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To cite this article: Rusi Jaspal , Barbara Lopes & Pedro Lopes | (2020) Predicting social distancing and compulsive buying behaviours in response to COVID-19 in a United Kingdom sample, Cogent Psychology, 7:1, 1800924

To link to this article: <https://doi.org/10.1080/23311908.2020.1800924>



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Published online: 06 Aug 2020.



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Received: 05 May 2020
Accepted: 20 July 2020

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Reviewing editor:
Marco Hubert, Zeppelin University,
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APPLIED PSYCHOLOGY | RESEARCH ARTICLE

Predicting social distancing and compulsive buying behaviours in response to COVID-19 in a United Kingdom sample

Rusi Jaspal^{1*}, Barbara Lopes² and Pedro Lopes³

Abstract: This study examines differences between key socio-demographic groups and the impact of strength of social network, political trust, and fear of COVID-19 on working from home (a key social distancing behaviour) and compulsive buying (a maladaptive behaviour) in response to COVID-19. This study used a correlational cross-sectional survey design. A sample of 411 participants in the United Kingdom (UK) completed measures of strength of social network, political trust, fear of COVID-19, length of self-isolation and compulsive buying. Results showed that older people and lower income groups are less likely to work from home in response to COVID-19; that people with a diagnosed mental health disorder exhibited less political trust, more fear of COVID-19, and more compulsive buying; and that people reporting COVID-19 symptomatology had been in self-isolation for longer and exhibited more compulsive buying than those with no COVID-19 symptomatology. The structural equation model showed that age, having a diagnosed mental health disorder, having COVID-19 symptomatology and strength of social network impacted on working from home and compulsive buying, through the mediators of political trust, fear of COVID-19 and length of self-isolation. The results demonstrate that some groups in the UK population may be vulnerable to maladaptive behaviours and poor social, psychological, and physical health outcomes as a result of the COVID-19 pandemic. These groups may require special support to cope effectively with the effects of COVID-19.

ABOUT THE AUTHORS

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PUBLIC INTEREST STATEMENT

The management of the COVID-19 outbreak in the United Kingdom (UK) has proven to be challenging. The incidence of COVID-19 and the mortality rate have been unacceptably high. This study shows that different groups in the diverse UK society (e.g., older people, people with lower income levels, people with a mental health disorder) exhibit varying levels of adherence to social distancing (a key preventive behaviour) and compulsive buying (a maladaptive behaviour), that these behaviours have clear social and psychological underpinnings (such as having a strong social network, political trust, and fear of COVID-19), and that only an effective understanding of these social and psychological underpinnings will enable us to manage the outbreak. Social psychological analyses must be at the forefront of public health interventions to reduce the incidence and negative sequelae of COVID-19.

Subjects: Health Psychology; Applied Social Psychology; Infectious Diseases

Keywords: COVID-19; political trust; fear; social isolation; compulsive buying

1. Introduction

Coronavirus disease (COVID-19) is an infectious disease which is caused by the virus SARS-CoV-2. Since its first clinical observations in China in December 2019, COVID-19 has been designated as a global pandemic. The United Kingdom (UK) has announced a nationwide lock-down and a policy of social distancing, which includes self-isolation and working from home where possible. When data were collected for this study, the UK had restricted testing only to those who required hospital treatment for symptoms of COVID-19. Although most patients appear to exhibit a mild form of COVID-19 and recover without hospital treatment, groups at risk of serious complications include those aged 70 and over and those with underlying health conditions. As of 17 July 2020, 293,239 people have tested positive for the virus in the UK and 45,233 COVID-19 patients (15.4% of those who tested positive) have died.¹

The effective management of COVID-19 in the UK depends in part on public compliance with guidance from Public Health England (PHE) that people limit physical contact with others by self-isolating and working from home. The UK population is of course diverse and people from distinct age groups and socio-economic backgrounds and with different levels of mental health may react differently to the emerging pandemic (Jaspal et al., 2020). They may have differing social, economic, and psychological abilities to comply with PHE guidance. Psychological variables, such as political trust, fear of COVID-19, and strength of social network are key, since they determine how people feel about COVID-19, the social support they perceive to be available, and their level of trust in the guidance issued by the authorities. Moreover, psychological and behavioural responses to the pandemic, such as compulsive buying, which has been observed since the start of the pandemic, have significant implications for both disease management and wellbeing in the UK population (Kellett & Bolton, 2009).

Accordingly, in a sample of UK adults, this study examines differences between key socio-demographic groups and the impact of strength of social network, political trust, and fear of COVID-19 on working from home (a key social distancing behaviour) and compulsive buying.

