



## LJMU Research Online

**Cronshaw, S**

**Web Workouts and consumer well-being: The role of digital-physical activity during the UK COVID-19 lockdown**

<http://researchonline.ljmu.ac.uk/id/eprint/14958/>

### Article

**Citation** (please note it is advisable to refer to the publisher's version if you intend to cite from this work)

**Cronshaw, S (2021) Web Workouts and consumer well-being: The role of digital-physical activity during the UK COVID-19 lockdown. Journal of Consumer Affairs. ISSN 0022-0078**

LJMU has developed **LJMU Research Online** for users to access the research output of the University more effectively. Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. Users may download and/or print one copy of any article(s) in LJMU Research Online to facilitate their private study or for non-commercial research. You may not engage in further distribution of the material or use it for any profit-making activities or any commercial gain.

The version presented here may differ from the published version or from the version of the record. Please see the repository URL above for details on accessing the published version and note that access may require a subscription.

For more information please contact [researchonline@ljmu.ac.uk](mailto:researchonline@ljmu.ac.uk)

<http://researchonline.ljmu.ac.uk/>

# Web workouts and consumer well-being: The role of digital-physical activity during the UK COVID-19 lockdown

Sue Cronshaw 

Liverpool John Moores University,  
Liverpool, United Kingdom

## Correspondence

Sue Cronshaw, Liverpool John Moores  
University, Liverpool, United Kingdom.  
Email: s.cronshaw@ljmu.ac.uk

## Abstract

By using three areas of well-being, psychological, physical, and social this study aims to explore the perceptions of consumers engaging in digital-physical platforms and communities during the UK COVID-19 lockdown and the impact such participation had on their well-being. Ninety people were recruited via an online study, all were using online workouts, and self-selected to participate. The use of virtual ethnography gave further insight into the functions of these platforms and their role in social connection. Participants discussed the benefits to their mental health, the provision of structure to their day, the social connection it provided, and the alleviation of feelings of isolation. The findings also demonstrate how numerous consumer groups in society could use digital-physical platforms as a potential way of connecting those who are unable to engage in face-to-face settings.

## KEYWORDS

well-being, digital-physical activity, online communities

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2021 The Author. *Journal of Consumer Affairs* published by Wiley Periodicals LLC on behalf of American Council on Consumer Interests.

## 1 | INTRODUCTION

In January 2020, The World Health Organisation (WHO) declared the COVID-19 pandemic an International public health emergency (Zheng, 2020). Countries across the globe began shutting borders and taking steps to stem the spread of infection. On March 23, 2020, in accordance with the advice from WHO and Public Health England, Prime Minister Boris Johnson announced that the country would engage with lockdown rules and procedures.

The subsequent changes in lifestyle were dramatic and had far-reaching consequences for both people's health and the economy. The impact of lockdown strategies has been seen during previous pandemics such as SARS, people's sense of uncertainty and isolation can have a detrimental effect on the nation's well-being (Cava *et al.*, 2005). A decade later and these factors were identified again as a by-product of the COVID-19 lockdown in the UK, as Lei and Klopach (2020) argue, feelings of alienation and hopelessness were common, leading to an impact on people's long-term well-being.

Businesses across the UK were forced to close, adapt or re-think their current offering. One of the sectors having to adjust to the required changes in business practice was the fitness industry, specifically gyms. The pivot to digital-physical activity led to the development of communities with membership benefits reaching far beyond physical fitness. Existing gyms, alongside well-known online fitness experts, flooded the internet with a plethora of workouts. Joe Wicks motivated just under 1 million school children and their parents to participate in "PE with Joe" as a start to the home-schooling day (Guinness World Records, 2020) while Davina "own your goals," Les Mills and many other fitness providers around the country were broadcasting daily workouts. Digital-physical activity has re-designed existing perceptions of exercise in the UK, the intention of this study is to explore the perceptions of people participating in such activity and the role these workout communities played in supporting consumer's psychological, physical, and social well-being.

## 2 | LOCKDOWN AND WELL-BEING

The loss of social interaction due to physical distancing measures and self-isolation has left many people in the UK feeling a sense of loneliness and a lack of connection with others. Loneliness, a "psychological manifestation of social isolation, associated with adverse impacts on mental and physical health" (Razai *et al.*, 2020, p. 1) can have profound psychological effects on individuals (Philippe *et al.*, 2020). Loss of usual routine and not taking part in normal day-to-day activities can cause frustration and a sense of isolation. Perceived social isolation can have serious consequences for "cognition, emotion, behaviour and health" (Hawkey and Cacioppo, 2010). This was supported by the guidance published by Public Health England (2020), when they identified that during lockdown, people may feel frustrated, lonely, low, and anxious (Table 1).

The area of well-being is complex and multi-dimensional, with much debate around definitions, as each conceptualization of well-being has an emphasis on a particular area, depending on the context. The OECD define well-being as subjective, involving "good mental states, including all of the various evaluations, positive and negative, that people make of their lives and the affective reactions of people to their experiences" (OECD, 2013). This is echoed by Balderjahn *et al.* (2020, p. 460) who assert that well-being is "emotional and cognitive assessments of personal life satisfaction." This suggests that well-being is more a general evaluation of how

one feels mentally and is echoed by Kim *et al.* (2018), p. 1,010) who argue that well-being is “cognitive evaluations and affective reactions that people make about their lives.” Grossman and Gruenewald (2020) focus on the importance of mental well-being while also identifying physical health as a key aspect, Iyer and Muncy (2016) regard subjective well-being in terms of cognitive and affective, while Nieboer and Cramm (2018) argue the facets of well-being are physical and social, with an emphasis on affection, stimulation, comfort, and status. Another more specific area of well-being is addressed by Lee and Ahn (2016) who consider the topic of well-being from a consumption perspective, reflecting on factors that influence consumer well-being. Historically consumer well-being was measured by economic principles, satisfying needs through the purchase of products and services (Pancer and Handelman, 2012). Whereas more recent literature has reflected consumer well-being in broader terms, considering a consumer's evaluation of their life with both a cognitive and affective component (Oral and Thurner, 2019).

