Swansea University
Prifysgol Abertawe

Cronfa
Setting Research Free

Cronfa - Swansea University Open Access Repository

_____

This is an author produced version of a paper published in:
Information Systems Frontiers

Cronfa URL for this paper:
http://cronfa.swan.ac.uk/Record/cronfa37734

_____

Paper:

_____

Mohammad Alamgir Hossain[*]
School of Business IT and Logistics, RMIT University, Australia
Telephone: 61399251477
mohammad.hossain@rmit.edu.au

Yogesh K. Dwivedi
Emerging Markets Research Centre (EMaRC), School of Management, Swansea University, UK
Telephone: (01792) 602340
Email: y.k.dwivedi@swansea.ac.uk

Caroline Chan
School of Business IT and Logistics, RMIT University, Australia
Telephone: 61399255808
Email: caroline.chan@rmit.edu.au

Craig Standing
School of Business and Law, Edith Cowan University, Australia
Telephone: 61863045545
Email: c.standing@ecu.edu.au

Abdus-Samad Olanrewaju
School of Business IT and Logistics, RMIT University, Australia
Email: Abdus-Samad.Olanrewaju@rmit.edu.au

Abstract

Human's decision making is not necessarily always planned; their unplanned behaviour—determined by natural personality traits—also contributes to the decision making process. In this study, we investigate factors related to planned and unplanned behaviour to understand why people share political content in online social media. Based on an online survey of 257 social media users, our results demonstrate that the factors representing both planned (i.e., perceived social recognition and altruistic motivation) and unplanned behaviour (i.e., extroversion and impulsiveness) affect people's political content sharing behaviour. Our study also identifies that sharing political content is not like sharing other forms of content such as tourist attractions—the former can provoke serious punishment in some countries. Accordingly, trait impulsiveness is negatively associated with political content sharing behaviour. We also found that collective opinion moderates people's planned behaviour, but not their unplanned behaviour. In other words, personality traits are unaffected by others' opinions, but traits that humans can control can be shaped by others'.

Keywords: *political content, social media, planned and unplanned/automatic behaviour, collective opinion*

---

[*]Corresponding author

1. Introduction

'Technology is quickly changing social structures, and has already broken down many barriers for freedom' (Freddy Brugmans and Dis 2013, p. 45). Millions of people visit online social media and social networking sites (hereinafter 'social media'), and thus social media have become an important channel for sharing content (Dwivedi et al. 2015a). Social media has proved itself a strong enabler for changing political structures. Roughly one-in-five social media users have changed their minds about a political issue, because of something they saw on social media (Duggan and Smith 2016). Practical examples can be seen from Egypt, Thailand, Syria and Libya, where political content was consumed and shared very rapidly by large numbers of people (Starbird and Palen 2012; Bruns et al. 2013; Kapoor et al. 2017). While social media is an easy and rapid way of disseminating and consuming political content (Kapoor and Dwivedi 2015), sharing political content online often comes at a price. In social media, an innocent person can 'follow', 'like' or share political content without necessarily supporting the ideology of the content, and thus is vulnerable to prosecution. In December 2015, a man was arrested in Thailand for 'liking' a doctored photograph of the King (now deceased) and sharing it with 'friends' on Facebook; he could be jailed for 32 years (Bhutia 2015). In Palestine, in 2013, a man was jailed for 'liking' a social media post because the post was deemed hostile towards a politician (Russian Times 2013). Further, in Russia, a man was sentenced to a two-year jail term for sharing a post from a Ukrainian nationalist and 'inciting hatred' towards Russians (Nataliya 2016). In Saudi Arabia, penalties as extreme as execution exist for those who 'spread rumours' (but not necessarily produce them) about the government on social media and 'cause confusion in societies' (Akbar 2015). The list of similar incidents grows every day. Therefore, media experts have been advising people to refrain from sharing 'sensitive content' on social media due to the possibility of this type of sharing leading to the loss of friends (Antczak 2016; Duggan and Smith 2016), or the possibility of imprisonment (Legal Aid 2016).