1.1. Political trust

As a key source of information and guidance concerning the pandemic and its mitigation strategies, political institutions become focal points during health crises (Cheung & Tse, 2008). Decreased trust can give rise to anxiety and panic in relation to the hazard (Hier, 2003). Political trust is a significant psychological construct which may determine how members of the public think about the guidance regarding COVID-19 issued by the authorities. There has been constructive scrutiny of government policy in relation to COVID-19 (e.g., Oliver, 2020), which may inadvertently feed into public scepticism and mistrust (Jolley & Lamberty, 2020)—especially in an era of “information overload” (Kar, 2020). A previous study has shown that political trust during the SARS epidemic was negatively associated with anxiety because it tends to provide psychological stability amid situational instability (Cheung & Tse, 2008). However, in the absence of political trust, fear of COVID-19 may increase and individuals may seek alternative, potentially less effective strategies for coping.

1.2. Fear of COVID-19

When major societal challenges, such as pandemics, arise, fear is a common emotional and physiological reaction (Ahorsu et al., 2020; Towers et al., 2015), but it can be psychologically distressing (Shultz et al., 2016). This negative emotion may be especially acute among people with pre-existing mental health issues, such as depression and anxiety (O'Connor et al., 2002), who may also have a proclivity to be distrustful of others, including the government (Lindström & Mohseni, 2009). Fear may drive behaviour while having a “contagion effect” on others (Lara et al., 2012; Towers et al., 2015).

Fear can lead people to adopt preventive behaviours with possible implications for infection management (Witte & Allen, 2000) but, when excessive, it can also lead to inertia and engagement in risk behaviours, including compulsive buying (Witte & Allen, 2000). Stimuli such as news reporting which specify the hazard without clearly describing pathways for action, “alarmist” discourse, and mortality salience can have an adverse impact on behaviour (Kosloff et al., 2006; O’Neill & Nicholson-Cole, 2009). Furthermore, when political trust is low during a health crisis, people may experience decreased psychological wellbeing in relation to the hazard (Cheung & Tse, 2008). As a psychological variable, fear is thus likely to be relevant to understanding public responses to COVID-19.

1.3. Social distancing and working from home

The policy of social distancing is key to reducing the incidence of COVID-19 and, accordingly, people are being instructed to work from home where possible. This is different from the psychological construct of social isolation, whereby people have reduced interpersonal contact of any kind, and which is associated with negative health outcomes (Cacioppo & Hawkley, 2003; Courtin & Knapp, 2017).

Moreover, vulnerable groups in society may be less able to work from home, such as older people who are more likely to perceive their job security as poor (Eichhorst & Tobsch, 2017; Hank & Erlinghagen, 2011), and low-paid workers who are at higher risk of subordination and abusive supervision in the workplace (Lopes et al., 2019b). Social isolation, which may be exacerbated by social distancing, can increase feelings of loneliness, that is, the subjective perception of being disconnected and isolated from others (Gierveld, 1998). Conversely, a robust social network may provide the motivation and support necessary to engage in social distancing (including working from home) effectively and with more favourable outcomes for psychological wellbeing (Reblin & Uchino, 2008). Since social isolation precludes the derivation of social support from others to undertake challenging activities (such as social distancing), it may lead people to engage in alternative maladaptive coping strategies, such as compulsive buying.

1.4. Compulsive buying

Compulsive buying constitutes an extreme and maladaptive cognitive and behavioural proclivity towards uncontrollable retail activity—often in response to threatening societal challenges (Kellett & Bolton, 2009). Health crises, such as epidemics and pandemics, can constitute a key trigger for compulsive buying (which is also referred to as “panic buying”). This has been noted in the UK and elsewhere in relation to the COVID-19 pandemic (e.g., Hall, 2020) but was also observed during the SARS epidemic (Zhong & Zeng, 2006).

Although often conceptualised as a disorder in the clinical literature (Kellett & Bolton, 2009), compulsive buying may be a self-protective measure in the face of fear and uncertainty associated with COVID-19. This is consistent with the cognitive-behavioural model of compulsive buying which suggests that internal and external triggers associated with the pandemic (e.g., fear of COVID-19) may increase compulsive buying (Kellett & Bolton, 2009). Like fear, compulsive buying may be especially acute in people with pre-existing mental health problems who use it as a coping strategy (Gallagher et al., 2017). However, it can also have negative economic and psychological consequences, such as financial problems and negative affect, including guilt, remorse, and anxiety (Kellett & Bolton, 2009). Furthermore, compulsive buyers are more likely to engage in secrecy and concealment, potentially increasing feelings of social isolation (Weinstein et al., 2016). There is also a broader societal challenge associated with compulsive buying in the context of a pandemic—it can result in increased public anxiety when there is a perceived shortage of vital goods, and this shortage can in turn have a disproportionate adverse impact on more vulnerable groups in society, such as older people (Carrick, 2020).