As highlighted previously, living through a global pandemic and the impact of lockdown can manifest in psychological issues (stress and anxiety), social problems (isolation) and can have a detrimental effect on ones' health overall. Therefore, for the purpose of this study, the work of Grant, Christianson, and Price (2017, p. 53) will be used as their theory incorporates a clear range of areas highlighted within the literature discussed. They argue that there are three areas of well-being: Psychological well-being (happiness) a balance of positive and negative thoughts and fulfillment and realization of human potential. Physical well-being (health) potential illness, stress, and access to healthcare and social well-being (relationships), including ones' relationships with others, both individuals and communities. As the COVID-19 lockdown has been a cause of stress to many and had an impact on people's happiness, health, and relationships, this approach is arguably a useful tool to frame people's responses. According to Lazarus (1999), if nothing can be done to change a stressful situation, we adopt emotion-focused coping in an attempt to change the way we appraise what is happening without changing the realities of the situation. Although coping processes do not lead to the resolution of the source of stress, they allow for management of stress and an acceptance of a situation. One coping process adopted in situations of anxiety and stress is physical activity (Long and van Stavel, 1995). It has been well documented that anxiety, an unpleasant mood characterized by thoughts of worry (Herring *et al.*, 2010) can be reduced by engaging in exercise (Aylett *et al.*, 2018). Schlicht (1994, p. 275) asserts that “habitual physical exercise is almost universally accepted as being a protective behaviour for physical and mental health” regardless of age, gender, and further personal and situational characteristics'. This paper aims to add to this existing literature, exploring the role of digital-physical activity in supporting consumer well-being during the COVID-19 pandemic.

## 2.1 | Social media and communities

It has been argued that widespread application of quarantine can strengthen social cohesion and shared values (Brooks *et al.*, 2020, p. 2). Social media plays a part in this connection as people share thoughts and experiences as a way of bonding over the situation, providing them with a sense of belonging and a shared identity (Preece, 2000). Pittman and Reich (2016) highlight the benefits of social media in this situation, specifically image-based platforms, which can offer an enhanced intimacy that alleviates some of the feelings of lacking social connection. This is supported by Brooks *et al.* (2020) who suggest social media can play an important role in

reducing loneliness by creating opportunities for social interaction, it can also increase social capital and promote psychological well-being (Ellison *et al.*, 2007).

While there are many benefits to social media in how it connects people, it must be recognized that it can also cause a disconnect between people as it provides a shield of anonymity that reduces accountability. Allen *et al.* (2014, p. 18) reflect on the negative elements of social media use arguing online tools “create a paradox for social connectedness.” While they make it easier to form and develop online connections, they can also create a source of “alienation and ostracism.” Despite the negative elements, for the purpose of this study, the role of social media as a method of connection rather than disconnection will be the focus.

In its function as a platform for social interaction without spatial limitations, social media forums provide the opportunity for online communities to form. Dutot (2020) reflects that people are using social media to be part of a group and the group is enhanced the more people participate and spend time online. Over time, these groups become communities that serve as a space for both production and consumption, allowing freedom for users to engage on several levels of involvement. Indeed, the benefits of virtual communities appear a perfect blend for lockdown as it is a way of “both making contact with and maintaining a distance from others” (Rheingold, 1993, p. 11).

Online communities can be a significant source of help and social support for people (Stewart, 2010) stimulating development of new knowledge and competencies (Mačiulienė and Skaržauskienė, 2016). Petrič (2016) asserts that online communities essentially constitute social glue, forming bonds within a group. For these groups to function, he argues it should be a supportive environment with credible information shared, creating a sense of belonging and individual empowerment. Regardless of whether users are passive (viewing) or active (posting) (Koh *et al.*, 2007), both forms of participation, have a positive influence on the development of a sense of community. Participation in online communities may therefore motivate users to integrate themselves into the community and thereby induce identification-based commitment, acknowledging their identity as part of the group (Tsai and Pai, 2012).

While many acknowledge the terminology “community” as relevant to online forums, Hine (2000) raises the argument that online groups cannot be classed as communities if the participants can simply log out without a sense of accountability. “The level of connection and intimacy is insufficient to make participants members of a community” (Hine, 2000, p. 19). According to Beniger (1987) this type of social formation is instead known as a pseudo community. As it is the participants' perceptions about the digital-physical activity and forums that is the focus of this study, should the participants choose to identify that they belong to a “community” and use the terminology that they perceive as a collective group bound by interests or social connections, then the study will reflect the concept of community in the results.

The lines between gyms and home blurred as the spaces that people trained switched to their living rooms and gardens. While initially, people had the intention to continue training, the reality of being alone in your home was far removed from the normative gym experience. The literature demonstrates the part that social media can play in connecting and therefore motivating people through online communities. To evidence the role digital-physical activity plays in this connection and to explore the impact it has on people's well-being, a framework of psychological, physical, and social well-being has been used.

The research questions for this study are the following:

- R1. What impact did participation in online workouts and their communities have on consumer well-being?

R2. What are the perceived benefits of participation in online workouts to consumers during lockdown?

