NCT05023213

Secondary identifying numbers
PRR1-10.2196/33596

Study information

Scientific Title

Evaluating the efficacy of a social media-based intervention ("Warna-Warni Waktu") to reduce body dissatisfaction among young Indonesian women: a parallel randomized controlled trial

Acronym
WWW

Study objectives
1. Participants randomised to the intervention condition will experience improved body satisfaction, mood, and skin shade satisfaction, and reduced internalisation of appearance ideals at 1-day post-intervention, and 1-month follow-up, relative to the waitlist control condition.
2. Each video in the Warna-Warni Waktu series will elicit immediate state-based improvements in body satisfaction and mood.
3. Greater engagement and adherence to the Warna-Warni Waktu intervention will result in improved body satisfaction, mood, and skin shade satisfaction, and reduced internalisation of appearance ideals. This analysis will be exploratory in nature, depending on participants' engagement and adherence to the intervention during the trial.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 20/05/2021, Research Ethics Admin Team UWE Bristol (Northavon House, Frenchay Campus, Bristol, BS16 1QY, UK; +44 (0)117 32 82872; researchethics@uwe.ac.uk), ref: HAS. 21.04.138

Study design
Interventional two-arm single-masked parallel randomized controlled web-based trial

Primary study design
Interventional

Secondary study design
Randomised controlled trial

Study setting(s)
Internet/virtual

Study type(s)
Prevention

Participant information sheet
Not available in web format, please use contact details to request a participant information sheet

Health condition(s) or problem(s) studied
Body dissatisfaction in female adolescents and young Indonesian women

Interventions

Interventional two-arm single-masked parallel randomised controlled web-based trial with an intervention group and a waitlist control group; block randomisation is performed with a 1:1 allocation with blocks of 4, 6, and 8. (The datasets given to the statistician are masked to the condition.)

Recruitment
Participants are recruited using a local research agency's database of previous research participants. Previous participants over the age of 40 are contacted via telephone and screened regarding having a daughter within the eligible age range. If the respondent has more than one daughter in the age range, the one with her date of birth closest to the date of contact is chosen. For eligible daughters between 15-17 years old, the recruiter reads the parental information sheet to the parent. Parents provide verbal consent for the daughter's participation, as well as verification of the parents' identity and daughter's age through photo IDs. Parents answer questions relating to the family's socioeconomic status before the recruiter requests to speak to the daughter. Then, the daughter is screened for eligibility and informed verbal assent is obtained. A parental information sheet is sent to the parent via WhatsApp, and written informed parental consent is obtained.

A similar pattern of communication occurs with daughters 18-19 years old. Parents verify the age of the parents and the daughter and respond to questions regarding the family's socio-economic status. The adult daughter provides informed verbal and written consent, in the same manner required of parents of those aged 15-17 years.

Intervention:
The intervention, Warna-Warni Waktu (translation to English: Colourful Time Travel), was developed over a 20-month period, from October 2019 - May 2021. In addition to the close collaboration amongst body image academics, creative agencies, social media specialists, not-for-profit organisations, as well as industry funders, development involved three rounds of feedback from the intervention's target audience. The narrative story told in the six-video series is based on the concept of time travel so as to convey the additive impact of body image concerns to young people. A combination of both animated characters and real people are used.

Four risk factors for the development of body image concerns are relevant: 1) social media and influencers 2) appearance-based comparisons 3) appearance-based teasing, and 4) body talk. Each of these risk factors are targeted in videos two through five, with videos one and six being the introductory and concluding videos. Each video is four to five minutes in length. A number of change techniques (including those based upon psychoeducation and media literacy) are embedded within the videos. Each video is accompanied by one to five short interactive activities, designed to elicit cognitive dissonance.

Procedure:
All participants enter the study (i.e., complete the baseline assessment questionnaire) on the same day (Day 1). Participants receive a data package a day prior to this from the research agency to ensure participants have ample mobile phone data to allow participation in the study. A link to the baseline assessment, hosted on Qualtrics (Qualtrics, Provo, UT), is sent to participants via WhatsApp, along with a unique participant identification number (PIN). Participants are requested to enter the PIN on the first page of the baseline survey, in order to match participant responses over time. Participants have 24 hours to complete the baseline assessment; participants that do not complete the baseline assessment within the first 8 hours are sent a reminder message. Following the 24-hour window, participants who complete the baseline assessment are randomised into one of the two conditions. Participants are alerted on Day 2 to what happens next, depending on which condition each are randomised. Participants

randomised to the intervention condition are informed to expect a series of links to be sent over the following six days. Participants in the waitlist control condition are informed that contact is to be made again in one weeks' time to complete a second assessment.