Drawing on the cognitive-behavioural model of compulsive buying, the hypothesis that stress-inducing events, such as COVID-19, are associated with increased compulsive buying is examined. Compulsive buying does not appear to be very prevalent in the general population (Black, 2007), but it

does appear to increase in situations of uncertainty. In response to COVID-19, people have been engaging in compulsive buying, targeting packs of antibacterial wipes and toilet roll and bottles of hand sanitisers, in particular (Hall, 2020). Compulsive buying is an important variable in the context of COVID-19 because it can increase not only fear and anxiety but also the risk of further infections given the frequent trips to supermarkets and, thus, contact with other people in relatively small spaces.

1.5. Hypotheses

- (1) There is a negative relationship between age and income and working from home, with older and lower-income groups being less likely to work from home in response to COVID-19.
- (2) People with a diagnosed mental health disorder exhibit less political trust, more fear of COVID-19, and more compulsive buying than those with no diagnosed mental health disorder.
- (3) In line with research that suggests that perceived COVID-19 symptomatology is a vulnerability factor associated with depressive symptomatology in the context of COVID-19 (see Shevlin et al., 2020), it is hypothesised that people reporting COVID-19 symptomatology have been in self-isolation for longer and exhibit more compulsive buying than those with no symptomatology.
- (4) In line with the vulnerability x stress model (Kellett & Bolton, 2009), it is expected that vulnerabilities like age, having a diagnosed mental health disorder, having COVID-19 symptomatology and strength of social network impact on working from home and compulsive buying, and that these relationships are mediated by the social psychological variables of political trust, fear of COVID-19 and length of self-isolation.

2. Method

2.1. Ethics

This study was granted ethics approval from the College of Business, Law and Social Sciences' Research Ethics Committee at Nottingham Trent University.

2.2. Participants

A sample of 411 participants in the UK was recruited on *Prolific*, an online recruitment platform, and completed a survey on social isolation and compulsive behaviour in response to COVID-19. Participants were aged between 18 and 76 ($M = 44.85$, $SD = 15.38$). There was an even distribution of men ($N = 202$, 49%) and women ($N = 206$, 50%). Most participants reported British citizenship ($N = 375$, 91.2%), and White British ethnicity ($N = 301$, 73.2%). There was a fairly even distribution of income groups in the sample. See Table 1 for a more detailed description of the participant sample.

2.3. Instruments

First, participants responded to a series of demographic questions including whether or not they had been diagnosed with a mental health disorder (yes vs. no) and, if so, to describe the disorder and to indicate whether or not they were receiving treatment for it (yes vs. no). Participants then completed the Trust in Politicians and the Trust in the Political System scales (Mutz & Reeves, 2005) which consisted of 12 items (e.g., "Politicians generally have good intentions", $\alpha = .93$). Participants indicated their level of agreement on a five-point scale (1 = strongly disagree, 5 = strongly agree). They then indicated whether (yes vs. no) and, if so, for how long they had been in self-isolation due to COVID-19 on a six-point scale (1 = less than 1 week, 6 = more than 4 weeks). Similarly, they indicated whether (yes vs. no) they had been working from home due to COVID-19 and, if so, for how long using the same scale. Next, they completed the Lubben Social Network Scale (Lubben et al., 2006), consisting of 6 items (e.g., "How many times do you see or hear from [family/friends] at least once a month?", $\alpha = .82$), to indicate the strength of their social network on a five-point scale (0 = never, 5 = nine), with lower scores indicating social isolation.

At this point, participants indicated whether or not they were displaying COVID-19 symptomatology (dry cough, fever) (yes vs. no) and whether or not they thought they had caught the disease (yes vs.