Unlike traditional print media, technological advances (e.g., Web 2.0) can make people changing their role from passive recipient to active producer/disseminator of data in online social media. A recent literature review by Kapoor et al. (2017) claim that social media is extensively used for sharing user-generated political news. Both sharing of political content in online social media and the ugly consequences of sharing are growing (Shiau et al. 2017). 'Thirty-seven per cent of Internet users have contributed to the creation of news, commented about it, or disseminated it via postings on social media sites like Facebook or Twitter' (Purcell et al. 2010, p.4). Similarly, Duggan and Smith (2016) claim that at least one-third of social media users discuss, comment or post about politics or government on these platforms. Anecdotes such as those presented above suggest that law enforcement agencies may punish not only content creators but also people who share the content directly and indirectly (through 'likes' or comments on the post). But what makes people share content in social media? Is it something people plan beforehand, or do they do it on a whim? i-Scoop (n.d.) admits: 'This is a very complicated question because there are so many factors that weigh into a decision to share content'. There is no clear answer in the literature either, although there is consensus that people share content in social

media mainly for two reasons: (a) to be seen as 'cool' or expert, to demonstrate enthusiasm and so on—perceived social recognition (PSR); and (b) to help someone who would benefit from the content—altruism. These two behaviours are mostly 'planned', meaning that the effect (e.g., enhanced image) is considered before sharing. However, scholars have identified that not only planned but 'unplanned' factors are critical in sharing knowledge. For example, Gulev (2009) identified that although the planned setting cannot guarantee a knowledge sharing culture, impulsive behaviour does 'push' it. Notwithstanding the vast body of research on planned behaviour in social media use (Ngai et al. 2015), there is a dearth of research on unplanned behaviour, particularly in the context of content sharing. Hence, it is imperative that researchers explore the content sharing behaviour of individuals in social media by examining both planned and unplanned determinants. Accordingly, to gain a better understanding of why people share political content in online social platforms, we introduce the perspective of planned and unplanned behaviour as a theoretical framework.

Most social cognitive theories, including the Theory of Planned Behaviour (TPB) (Ajzen 2012), hold that every action taken by individuals is based on their cognitive judgements; individuals are capable of perfectly weighing the costs and benefits before making a decision. For instance, customers buy a product on the basis of the perceived difference between the price and the perceived utility of the product. Similarly, people use a technology based on the difference between the complexity and the usefulness of the technology. However, taking evidence from literature, Sniehotta et al. (2014) demonstrate that "[TPB] theory has been criticised for its exclusive focus on rational reasoning, excluding unconscious influences on behaviour (p. 2). For many other reasons, hence, "TPB has lost its utility. … It is no longer a plausible theory of behaviour or behaviour change and should be allowed to enjoy its well-deserved retirement" Sniehotta et al. (2014, p. 4); it rather should incorporate variables related to both reflective as well as impulsive behaviour. In other words, although TPB remains valid for reasonable cases, it does not necessarily guarantee that 'acceptance' will occurs at all, or at even most of the times, in a planned way because people often do things in an unplanned manner (S. C. Park et al. 2016). They actually use both their conscious and sub-conscious minds while making a decision. That is, there are two modes of thinking: one is planned (reflective, rational and cognitive) while the other is unplanned (instinctive and automatic) (Kahneman 2011; Thaler and Sunstein 2009). Planned behaviour is a goal-directed phenomenon, whereas unplanned/impulsive behaviour is goal interpreted (Strack and Deutsch 2006). In the online media context, planned behaviour explains how people participate in online social platforms using a structured thinking process, whereas unplanned behaviour may help to explain why individuals perform some actions without proper planning.