### 3 | METHOD

The goal of descriptive research is to describe a phenomenon and its characteristics. With this approach, observation and survey tools are often used to gather data and participant's experiences which can lead to a description of the needs of consumers (Thomlinson, 2001). Participants were recruited through a Facebook post that was shared on numerous fitness sites in addition to the researcher's own personal page. The post invited those over 18 years of age, who have used online workouts or participated in online communities linked to the workouts during lockdown, to consider completing a questionnaire. The phrase "used online workouts" is an indication of physically executing the workout rather than just passively watching them. Non-probability, purposive, self-selection sampling was applied, where the individuals chose to take part in the research of their own accord based on the criteria outlined. This ensured that the individuals met the selection criteria, people engaging with online workouts, and could provide more insight into the phenomenon being studied (Sharma, 2017). The researcher has little control over the selection process in social media surveys as potential participants are among those people with internet access who find the study information on Facebook and decide to complete the survey (Khazaal *et al.*, 2014). Participants often respond due to having strong opinions about the research or consider it important or interesting (Symon and Cassell, 2013). This can therefore result in the data being subject to selection bias and not being representative of the population (Sharma, 2017).

A structured questionnaire was designed with open-ended questions, to elicit qualitative data (Bryman and Bell, 2015) It is argued that well-designed qualitative questionnaires can produce data of immense value to health research (Eckerdal and Hagström 2017). Qualitative questionnaires also eliminate influencer effects, variability, and social desirability bias (Bryman and Bell, 2015) while allowing for unexpected and unprompted responses that can help identify the salience of the issues for the participants.

Participants were invited to respond to a range of questions about their experience of digital-physical activity. Initially they were asked if they participated in online workouts and were asked to list them. Due to the criteria in the Facebook post stipulating the need for people who have used online workouts, all respondents answered yes to this question. They were then asked a series of questions about their motivation for using the workouts, how it made them feel after a workout was completed, their level of involvement in the online chat, what they liked about online workouts, if they were new to the format and if they had previously been engaged in exercise offline.

The data from 90 participants (91% female aged 18–71, 9% male aged 20–65) was collected digitally using online data collection software and analyzed using thematic analysis. Due to the timely requirement of data collection and analysis, a 3-week timeframe was placed on the questionnaire collection. The data collected was totally anonymous and not traceable to the identity of the participants. In relation to digital-physical activity, there is no published data indicating what is typical in terms of demographic or gender, so it is unknown if the response to the questionnaires is representative of the online workout community. Having 91% of the participants in this study identifies as female may suggest that it is an activity engaged in more by females than by males. This is also reflected in the virtual ethnography, as the researcher did not

observe any male participants in the online community. The lack of male participants, therefore, provided an imbalance in the data collected as it was predominantly from the female perspective. In an attempt to understand the split, the researcher found several studies considering the role of gender and exercise participation, but they focus on specific contexts, characteristics, demographics, and medical conditions. There is very little recent research comparing gender participation as a singular criteria or research that identifies the commonalities in exercise online. One study that does consider gender is by Hickey and Mason (2017) who investigate exercise activity among 18–24-year-old college students. They found that men participated in more hours of exercise and more types of activities than women, who reported having more barriers to exercise than men including career and familial responsibilities. The convenience of online workouts may therefore provide an accessible way for women to exercise despite the barriers, thus supporting the gender split of online participation in this study.

An exploratory approach to coding was utilized, identifying keywords, trends, and themes to outline the analysis (Guest *et al.* 2012). By identifying and describing both implicit and explicit ideas, further themes were drawn from the responses. For the purpose of this study, the definition of theme is taken from van Manen (1990) who considered them to be interpretative discoveries to give the notions of data meaning. This is reflected by Saldana (2010, p. 143) who suggests looking for “repeating ideas, participant terms and similarities of expression.” The use of thematic analysis allows the researcher to explore the possibility that the participants perceptions demonstrate similarities with key themes linking the individual experiences. To ensure accuracy and a clear system for the coding of themes, template analysis was used.

It is argued that template analysis is not a methodology but a technique, as its flexibility lends itself to several research approaches (King, 2012). It does not prescribe a set number of codes or themes or hierarchy as grounded theory does, instead, it gives the researcher the freedom to “identify themes wherever they find the richest data” (King, 2012, p. 429). The researcher identified the a priori themes of community and well-being then expanded these as further themes were drawn out during the analysis.

The second stage of the research took the form of virtual ethnography. A Facebook site dedicated to online workouts was used as a platform to further understand the role of digital physical activity during lockdown. The site was selected as it has over 30,000 members, is one of the largest in the UK, and has several different posts and streams of conversation running every day. The researcher joined the community in an observational role alone, they did not participate in any way to ensure there was no leading or direction of content. There were no exchanges between the researcher and community members, the researcher role was that of “tourist” within the community (Elizabeth *et al.*, 2017).

Kozinets (2015) argues that there are very few, if any, specific, procedural guidelines to take a researcher through the steps necessary to conduct and present a virtual ethnography or “netnography” using social media data, indeed online ethnography can be several online research methods that adapt to the study of communities and cultures (Cova and D’Atone, 2016). Netnography is participant-observational research which Kozinets (2015) argues can be data the researcher directly collects through the capture and recording of online community events and interactions and data the researcher sketches as reflective notes. He describes these notes as an “immersion journal” and highlights the contents as “what is going on, what is connected, what is new and what is meaningful” (Kozinets, 2019, p. 301). Despite the lack of interaction with the community online, Kozinets (2019) argues that when observing for a length of time, reading messages, and following message threads in real time, it can be considered a form of

engagement and involvement rather than passive observation and insights gained from such observations “can provide a compelling look at the phenomenon of interest” (Kozinets, 2019, p. 249).