Table 1. Socio-demographic characteristics of the participant sample

Ethnicity	White British	White Other	Any other Asian	African	Any other Mixed/Multiple background	White and Black Caribbean	Any other ethnic background	Pakistani	White and Asian	Caribbean
	N = 301 73.2%	N = 31 7.5%	N = 30 7.3%	N = 10 2.4%	N = 10 2.4%	N = 7 1.7%	N = 7 1.7%	N = 6 1.5%	N = 4 1%	N = 3 0.7%
Religion	Non-religious	Christians	Muslims	Other	Hindu	Sikh	Jewish	Buddhist		
	N = 240 58.5%	N = 133 32.4%	N = 18 4.4%	N = 9 2.2%	N = 5 1.2%	N = 3 0.7%	N = 2 0.5%	N = 1 0.2%		
Relationship status	Single	Married	Monogamous relationship	Other type	Engaged	Civil partnership	Open			
	N = 127 30.9%	N = 164 39.9%	N = 71 17.3%	N = 22 5.4%	N = 15 3.6%	N = 11 2.7%	N = 1 0.2%			
Income	Less than £10,000	£10,000 to £14,999	£15,000 to £19,999	£20,000 to £24,999	£25,000 to £29,999	£30,000 to £34,999	£35,000 to £39,999	£40,000 to £50,000	More than £50,000	
	N = 86 20.9%	N = 53 12.9%	N = 56 13.6%	N = 52 12.7%	N = 43 10.5%	N = 31 7.5%	N = 25 6.1%	N = 29 7.1%	N = 36 8.8%	
Education	Undergraduate Degree (e.g., BSc.)	A Levels	GCSE/O Level	Postgraduate Degree (e.g., M.A.)	PhD	Primary School				
	N = 167 40.6%	N = 97 23.6%	N = 74 18%	N = 53 12.9%	N = 15 3.6%	N = 5 1.2%				

no). Next, they were asked to indicate the frequency with which they think and talk about COVID-19 in a day (2 questions) on a four-point scale (1 = not at all, 4 = more than 5 times). They then completed the Fear of COVID-19 Scale (Ahorsu et al., 2020), consisting of 10 items (e.g., ‘I am most afraid of COVID-19’ $\alpha = .86$) and indicated their level of agreement with each statement on a five-point scale (1 = strongly disagree, 5 = strongly agree). Finally, they completed the Compulsive Behaviour Scale (Edwards, 1993), which was adapted to the COVID-19 context and administered to participants while asking them to think about the pandemic. The adapted scale consisted of 22 items (e.g., “I buy things when I do not need anything”, $\alpha = .92$), and indicated the extent to which each statement applies to them on a five-point scale (1 = not at all, 5 = totally applies).

3. Results

3.1. Descriptive statistics

See Table 2 for full descriptive statistics for the main variables.

3.1.1. Means and standard deviations of key variables

The mean and standard deviations for key variables were as follows: length of self-isolation ($M = 1.81$, $SD = .98$), suggesting that on average people have been self-isolating for one week; length of time working from home ($M = 1.83$, $SD = 1.21$), indicating similarly that on average people have been working from home for a week; strength of social network ($M = 21.89$, $SD = 6.61$), indicating moderate social isolation; frequency of thinking about COVID-19 ($M = 3.24$, $SD = .84$), showing that on average people in the UK think about COVID-19 at least 3–5 times a day and 205 (50%) participants think about it >5 times a day; talking about COVID-19 in a day ($M = 2.94$, $SD = .88$), suggesting that on average people in the UK talk about COVID-19 3–5 times a day; fear of COVID-19 ($M = 25.66$, $SD = 7.55$), suggesting moderate to high fear; political trust ($M = 36.33$, $SD = 8.89$), suggesting moderate political trust; and compulsive buying ($M = 38.94$, $SD = 14.91$), indicating relatively low levels of compulsive buying.

3.1.2. Diagnosis of mental health disorder

Most participants ($N = 348$, 84.7%) reported no diagnosis with a mental health disorder, while 59 (14.36%) did. Of these 59 individuals, 50 (84.75%) reported receiving treatment for the disorder while nine (15.25%) reported receiving none. The most commonly reported disorders were depression and/or anxiety ($N = 39$, 66.2%).

Table 2. Descriptive statistics for the key variables of this study

	Mean	SD	Minimum	Maximum
Age	48.85	15.38	18	76
Social network	21.89	6.61	6	36
Length of self-isolation	1.81	.98	1	6
Length of working from home	1.83	1.21	1	6
Fear of COVID-19	25.67	7.55	10	50
Political trust	36.33	8.89	15	60
Compulsive buying	38.94	14.91	22	104
Frequency of watching/reading news about COVID-19 in a day	2.77	.84	1	4
Frequency of thinking about COVID-19 in a day	2.94	.88	1	4

3.1.3. Self-isolation and working from home

Most participants reported being in self-isolation due to COVID-19 ($N = 370$, 90%) while 41 (10%) people were not. The majority ($N = 192$, 47.2%) had been self-isolating for less than a week, 129 (31.4%) for 1 week, 70 (17.2%) for 2 weeks, 9 (2.2%) for 3 weeks, 1 (.2%) for 4 weeks and 6 (1.5%) for more than 4 weeks. There was an even distribution of those working from home due to COVID-19 ($N = 205$, 49.9%) and those not working from home ($N = 206$, 50%).

3.1.4. COVID-19 symptomatology

The majority of the sample did not report COVID-symptomatology (dry cough, fever) ($N = 360$, 87.6%) while 41 (12.4%) did. The vast majority believed that they had not caught COVID-19 ($N = 390$, 94.9%) while only 21 (5.1%) believed themselves to have caught it.