In this study, political content is defined as material that 'relates to political organisations, political parties, political issue advocacy or fundraising, and individual candidates and politicians' (Google Adwords 2017). Such content includes statuses, posts, news, criticism and humour. 'Behaviour' is related to posting and/or sharing content, and/or to making comments and/or 'liking' the content posted

or shared by others. In this study, we identify two factors related to planned behaviour—PSR and altruism—which are believed to be more cognitive and structured (Dwivedi et al. 2017). Similarly, two factors associated with unplanned behaviour—impulsiveness and extroversion—are believed to be emotional in nature and occur rapidly or automatically. We chose these factors because they are known to influence behaviour in the current context. In addition, collective opinion (CO) has been shown to affect people's behaviour on online platforms (Hossain et al. 2016). We therefore include CO in our study to determine if it moderates the relationship between the factors of people's planned and unplanned behaviour and their intention to share political contents. In summary, our aim is to better understand people's political content sharing behaviour by considering both planned and unplanned behaviour and the role of CO in this context. In doing so, address two research questions:

I. To what extent do planned and unplanned behavioural factors help to predict people's behaviour towards sharing political content in online social media?

II. To what extent is the relationship between these behavioural factors and people's sharing behaviour moderated by collective opinion?

The remainder of the paper is structured as follows. The next section introduces a theoretical review of planned and unplanned behaviour and the rationale for considering both in a single frame to explain human behaviour. We then introduce the research model along with hypotheses. The subsequent section discusses the research method, followed by the results. The theoretical and practical implications of the findings are then outlined prior to a presentation of the limitations and our conclusions.

2. Theoretical Background

One of the fundamental and influential theories explaining human behaviour towards accepting a technology is the TPB (Ajzen 2012). The TPB holds that people's behaviour is planned and thus can be controlled. In contrast to unplanned or automatic thinking behaviour, the TPB claims that:

Human social behaviour is neither mysterious nor outside conscious awareness. Behaviour is performed not automatically or mindlessly but follows reasonably and consistently from the behaviour-relevant information available to use (Ajzen 2012, p. 438).

The TPB strongly supports the idea that human behaviour can be deliberative and programmed. Accordingly, the TPB explains the behaviours over which people have the ability to exert self-control. With respect to the mechanism of planning the behaviour, the TPB demonstrates that human behaviour can be guided by three kinds of beliefs: behavioural (beliefs about the likely consequences of the behaviour), normative (beliefs about the normative expectations of others) and control (beliefs about the presence of factors that may facilitate or impede the performance of the behaviour). These beliefs

affect attitudes towards behaviour, subjective norms and perceived behavioural control, respectively. Finally, behavioural intention links beliefs and behaviour. One of the prominent limitations of the TPB is that it does not account for the variables that factor into beliefs (LaMorte 2016). However, it is notable that Ajzen (http://people.umass.edu/aizen/tpb.background.html) identified a number of 'background factors' (including individual, social and information) as antecedents of beliefs. Thus, although personality is not integrated into the main TPB model, it is considered an individual characteristic. Hence, to control the beliefs of social media users, their personalities should be examined and considered when explaining planned behaviour. For a meta-analysis on TPB see Armitage and Conner (2001).

However, "TPB does *not* propose that people are rational or that they behave in a rational manner" (Ajzen 2015, p. 133). Despite its potential influence, users' planned behaviour is not the only element likely to influence the sharing behaviour of political content in social media. Compared to planned behaviour, unplanned behaviour is less studied in the information systems (IS) literature. Nonetheless:

> *It is understandable that many think that everything is designed, or at least the behaviour of people is planned. However, there is a major fallacy, which leads to many misunderstandings. The living world constantly adapts to changing circumstances. … Human behaviour, including making plans, stems from motivations and emotions that are, fundamentally unplanned. F. Brugmans (2012) refers to call it 'unplanned behaviour'* (Freddy Brugmans and Dis 2013, p. 44, citation modified).