Although there are concerns around whether people reveal their “real” identity on social media, Hine (2000) argues that with virtual ethnography, the search for authenticity should be put aside and the researcher should take their findings as true of that individual or group. The researcher, therefore, took each account written as being authentic and holding meaning to that person at that time. The researcher observed the site daily from April 22, 2020 (a month into lockdown) until June 24, 2020. During this time, they observed, made notes, read comments, and followed threads constructed by the members of the forum. The subsequent findings were analyzed for key themes alongside the results of the questionnaires. No names or dates were attributed to the posts in the findings to maintain anonymity for the people writing them.

## 4 | FINDINGS OF QUESTIONNAIRE AND DISCUSSION

Public Health England highlights methods to alleviate feelings caused by social distancing, self-isolation, and lockdown, including connecting with and supporting others, looking after physical well-being, having a daily routine, and doing things you enjoy (Public Health England, 2020). These suggestions are reflected in the role that digital-physical activity and their communities have played in sustaining a positive mindset, healthy body, and social connection among consumers. The findings provide a clear framework to develop the theme of well-being, considering the areas that the participants evidenced as key to their rationale for joining and maintaining their engagement with the online workout platforms and their communities.

### 4.1 | Control and psychological well-being

Being told you have to remain indoors for the majority of the day left people in the UK feeling a lack of control over their lives, with no gym, little freedom, no shopping, potentially working from home, furloughed, or unemployed. “Normal life” as they knew it had changed so dramatically that it was difficult for some to maintain a positive outlook (Brooks *et al.*, 2020). Without the autonomy that their previous lives provided they lacked structure, purpose, and routine. It is understandable, therefore, how the participants in this study sought to reclaim some control, some interest outside the framework of their lives in lockdown by undertaking a task they saw as completely autonomous, a challenge that allowed them feelings of esteem and self-worth. This is echoed by Yang and Jingjing (2020) who assert that boosting a sense of control for an individual can protect their emotional well-being.

Therefore, despite having lost a large amount of control in other areas of their lives, one of the key motivators for the people in this study participating in digital-physical activity was the sense of autonomy it provided. To maintain anonymity, the respondents were allocated a number, which is indicated in the data following “R.”

R.13 “The workout is live at 8 am so it gave me something to get up for”

R.19 “The workouts help to keep a routine to my day”

- R.57 “It’s therapy, for my mental & physical well-being”
- R.41 “I do it to improve well-being and mental health during lock down”
- R.86 “I feel good and positive in quite an uncertain time”

When asked about how participating in digital-physical activity made them feel, the participants clearly felt the impact on their psychological well-being as 100% of the respondents felt more positive, with many attributing the online classes to their improved mental health.

- R.9 “I’m happier in myself, more confident and more productive”
- R.37 “It makes me feel great; even when tired after a long day shift I still workout, even if it’s just for 30 min I really benefit from this. I also get better sleep”
- R.80 “I feel great after, the endorphins are lifted and puts me in a good mood to get on with my day”
- R.69 “I feel mentally and physically better for doing the workouts”
- R.68 “I feel amazing after the workouts, calmer and less stressed”
- R.48 “I feel refreshed, less anxious, content, and happy”
- R.46 “It makes me happy, positive, relaxed and feel good about myself.”

## 4.2 | Challenge and physical well-being

The participants in this study used the digital-physical platforms as a way to focus their energy, the motivation to log on and workout came from the need to continue with their fitness regardless of the challenging circumstances. The desire for feelings of competence, pushed the participants to seek out challenges beyond their previous experience, moving from physical gyms to digital-physical locations. People, impelled by the need to feel competent, might engage in various activities simply to expand their own sense of accomplishment’ (Deci, 1995, p. 65).

A key focus for the participants was their physical well-being which manifested itself in either sustaining or improving their fitness. The digital-physical activity introduced the challenge of new formats, new exercises that accommodated little or no gym equipment and creative attempts to maintain an element of fun in the classes. This flexible approach was inclusive and accommodating of all abilities, resulting in people being more willing to participate.

- R.6 “I do it to keep up my fitness/activity during lockdown”
- R.14 “I wanted to maintain my fitness when I can’t go to the gym”
- R.20 “I’m doing the online classes as I’m recovering from bowel cancer and I want to get fitter”
- R.8 “I needed to keep up my fitness in lockdown due to my job”

## 4.3 | Connection and social well-being

Having a connection with other people, being part of a community, and not feeling alone in what you undertake is a key factor in sustaining motivation (Lave and Wenger, 1991). Therefore, it was important for the participants in this study to contribute to the online community

as participation, no matter how peripheral, leads to value both in terms of how one values the community and how the community values individuals (Brooks *et al.*, 2020). Thus, part of the motivation for engaging in the digital-physical platforms is alignment to the shared repertoire of the community, alleviating isolation through connection and understanding. The role of the online communities was key to an increased sense of connection with participants wanting to engage with others as well as engaging with the exercise.

When asked why they participated in the online chats and forums linked to the workouts, the participants highlighted the sense of community they felt from joining in, it made them feel connected to others and part of a group, rather than just an individual, training alone. Eighty-seven percent of respondents positively valued a sense of community and used words such as camaraderie and community to demonstrate the sense of all being together. The online community allowed them the opportunity to interact with one another, this “practice as connection” (Wenger, 2008, p. 113), allows participants a much-needed sense of relatedness and ultimately enhanced motivation.