3.2. Normality checks

Kolmogorov–Smirnov (K-S) tests showed that all variables were normally distributed except for compulsive buying [$D(411) = 4.29$, $p < .001$]. Transformations were applied to correct this issue.

3.3. Effects of income on working from home

A chi-squared test bootstrapped at 1000 samples was performed to look at the relationship between different income groups on working from home vs. not working from home. It showed that income groups had an effect on working or not working from home $\chi^2(1,411) = 39.731$, $p < .001$, Cramer's $V = .311$, $p < .001$.

Higher-income groups were more likely to be working from home than the lower-income groups. Indeed, 59 (28.6%) participants in the lowest income group of $<£10,000$ reported not working from home; as did 31 (15%) of the $£10,000–14,999$ income group; 38 (18.4%) of the $£15,000–19,999$ income group; 21 (10.2%) of the $£20,000–24,999$ income group; 18 (8.7%) of the $£25,000–29,999$ income group, compared to just 12 (5.8%) participants in the $£30,000–34,999$ income group; 8 (3.9%) people in the $£35,000–39,999$ income group; 8 (3.9%) people in the $£40,000–50,000$ income group; and only 11 (5.3%) participants in the $>£50,000$ income group. This supports hypothesis 1.

3.4. Effects of having a diagnosed mental health disorder (vs. having no diagnosed mental health disorder) on key variables

Independent samples t -tests bootstrapped at 1000 samples showed statistically significant differences between those who had a diagnosed mental health disorder vs. those who did not for political trust [$t(402) = 2.213$, $p = .030$, $d = 0.3$; 95% CIs (.45202, 5.93609)]; fear of COVID-19 [$t(-2.166)$, $p = .031$; $d = 0.3$, 95% CIs (-4.55936, -0.04266)] and for compulsive buying [$t(402) = -4.938$, $p < .001$, $d = 0.7$; 95% CIs (-15.37426, -6.61162)].

People with a diagnosed mental health disorder showed much less political trust ($M = 33.68$, $SD = 10.27$) than people without a diagnosis ($M = 36.81$, $SD = 8.63$). Conversely, people with no diagnosed mental health disorder showed much less fear of COVID-19 ($M = 25.34$, $SD = 7.35$) than people with a diagnosis ($M = 27.63$, $SD = 8.19$). People with a diagnosed mental health disorder also showed much more compulsive buying ($M = 48.11$, $SD = 16.17$) than those with no diagnosis ($M = 37.11$, $SD = 13.57$) for compulsive buying. This result supports hypothesis 2.

3.5. Effects of having COVID-19 symptomatology on key variables

Independent samples t -tests bootstrapped at 1000 samples showed statistically significant differences between those with COVID-19 symptomatology vs. those with no symptomatology for compulsive buying [$t(402) = 2.107$, $p = .035$; $d = 0.3$; 95% CIs (.64985, 8.34441)] and for length of self-isolation [$t(402) = 2.405$, $p = .019$, $d = 0.4$; 95% CIs (.04806, 5.8249)].

People with COVID-19 symptomatology showed much more compulsive buying ($M = 42.74$, $SD = 13.55$) and had been in self-isolation for longer ($M = 2.14$, $SD = .90$) than people with no

symptomatology ($M = 38.15$, $SD = 13.54$ for compulsive buying and $M = 1.81$, $SD = .79$ for self-isolation). These results support hypothesis 3.

3.6. Correlations

Pearson Product-Moment correlations are presented in full in Table 3. First, age correlated positively with political trust and reporting COVID-19 symptomatology; but negatively with compulsive buying and with working from home. Second, income correlated positively with political trust, frequency of talking about COVID-19 in a day, and working from home; and negatively with length of self-isolation. Third, strength of social network was positively associated with political trust, frequency of talking and thinking about COVID-19 in a day, and working from home. Fourth, political trust was positively associated with length of self-isolation and negatively associated with compulsive buying. Fifth, frequency of thinking about the COVID-19 was strongly associated with frequency of talking about COVID-19 in a day and with fear of COVID-19. Sixth, fear of COVID-19 was positively associated with compulsive buying. Seventh, length of self-isolation was positively associated with working from home.