The 2013 International Federation for Information Processing (IFIP WG 8.6) conference (http://ifip86.iimb.ernet.in/) discussed the failures of information technology (IT)-based innovations. The contributors posited that organisational business models and IT assimilation strategies are purely based on the concept of planned actions, which is too simplistic to represent reality. Among various factors, one fundamental misconception is that people will behave according to a plan. In fact, people perform many actions in an unplanned manner; they do what they want to do, rather than what they plan to do. Thus, human behaviour is largely reactive and hence unplanned (Freddy Brugmans and Dis 2013).

People's unplanned behaviour is not an alien concept. In fact, it has been studied in the marketing literature for a long period. For example, Pollay (1968) identified customers' impulsive buying—purchases that are not normally planned—and compared this with their planned behaviour. They claimed that unplanned behaviour is influenced by the circumstances of a specific moment. This is also true for customers' shopping behaviour on online platforms (Vonkeman et al. 2017). Unplanned behaviour has also been studied in tourism, where travellers choose a destination, an attractive site or a restaurant without a prior plan but by using locally available information (Hwang and Fesenmaier 2011). Unplanned behaviour is also applied in IS research. For example, S. C. Park et al. (2016) called it 'automatic thinking' and demonstrated that online auctioneers often participate in unplanned auctions.

Similarly, Chung et al. (2013) applied unplanned behaviour to predict the use of a booth recommender system to direct people in an exhibition and found that IS tools significantly affect people's unplanned behaviour.

In the context of social media, unplanned behaviour may explain why people are prone to sharing political content as a rapid reaction, but without realising the potential consequences of their behaviour. 'Automatic thinking' behaviour may lead to winners' regret after auctions (S. C. Park et al. 2016). As mentioned in the Introduction, sharing political content may result in severe punishment. Wang et al. (2017); Jin et al. (2016) demonstrated that people's behaviour on social media can be explained as a form of unplanned thinking, in which the sharer loses their self-control and cannot help but share content. The key features of unplanned behaviour and how they apply to sharing behaviour are shown in Table 1.

Table 1. Features and applications of unplanned behaviour in content sharing in online social media

Feature	Application of the unplanned behaviour to sharing behaviour
Spontaneity	'just doing it' without control over the behaviour during sharing
Effortlessness	automatically sharing the content without making an effort to check/understand the authenticity of the content
Reactivity	automatically sharing the content without being aware of its effects
Speed	sharing the content quickly to be ahead of others

Note: Adapted from (S. C. Park et al. 2016) and applied to our study context

Decision making involves a process that includes many elements, although most individuals make many decisions within seconds (Lipoff 2011). It is apparent from the above discussion that one thing common to both unplanned and planned behaviour is personality, which determines most aspects of human behaviour, as supported by evidence provided by psychologists (e.g., Jin et al. 2016). It is recognised in the field of psychology that while making a decision, people use both cognition/reflection as well as emotion/affective/impulsive thinking (Strack and Deutsch 2006; Wang et al. 2017). In fact, the right and left side of our brains function differently but work together to reach a final decision; both are involved in decision making processes, even though one side of the brain may dominate in a particular decision (Lipoff 2011). Studies have shown that personality affects a person's cognitive and affective behaviour such as in impulsive buying (Olsen et al. 2016) and social media (Muhammad et al. 2017). In fact, Sniehotta et al. (2014) pointed out that: "behaviour may be guided by reflective or impulsive determinants and offer hypotheses about the circumstances under which either of these processes is more likely to influence behaviour" (p. 5). Therefore, in order to explain people's political content sharing behaviour in social media, we incorporated variables both related to planned and unplanned perspectives given that people's planned behaviour may still involve unplanned components

and some planning still occurs in the background of our minds while we perform an unplanned behaviour (Strack and Deutsch 2006).