R.55 “I could not motivate myself to do any exercise on my own but found the online session very good because it feels like I am at the gym and knowing other gym members are doing the same workout keeps me going”

R.24 “My daughter was doing them and enjoying the sessions so 3 of us worked out together which was lovely. Family fitness sessions have been good for bonding”

R.32 “It stops me feeling isolated and I want the instructors to know how much I appreciate them doing classes”

R.19 “It’s a form of socialising during lockdown”

R.90 “It makes me feel part of a community”

R.74 “It feels good to participate. When I mentioned I had been to hospital it was nice that people put comments up”

During periods of isolation, one can feel a disconnect from the outside world. The digital-physical platforms have provided a link to other like-minded individuals who have connected due to their passion for exercise. They support one another through the forums, discussing apprehension about upcoming workouts, exhilaration for completing them, and sharing performance measures as a way to remain accountable to the process. Participation in these platforms is therefore a way to support their own social well-being, going some way to counteract the impact lockdown had on their social bonds.

## 5 | FINDINGS OF VIRTUAL ETHNOGRAPHY

The observations from the online platform provided more in-depth content for analysis as it allowed an understanding of the functions and interactions within a digital-physical platform on a day-to-day basis. The themes emerging were Reality, Progress, Membership hierarchy, behavior change, and impact. The following table provides examples of posts reflecting these themes alongside data around the interactions and comments from the community members. These themes culminate in what the researcher identified as the “reality” of life. Members seem to shy away from the usual social media filters and fake images and instead express reality through incredibly honest narratives that one could argue would not be expressed through the normal channels of face-to-face interaction in gym settings. Digital-physical activity has therefore provided a safe space for sharing an authenticity of lives being lived in lockdown.

TABLE 1 Findings of virtual ethnography

Post	No. of likes	No. of comments	Examples of comments	Observations
“Anyone else not going back to the gym?”	246	178	<p>“I’m definitely not going back, I love this community and the workouts”</p> <p>“I feel the gym is a bit intimidating but with this you can work out at home and not worry about being a sweaty betty”</p> <p>“I will not be going back, I love the freedom and variety online”</p>	<p><b>Behavior change</b></p> <p>Only 13 people out of 178 said they intended to return to the gym. Digital-physical activity is an alternative that has proved to be a popular option due to the flexibility, convenience and variety as well as the privacy it can offer.</p>
“Hello, starting a 6 week push today. Over the last couple of years since my marriage ended my drinking has crept up to almost daily. This is going to be the toughest part, wish me luck!”	210	73	<p>“Well done. You can do this, maybe set aside the money you would have spent on drink and treat yourself to something nice”</p> <p>“Much luck and love. You’ve got this”</p> <p>“Stay strong, look after no. 1”</p> <p>“Good luck! I’m there with you, my drinking is not my best habit by a long shot, but we can do this!”</p> <p>“You can do this, please let us know how it goes”</p>	<p><b>Reality</b></p> <p>The platform is used as a form of support beyond the workouts. The members view each other as like-minded and share honest, personal anecdotes as a way of connecting and reaching out. The response is positive and ranges from advice, words of encouragement, affirmations, accountability, recognition of being in a similar position, and congratulations on starting the process. The level of relatedness is high and provides a source of motivation for the participants.</p>
“So, completed my first workout tonight. It’s been about 5 years since I did any real form of exercise, so started with the beginner to test the water. OMG it near	117	49	<p>“Go you! Take it slow and easy and have rest days and you’ll smash it. Think tortoise and the hare”</p> <p>“You’ve made a start, well done”</p>	<p><b>Membership hierarchy</b></p> <p>People new to the forum are welcomed readily. There appears to be a hierarchy with the “older” members giving advice and</p>

TABLE 1 (Continued)

Post	No. of likes	No. of comments	Examples of comments	Observations
killed me. I will carry on in the hope I can regain some of the fitness I used to have. I think it may take some time”			<p>“This is a great place to be, lots to choose from and lovely community support. Good luck”</p> <p>“I also started the beginner workout on Monday, I’m going to do another today. Keep in touch!”</p> <p>“Well done, when I first started it nearly killed me too”</p> <p>“Well done, you’ve taken the hardest step and started. It will be worth it”</p>	reflecting on when they first joined. They consider fitness as a journey. Other new members gravitate together and appear to consider each other a form of support as they are no longer the only new member.
“From struggling to get out of bed due to crippling depression to getting up early on the weekend for combat—how things change!”	352	43	<p>“Well done you lovely, you’ve come a long way”</p> <p>“Respect, you are a true warrior. Well done”</p> <p>“Me too. Not severe but long term and there I was this morning ready to join in! Don’t recognize myself but loving who she is”</p>	<p><b>Impact</b></p> <p>As the community developed, members shared life stories, the platform became less about purely exercise posts and more about what the impact of exercise can be beyond physical. In their posts, the members demonstrated resilience, determination and mental strength which encouraged others to share their experiences. It could be argued the psychological well-being of participants was enhanced through the support, the feeling of not being alone.</p>
“In 2 weeks I feel fitter, my chest feels lighter, my legs feel stronger and I feel motivated to carry on”	181	41	<p>“Amazing well done.”</p> <p>“Fabulous inspiration”</p> <p>“We are all glad you have started with us too”</p> <p>“Well done”</p> <p>“I love this post”</p>	<p><b>Progress</b></p> <p>Reports of progress stimulate a lot of positive “likes” as people like to benchmark themselves against others. If they see members getting</p>

(Continues)

TABLE 1 (Continued)

Post	No. of likes	No. of comments	Examples of comments	Observations
				fitter and stronger from using the online workouts, it motivates the other members to continue. It encourages engagement in the workouts.