3.7. Structural equation model

Since there were effects of income on working from home or not and age; and of having a diagnosed mental health disorder or not (dummy coded as 0 = No vs. 1 = Yes); strength of social network; and reporting COVID-19 symptomatology (dummy coded as 0 = No vs. 1 = Yes) on compulsive behaviours, these variables were inserted as the main predictors followed by mediation variables of political trust, length of social isolation, and fear of COVID-19. The variables of compulsive behaviours, and working from home (dummy coded as 1 = Yes vs. 0 = No) were inserted as dependent variables. The structural equation model was statistically significant $\chi^2(30, 441) = 52,816$ $p = .006$. Model fit was good with a Root Mean Square Error of Approximation (RSMEA) of .06 and a Tucker–Lewis Index (TLI) = .95 and a Confirmatory Factor Index (CFI) = .88; Normed Fit Index (NFI) = .90 (see Figure 1).

First, concerning the dependent variable of working from home, the model showed that income and age both had statistically significant direct effects on the variance of working from home [$\beta = .30$, $S.E. = .015$, $p < .001$ for income; $\beta = .16$, $S.E. = .003$, $p < .001$ for age]. This suggested that lower-income groups and older age groups are more likely not to be working from home.

There were also indirect effects. Age, income and having a diagnosed mental health disorder had direct effects on the variance of political trust [$\beta = .18$, $S.E. = .027$, $p < .001$ for age; $\beta = .12$ $S.E. = .140$, $p = .010$ for income; $\beta = -.10$, $S.E. = 1.18$, $p = .049$ for having a diagnosis of mental health disorder]. Political trust in turn had a statistically significant effect on the variance of length of self-isolation with a $\beta = -.09$, $S.E. = .004$, $p = .049$. The length of self-isolation then had a statistically significant impact on the variance of working from home with a $\beta = .13$, $S.E. = .056$, $p = .005$. This meant that older people and people with higher income and people who had not reported a diagnosis of mental health disorder had more political trust. More political trust is then associated with low duration of self-isolation, which in turn is then associated with not working from home.

Moreover, reporting COVID-19 symptomatology had a statistically significant direct effect on the variance of the length of self-isolation with a $\beta = .14$, $S.E. = .060$, $p = .005$. Length of self-isolation in turn impacted on the variance of working from home with a $\beta = .13$, $S.E. = .056$, $p = .005$. This suggested that reporting COVID-19 symptomatology is related to longer self-isolation, which in turn is associated with working from home.

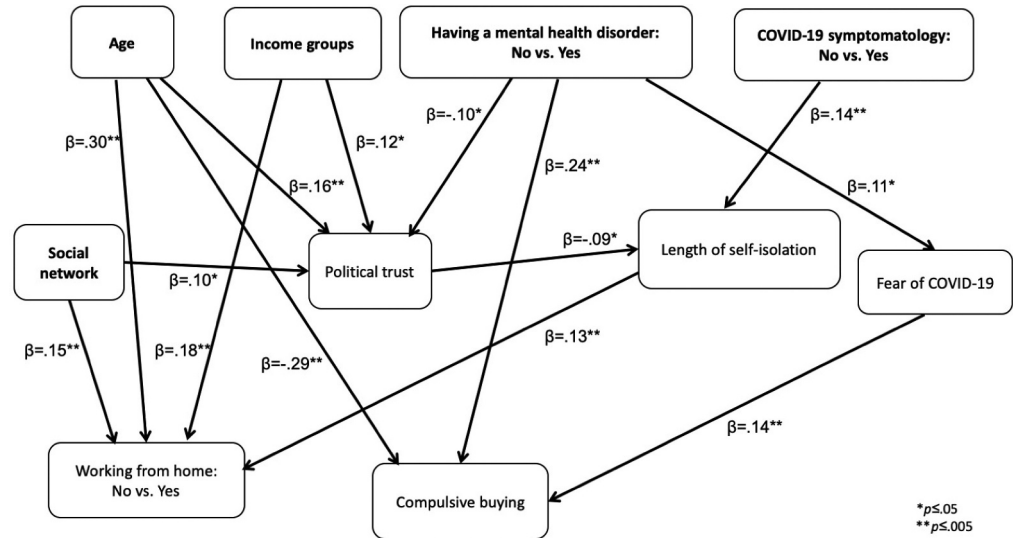
Moreover, strength of social network had a statistically significant direct effect on the variance of working from home with a $\beta = .15$, $S.E. = .007$, $p < .001$. It also had indirect effects on this variable. First, it impacted on the variance of political trust with a $\beta = .10$, $S.E. = .064$, $p = .034$, which in turn was associated with length of self-isolation with a $\beta = .09$, $S.E. = .004$, $p = .049$. Length of self-isolation finally impacted on the variance of working from home with a $\beta = .13$, $S.E. = .056$, $p = .005$. This suggested that