On the third day (Day 3), participants in the intervention condition are sent a unique PIN and a link to the first video in the intervention. Again, participants are requested to enter the unique PIN on the first page of the link. Before watching video one in the Warna-Warni Waktu series, participants complete state measures of body satisfaction and mood. State measures of body satisfaction and mood are asked again, immediately after the video. Next, participants are presented with the reinforcer activities for video one to complete. This process is repeated on Days 4-8, for videos two-six.

On Day 9 of the study, participants in both conditions are sent a link to complete the second assessment. As with the baseline assessment, participants are given 24 hours to complete this assessment, with reminder messages sent to non-completers after the first eight hours. The same process is executed for the third and final assessment, one month later on Day 37.

Following the third assessment, all participants are debriefed on the study aims and provided with additional sources of mental health support, as well as a certificate of participation. Those in the waitlist control condition are provided with a link to the Warna-Warni Waktu video series to watch, if desired.

Intervention Type
Behavioural

Primary outcome measure
Body esteem (body satisfaction) measured using the Body Esteem Scale for Adolescents & Adults (BESAA) at baseline, post-intervention (1 day after the intervention was completed); follow-up (1 month after the intervention was completed)

Secondary outcome measures
1. Internalisation of societal appearance ideals measured using the Sociocultural Attitudes Towards Appearance Questionnaire-3 (SATAQ-3) at baseline, post-intervention (1 day after the intervention was completed); follow-up (1 month after the intervention was completed)
2. Positive and negative affect measured using the Positive and Negative Affect Schedule for Children (PANAS-C) at baseline, post-intervention (1 day after the intervention was completed); follow-up (1 month after the intervention was completed)
3. Skin shade satisfaction measured using a two-item purpose-built measure at baseline, post-intervention (1 day after the intervention was completed); follow-up (1 month after the intervention was completed)
4. State body satisfaction measured using a single 101-point visual analogue scale immediately before and after each of the intervention's videos
5. State mood measured using a single 101-point visual analogue scale immediately before and after each of the intervention's videos

Overall study start date
01/10/2019

Completion date
12/12/2021

Eligibility

Key inclusion criteria
1. Between 15 and 19 years of age
2. Had their own mobile phone
3. Visited Facebook or Instagram every day

Participant type(s)
Healthy volunteer

Age group
Mixed

Sex
Female

Target number of participants
2000

Total final enrolment
2000

Key exclusion criteria
1. Following the Girl Effect brand (Springster) on social media
2. Had previously accessed the Springster website
3. Did not have written consent from a parent or guardian (if under 18 years of age)

Date of first enrolment
13/09/2021

Date of final enrolment
05/11/2021

Locations

Countries of recruitment
Indonesia

Study participating centre
Infinity CXT
88 Kasablanka Tower, 18th Floor, Tower A,
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Funder(s)

Funder type
Industry

Funder Name
Unilever (Dove Self-Esteem Project)

Alternative Name(s)
Unilever Global, Unilever PLC, U

Funding Body Type
Government organisation

Funding Body Subtype
For-profit companies (industry)

Location
United Kingdom

Results and Publications

Publication and dissemination plan

Plans to submit the trial manuscript to the Journal of Medical Internet Research (JMIR), a high-impact peer-reviewed journal.
(added 04/01/2023)
The trial manuscript has been submitted to the Journal of Medical Internet Research (JMIR), a high-impact peer-reviewed journal, and is currently under review, following a revise and resubmit.

Intention to publish date

28/02/2023

Individual participant data (IPD) sharing plan

The data-sharing plans for the current study are unknown and will be made available at a later date.

IPD sharing plan summary

Data sharing statement to be made available at a later date

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article		28/01/2022	06/10/2022	Yes	No
Results article	results	03/04/2023	04/04/2023	Yes	No