## 6 | DISCUSSION

The COVID-19 pandemic has had an impact on consumers far beyond the actual symptoms of the disease. The anxiety and stress induced by the situation has implications for people's psychological, physical, and social well-being. What this research has evidenced, is the role that digital-physical activity has played in supporting these facets of well-being. By helping consumers feel they are coping, the stress induced by the pandemic is more manageable. Lazarus (1999, p. 151) argues the process of coping can include "breathers" such as coffee breaks, "sustainers" that motivate people to continue to cope, and "restorers" that enable replenishment of personal resources. These coping strategies are reflected in the role that digital-physical activity played during the COVID-19 pandemic. The act of logging on to a workout can provide a breather for the consumer, a break from day-to-day activities. The physical exertion of exercise can act as a "sustainer," motivating people to keep going due to the positive feelings that exercise can induce and the social connection provided through the online communities allows an element of restoration, people feel less isolated as connecting socially can replenish personal resources.

This research has provided new insights into the role of digital-physical activity and the impact on consumer well-being. The findings have demonstrated the potential of digital-physical activity in creating social bonds with others without having to leave the confines of home. This has implications for a large range of consumer groups as it has been highlighted how online communities can provide a social connection for people without spatial limitations. People are more aware of their health not only during a pandemic, but also in the aftermath, especially with research that suggests obesity-related conditions seem to worsen the effect of COVID-19. Most people are aware that exercise is good for health, but not everyone can or wants to walk into a gym. Digital-physical activity can be the initial step for consumers engaging with exercise for the first time or after a break from physical activity. Aside from the social and psychological health benefits, being guided through a workout, and moving more than you usually would, has direct physical health benefits for the long term.

The findings have also shown how consumers are now questioning if they need to return to a physical gym. This has implications for gym owners who can potentially develop another income stream, offering classes online to those who cannot or do not wish to enter a gym. By developing a range of online content, combined with a forum for members to chat and for the business to engage with and understand the perceptions and needs of its consumers through

co-creation, the fitness industry can develop its business model and cater for a different fitness consumer.

Considering fitness consumption in the long-term, the digital-physical model can assist with many groups in society who have barriers to gym attendance, these include but are not restricted to: Postpartum women who face substantial personal and environmental barriers to gym participation including a lack of confidence, time constraints, lack of access to affordable and appropriate activities and poor access to public transport (Saligheh *et al.*, 2016). People with physical disabilities, who experience limited opportunities to engage with gyms due to accessibility, lack of social support, and oppressive attitudes within gyms (Sharon-David *et al.*, 2020). Obese consumers, who Ball *et al.* (2000) argue have numerous barriers to exercise participation including feeling too big and too embarrassed, thus requiring a “safer” space to begin physical activity without judgment. And patients with a cancer diagnosis who experience barriers to participating in gym environments as they appreciate the opportunity to exercise at a place where the physical limits of the body or altered appearance caused by the disease and the treatments are non-judgmentally accepted. Being in a context where everyone is familiar with the diagnosis of cancer, and the ways in which it may affect the body, reduces the risk of perceived stigma (Midtgaard *et al.*, 2015, p. 615).

There are also implications for private and public healthcare providers and policymakers, who can explore the option of digital-physical platforms as a potential way of connecting those who are unable or unwilling to engage in face-to-face settings such as people in support groups for addiction, the elderly and people with additional needs living alone. The platforms can provide physical stimulation through appropriate exercise tuition, tailored to the health and ability of those in the group. This template of digital-physical communities has the potential to change the existing policy around community work, alleviating the existing pressure on health workers to visit individuals and creating a format that can be adopted for a variety of consumer groups and situations.

## 7 | LIMITATIONS OF STUDY

As this study was conducted during the COVID-19 lockdown in the UK, the data collection was limited to online methods. The method of online questionnaires, therefore, limited the depth of data elicited. To ensure the study was published within a timeframe relevant to the context of COVID-19, the data was collected in a short period of time. It would be interesting to consider the role of digital-physical activity from a global perspective, exploring whether online exercise is a phenomenon unique to the UK or if other countries engaged with the concept with the same enthusiasm.

## 8 | CONCLUSION

Lockdown in the UK due to COVID-19 has caused serious concerns about the impact on the nations' mental health. Issues of anxiety due to social distancing, isolation, fear of infection, and loss of structure and control have had consequences for people's overall well-being. A coping mechanism adopted by many in the UK was that of digital-physical activity.

Little is understood about the impact of digital-physical activity on consumer well-being during the COVID-19 lockdown in the UK. This study contributes to the understanding of the phenomenon, identifying a method of how people cope during periods of uncertainty, stress,

and isolation while reinforcing existing literature around how important the role of exercise is. Digital-physical activity can be used to sustain exercise activities for consumers that for practical, social, physical, or economic reasons, cannot attend a gym. These findings provide an option for health policymakers to further investigate support for those in society who are unable to engage in face-to-face settings, as digital-physical groups can be formed to connect those who are otherwise isolated in society. What has been demonstrated is the different way consumers have been accessing and consuming fitness products, and that these new ways are likely to become a permanent shift in consumption patterns in the fitness industry.

The findings show that as a result of participation in digital-physical activity, the participants experienced an improvement in three facets of well-being. Their psychological well-being was enhanced through their sense of control and reduced anxiety, physical well-being was helped by the actual workouts providing them with exercise, and social well-being was improved by the online community linking them with like-minded individuals and strengthening social bonds. Digital-physical activity provided not only a platform to alleviate anxiety and sustain and improve existing physical fitness, it created a place for social connection and community.