Table 3. Correlations between the key variables

	1	2	3	4	5	6	7	8	9	10	11	12
1.Age		.06	.12*	.18**	-.15**	.09	-.02	-.06	-.00	.19**	.02	-.31**
2.Income	.06		-.06	.05	.28**	-.04	.10*	-.10*	.02	.14**	-.06	-.08
3.Diagnosed mental health disorder	.12*	-.06		-.07	.10*	.02	.03	.05	-.09	-.13**	.11*	.28**
4.COVID-19 symptomatology	.18**	.05	-.07		.04	.04	.13*	.14**	.05	.04	-.09	.11*
5.Working from home	-.15**	.28**	.10*	.04		.04	.09	.10*	.16**	.08	.06	.01
6.Frequency thinking about COVID-19	.09	-.04	.02	.04	.04		.60**	.03	.15**	.02	.33**	.05
7.Frequency talking about COVID-19	-.02	.10*	.03	.13*	.09	.60**		-.03	.27**	.07	.30**	.08
8.Length of self-isolation	-.06	-.10*	.05	.14**	.10*	.03	-.03		-.03	-.10*	.08	-.01
9.Social network	-.00	.02	-.09	.05	.16**	.15**	.27**	-.03		.11*	-.02	-.03
10.Political trust	.19**	.14**	-.13**	.04	.08	.02	.07	-.10*	.11*		.01	-.10*
11.Fear of COVID-19	.02	-.06	.11*	-.09	.06	.33**	.30**	.08	-.02	.01		.16**
12.Compulsive buying	-.31**	-.08	.28**	.11*	.01	.05	.08	-.01	-.03	-.10*	.16**	

*p <.050; **p <.005

Figure 1. Structural equation model depicting relationships between the independent variables (age, income, strength of social network, having a diagnosed mental health disorder, COVID-19 symptomatology) and the outcome variables (working from home and compulsive buying) with the mediators of political trust, length of self-isolation and fear of COVID-19.



a stronger social network leads to greater confidence in political institutions, which in turn leads to the endorsement of official guidance concerning self-isolation and indeed working from home.

Second, concerning the dependent variable of compulsive buying, there were statistically significant direct effects of age and having a diagnosed mental health disorder on the variance of compulsive buying [$\beta = -.29$, S.E. = .043, $p < .001$ for age; $\beta = .24$, S.E. = 1.84, $p < .001$ for having a diagnosed mental health disorder, respectively]. This suggested that older people are less likely to engage in compulsive buying but that having a diagnosed mental health disorder predisposes people to more compulsive buying.

There were indirect effects as well. Having a mental health disorder had a direct impact on the variance of fear of COVID-19 with a $\beta = .11$, S.E. = 1.03, $p = .022$, which then had a direct effect on the variance of compulsive buying with a $\beta = .14$, S.E. = .088, $p = .003$. This meant that having a mental health disorder is associated with more fear of COVID-19, which in turn is associated with more compulsive buying in the context of COVID-19.

4. Discussion

COVID-19 is being described as one of the most significant challenges that the UK has faced since the end of the Second World War. The pandemic is the focus of media reporting, public health messages and there have been daily government briefings on its progression. It is understandable that people in our sample are frequently thinking and talking about COVID-19 (Jaspal & Nerlich, 2020). Although thinking and talking about COVID-19 increases the likelihood of action in relation to it, our study shows that cognition relating to the pandemic is characterised by fear, which may be attributed to the nature and content of reporting in relation to COVID-19 (Sugimoto et al., 2013).

It is vitally important that individuals are exposed to accurate public health messaging, which summarises the scientific facts, but which also specifies clear, coherent, and achievable patterns of behaviour that can be undertaken by every individual in response to the pandemic. This may have an empowering effect and, thus, reduce levels of fear (O'Neill & Nicholson-Cole, 2009). Although most people reported self-isolating, only half reported working from home (a key social distancing behaviour). Furthermore, levels of compulsive buying in the sample were relatively low but our study suggests that there are some factors that increase the risk of engaging in such behaviours. On the whole, people

reporting COVID symptomatology appeared to be compliant with government guidance to self-isolate but they also more likely to engage in compulsive buying than those without symptoms.

The results demonstrate that some groups in the UK population may be vulnerable to poor social, psychological, and physical health outcomes as a result of the COVID-19 pandemic. The results show that older people and people with lower income are less likely to be working from home. Previous research has demonstrated that both older people and those with lower income levels are less likely to perceive job security (Hank & Erlinghagen, 2011), which in turn may lead them to endure risks such as going to work despite the threat of COVID-19 (Lee et al., 2017). Moreover, there is evidence that lower-paid workers in the UK are at higher risk of coercive supervision by superiors, paranoid cognition, and poor mental health outcomes which too may lead to anxiety about job security (Lopes et al., 2019a, 2019b), and continuing to go to work (despite government guidance to work from home) may be construed as a strategy for safeguarding job security.