## ORCID

Sue Cronshaw  <https://orcid.org/0000-0002-9004-823X>

## REFERENCES

- Allen, K., Ryan, T., Gray, D.L., McInerney, D. and Waters, L. (2014) Social media use and social connectedness in adolescents: the positives and the potential pitfalls. *The Australian Educational and Developmental Psychologist*, 31(1), 18–31.
- Aylett, E., Small, N. and Bower, P. (2018) Exercise in the treatment of clinical anxiety in general practice – a systematic review and meta-analysis. *BMC Health Services Research*, 18(1), 559.
- Balderjahn, I., Lee, M., Seegebarth, B. and Peyer, M. (2020) A sustainable pathway to consumer wellbeing. The role of anti-consumption and consumer empowerment. *Journal of Consumer Affairs*, 54(2), 456–488.
- Ball, K., Crawford, D. and Owen, N. (2000) Too fat to exercise? Obesity as a barrier to physical activity. *Australian and New Zealand Journal of Public Health*, 24(3), 331–333.
- Brooks, S., Webster, R., Smith, L., Woodland, L., Wessely, S., Greenberg, N. and Rubin, G.J. (2020) The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet*, 395(10227), 912–920.
- Bryman, A. and Bell, E. (2015) *Business Research Methods*, 4th edition. Oxford, UK: Oxford University Press.
- Cava, M., Fay, K., Beanlands, H., McCay, E. and Wignall, R. (2005) The experience of quarantine for individuals affected by SARS in Toronto. *Public Health Nursing*, 22(5), 398–406.
- Cova, B. and D'Atone, S. (2016) Brand iconicity vs. anti-consumption well-being concerns: the Nutella palm oil conflict. *Journal of Consumer Affairs*, 50(1), 166–192.
- Deci, E. (1995) Why we do what we do. In: *Understanding Self-Motivation*. New York: Penguin Books.
- Dutot, V. (2020) A social identity perspective of social media impact on satisfaction with life. *Psychology & Marketing*, 37(6), 759–772.
- Eckerdal, R. and Hagström, C. (2017) Qualitative questionnaires as a method for information studies research. *Information Research*, 22(1), 1639
- Ellison, N., Steinfield, C. and Lampe, C. (2007) The benefits of Facebook “friends”: social capital and college Students' use of online social network sites. *Journal of Computer-Mediated Communication*, 12, 1143–1168.
- Grant, A.M., Christianson, M.K. and Price, R.H. (2017) Happiness, Health, or Relationships? Managerial Practices and Employee Well-Being Tradeoffs. *Academy of Management Perspectives*, 21(3), 51–63.
- Grossman, M. and Gruenewald, T. (2020) Failure to meet generative self-expectations is linked to poorer cognitive-affective well-being. *The Journals of Gerontology: Series B*, 75(4), 792–801.
- Guest, G., MacQueen, K.M. and Emily, E.M. (2012) *Applied thematic analysis*. SAGE Publications, Inc.
- Guinness World Records (2020) Joe Wicks' PE with Joe Smashes YouTube Livestream Record. <https://www.guinnessworldrecords.com/news/2020/4/joe-wicks-pe-with-joe-smashes-youtube-livestream-record-614934>.

- Hawkley, L. and Cacioppo, J. (2010) Loneliness matters: a theoretical and empirical review of consequences and mechanisms. *Annals of Behavioural Medicine*, 40(2), 218–227.
- Herring, M., O'Connor, P. and Dishman, R. (2010) The effect of exercise training on anxiety symptoms among patients: a systematic review. *Archives of Internal Medicine*, 170(4), 321–331.
- Hickey, M.E. and Mason, S.E. (2017) Age and gender differences in participation rates, motivators for, and barriers to exercise. *Modern Psychological Studies*, 22(2), 9–19.
- Hine, C. (2000) *Virtual Ethnography*. London: SAGE Publishing.
- Iyer, R. and Muncy, J. (2016) Attitude toward consumption and subjective well-being. *Journal of Consumer Affairs*, 50(1), 48–67.
- Khazaal, Y., van Singer, M., Chatton, A., Achab, S., Zullino, D., Rothen, S., Khan, R., Billieux, J. and Thorens, G. (2014) Does self-selection affect Samples' representativeness in online surveys? An investigation in online video game research. *Journal of Medical Internet Research*, 16(7), e164.
- Kim, G., Wang, S. and Sellbom, M. (2018) Measurement equivalence of the subjective well-being scale among racially/ethnically diverse older adults. *The Journals of Gerontology, Series B*, 75(5), 1010–1017.
- King, N. (2012) Doing template analysis. In: Symon, G. and Cassell, C. (Eds.) *Qualitative Methods and Analysis in Organizational Research: Core Methods and Current Challenges*. Thousand Oaks, CA: Sage Publishing, pp. 426–449.
- Koh, J., Kim, Y.-G., Butler, B. and Bock, G.-W. (2007) Encouraging participation in virtual communities. *Communications of the ACM*, 50(2), 69–73.
- Kozinets, R.V. (2015) *Netnography: Doing Ethnographic Research Online*. London: SAGE Publications Ltd..
- Kozinets, R.V. (2019) *Netnography: The Essential Guide to Qualitative Social Media Research*. London: SAGE Publications Ltd..
- Lave, J. and Wenger, E. (1991) Situated learning. In: *Legitimate Peripheral Participation*. New York: Cambridge University Press.
- Lazarus, R.S. (1999) *Stress and Emotion: A New Synthesis*. New York: Springer Publishing Company, Inc..
- Lee, M.S.W. and Ahn, C.S.Y. (2016) Anti-consumption, materialism, and consumer well-being. *Journal of Consumer Affairs*, 50(1), 18–47.
- Lei, M.-K. and Klopach, E. (2020) Social and psychological consequences of the COVID-19 outbreak: the experiences of Taiwan and Hong Kong. *Psychological Trauma Theory Research Practice and Policy*, 12(s1), s35–s37.
- Long, B. and van Stavel, R. (1995) Effects of exercise training on anxiety: a meta-analysis. *Journal of Applied Sport Psychology*, 7(2), 167–189.
- Mačiulienė, M. and Skaržauskienė, A. (2016) Emergence of collective intelligence in online communities. *Journal of Business Research*, 69(5), 1718–1724.
- Manen, V. and Max. (1990) *Researching Lived Experience: Human Science for an Action Sensitive Pedagogy*. Albany, NY: SUNY Press.
- Midtgaard, J., Hammer, N.M., Andersen, C., Larsen, A., Bruun, D.-M. and Jarden, M. (2015) Cancer Survivors' experience of exercise-based cancer rehabilitation – a meta-synthesis of qualitative research. *Acta Oncologica*, 54(5), 609–617.
- Nieboer, A. and Cramm, J. (2018) How do older people achieve well-being? Validation of the social production function instrument for the level of well-being–short (SPF-ILs). *Social Science and Medicine*, 211, 304–313.
- OECD. (2013) *Guidelines on Measuring Subjective Well-Being*. Paris: OECD Publishing.
- Oral, C. and Thurner, J.-Y. (2019) The impact of anti-consumption on consumer well-being. *International Journal of Consumer Studies*, 4(3), 277–288.
- Pancer, E. and Handelman, J. (2012) The evolution of consumer well-being. *Journal of Historical Research in Marketing*, 4(1), 177–189.
- Elizabeth, P., Maclaran, P. and Chatzidakis, A. (2017) *Contemporary Issues in Marketing and Consumer Behaviour*, 2nd edition. Abingdon: Routledge.
- Petrič, G. (2016) Communicatively integrated model of online community: a conceptual framework and empirical validation on a case of a health- related online community. In: Riva, G., Wiederhold, B. and Cipresso, P. (Eds.) *The Psychology of Social Networking Volume 1: Personal Experience in Online Communities*. Warsaw, PL: De Gruyter Open Poland, pp. 53–65.
- Philippe, C., Olié, E., Debien, C. and Vaiva, G. (2020) Keep socially (but not physically) connected and carry on: preventing suicide in the age of COVID-19. *Journal of Clinical Psychiatry*, 81(3), 20com13370.