Furthermore, given that people with lower income levels are less likely to be thinking and talking about COVID-19 than those with higher income levels, it is possible that they have limited exposure to government guidance about self-isolation and the importance of working from home where possible. Regardless of the psychological underpinnings of not working from home, those who do not do so are at higher risk of contracting COVID-19 and of transmitting it to others. Our results suggest that inequalities in society (in relation to older age and low income) may impinge on the progression of the pandemic, affecting some groups more than others.

In a similar vein, the results suggest that another marginalised group in society may be at risk of poor outcomes—people with a diagnosed mental health disorder (such as depression and anxiety). There is a relatively high prevalence of depression and anxiety in the UK (Baker, 2020). Moreover, a study of 4596 UK workers revealed a 54% prevalence of poor mental health in this key population (Lopes et al., 2019b). Thus, people with poor mental health constitute a significant group in the UK. In our study, people with a diagnosed mental health disorder exhibited lower levels of political trust than those without a diagnosis and were more likely to engage in compulsive buying in response to the COVID-19 pandemic. In view of their decreased political trust, people with poor mental health may be less likely to follow government guidance about self-protection and may be more reliant on other strategies for self-protection, such as compulsive buying (Scholz & Lubell, 1998). Although compulsive buying is already especially prevalent in those with underlying mental health conditions (Kellett & Bolton, 2009), as the cognitive behavioural model suggests, this maladaptive behaviour may be accentuated in the face of societal challenges, such as the COVID-19 pandemic. The results suggest that people in this vulnerable group in society may require particular support to enable them to cope more effectively with the threat of the pandemic.

People who have a strong social network (and are thus less socially isolated) are more likely to be working from home and, thus, to be adherent to the social distancing policy. Furthermore, this relationship is mediated by political trust and length of self-isolation in that those with a stronger social network exhibit higher levels of political trust and have been self-isolating for longer, as per government guidance to do so. Indeed, it has been found that a strong connection with relevant social groups can provide access to information (Moscovici, 1988), but also motivation, social support, and increased psychological wellbeing in the face of adversity (Sani et al., 2012; Terry et al., 1999). Therefore, having a strong social network—particularly at a time of enforced self-isolation—appears to be psychologically beneficial and conducive to better behavioural outcomes in the context of a pandemic. It is important to continue to combat social isolation—especially in the most vulnerable groups in society, such as older people, people of lower socio-economic status, and those with mental health issues (Dickens et al., 2011). Amid COVID-19, socially isolated individuals exhibit poorer outcomes and may be at especially high risk of adversity.

The structural equation model sheds light on the role of the social psychological variables of political trust and fear of COVID-19 in explaining social distancing and compulsive buying behaviours. Political trust is a key mediating variable of the relationship between the demographic variables (income, and mental health diagnosis) and working from home. People with higher income, those with no diagnosed mental health disorder and those with a stronger social network exhibit higher levels of political trust, which in turn makes them more likely to comply with government guidance to self-isolate for a longer period and, thus, to be working from home. Conversely, fear of COVID-19 was associated with compulsive buying behaviours, which is consistent with the cognitive-behavioural model (Kellett & Bolton, 2009). Participants with a diagnosed mental health disorder were more susceptible to fear of COVID-19 than those with no diagnosis, which suggests that this a group in the UK population which may require special support in order to cope effectively. However, it is noteworthy that the mean score for fear was moderate to high in the sample, suggesting that fear is a widespread factor, possibly due to the nature and content of media reporting about the pandemic, and one that appears to underpin the maladaptive behaviour of compulsive buying in the context of COVID-19.

The management of the COVID-19 outbreak in the UK has proven to be challenging. The incidence of COVID-19 and the mortality rate have been unacceptably high. This study shows that different groups in the diverse UK society exhibit varying levels of adherence to social distancing (a key preventive behaviour) and compulsive buying (a maladaptive behaviour), that these behaviours have clear social and psychological underpinnings (such as having a strong social network, political trust, and fear of COVID-19), and that only an effective understanding of these social and psychological underpinnings will enable us to manage the outbreak. Social psychological analyses must be at the forefront of public health interventions to reduce the incidence and negative sequelae of COVID-19.

Funding

The authors received no direct funding for this research.

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Citation information

Cite this article as: Predicting social distancing and compulsive buying behaviours in response to COVID-19 in a United Kingdom sample, Rusi Jaspal, Barbara Lopes & Pedro Lopes, *Cogent Psychology* (2020), 7: 1800924.

Note

1. [https://coronavirus.data.gov.uk/Accessed 17 July 2020](https://coronavirus.data.gov.uk/Accessed%2017%20July%202020).

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