- Pittman, M. and Reich, B. (2016) Social media and loneliness: why an Instagram picture may be worth more than a thousand twitter words. *Computers in Human Behaviour*, 62(September), 155–167.
- Preece, J. (2000) *Online Communities: Designing Usability and Supporting Sociability*. New York, NY: John Wiley & Sons, Inc..
- Public Health England. 2020. *Guidance for the Public on the Mental Health and Well-Being Aspects of Coronavirus (Covid-19)*: <https://www.gov.uk/government/publications/covid-19-guidance-for-the-public-on-mental-health-and-wellbeing/guidance-for-the-public-on-the-mental-health-and-wellbeing-aspects-of-coronavirus-covid-19>.
- Razai, M., Oakeshott, P., Kankam, H., Galea, S. and Stokes-Lampard, H. (2020) Mitigating the psychological effects of social isolation during the Covid-19 pandemic. *British Medical Journal*, 369, M1904. <https://doi.org/10.1136/bmj.m1904>.
- Rheingold, H. (1993) *The Virtual Community: Homesteading on the Electronic Frontier*. London: MIT Press.
- Saldana, J. (2010) *The Coding Manual for Qualitative Researchers*. London: SAGE Publishers.
- Saligheh, M., McNamara, B. and Rooney, R. (2016) Perceived barriers and enablers of physical activity in post-partum women: a qualitative approach. *BMC Pregnancy and Childbirth*, 16, 131.
- Schlicht, W. (1994) Does physical exercise reduce anxious emotions? A meta-analysis. *Journal of Anxiety, Stress & Coping*, 6(4), 275–288.
- Sharma, G. (2017) Pros and cons of different sampling techniques. *International Journal of Applied Research*, 3 (7), 749–752.
- Sharon-David, H., Siekanska, M. and Tenenbaum, G. (2020) Are gyms fit for all? A scoping review of the barriers and facilitators to gym-based exercise participation experienced by people with physical disabilities. *Performance Enhancement & Health*, (In Press). <https://doi.org/10.1016/j.peh.2020.100170>.
- Stewart, T. (2010) Online Communities. *Behaviour & Information Technology*, 29(6), 555–556.
- Symon, G. and Cassell, C. (2013) *Qualitative Organizational Research*. London: SAGE Publications.
- Thomlinson, B. (2001) Descriptive Studies. In: Thyer, B. (Ed.) *The Handbook of Social Work Research Methods*. Thousand Oaks, CA: SAGE Publications, pp. 131–141.
- Tsai, H.-T. and Pai, P. (2012) Positive and negative aspects of online community cultivation: implications for online Stores' relationship management. *Information & Management*, 49(2), 111–117.
- Wenger, E. (2008) *Communities of Practice. Learning, Meaning, and Identity*. New York: Cambridge University Press.
- Yang, H. and Jingjing, M. (2020) How an epidemic outbreak impacts happiness: factors that worsen (vs. protect) emotional well-being during the coronavirus pandemic. *Psychiatry Research*, 289, 113045. <https://doi.org/10.1016/j.psychres.2020.113045>.
- Zheng. (2020) SARS-CoV-2: an emerging coronavirus that causes a global threat. *International Journal of Biological Sciences*, 16(10), 1678–1685.

**How to cite this article:** Cronshaw, S. (2021). Web workouts and consumer well-being: The role of digital-physical activity during the UK COVID-19 lockdown. *Journal of Consumer Affairs*, 1–16. <https://doi.org/10.1111/joca.12375>