3. Research Model and Hypotheses

Our study argues that to explain human personality and its influence on human behaviour, we should consider both planned and unplanned behaviours. One of the most important distinctions between planned and unplanned behaviour is the degree to which actions are subject to conscious control. Unplanned behaviour is more likely to occur autonomously, without the influence or control of the conscious mind. Moreover, the drivers of unplanned behaviour can be difficult to modify because they are mostly integral natural attributes of the person (S. C. Park et al. 2016). For instance, we know little about why one child is more active than another or why people choose different colours for their favourites. In contrast, planned behaviour is directed by the conscious selection of actions. Our notion and argument is consistent with other existing theories. For example, the Dual Process Theory (Paivio 2014) states that human mental processes operate in two distinct but interrelated classes: automatic and controlled. The automatic processes occur without involving higher levels of cognition (Amsel et al. 2009), whereas controlled decisions are effortful and largely conscious processes in which an individual weighs alternatives and makes a more deliberate decision (Strack and Deutsch 2006). Similarly, theories in economics and management (Schoemaker 1993; March and Shapira 1987) related to risk taking behaviour posit that most people are not extreme risk seekers, nor are they risk averse. When making a financial decision, people try to maximise the positive outcomes and minimise the risks. Therefore, our notion of explaining people's behaviour on social media provides sufficient face validity and is subject to empirical validation. The research model is presented in Figure 1.
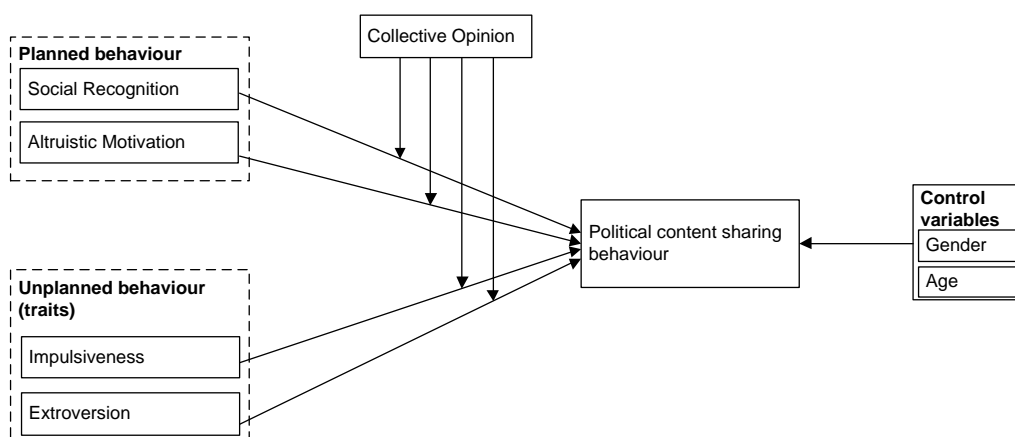

Figure 1. The research model

3.1 Factors related to planned behaviour

With respect to social media research in academia, reasonable efforts can be acknowledged that have enriched the planned behavioural aspects of social media acceptance. Planned factors that have been identified include perceived social attention/recognition (Goh et al. 2009; Hsu and Lin 2008), means of socialisation (C. S. Lee and Ma 2012; Hsu and Lin 2008), information and knowledge sharing (Goh et al. 2009; Oh and Syn 2015), altruism (Oh and Syn 2015) and entrainment gratification (perceived enjoyment/hedonic benefit) (N. Park et al. 2009). In the context of political content sharing, we contend that some of the factors previously identified in the context of generic content sharing via social media may still be relevant due to the inherent nature of participation. For example, seeking social status is relevant in the political content sharing context—a person might perceive that sharing political content via social media would indicate that they are politically conscious, and that sharing the content would raise their social status above that of people who do not do so. Perceived social recognition is similar to the subjective norm of the TPB (Venkatesh et al. 2003). Similarly, with the intention of sharing information and knowledge, people tend to share content in online forums to benefit others. Studies have identified that altruism is an important antecedent of online content sharing (Oh and Syn 2015; Parra-López et al. 2011). However, we recognise that some of the factors that are important in the context of generic content sharing may not be applicable in our context. For example, although research has documented that socialising is a strong driver for using social media (J. H. Park et al. 2014) and for participating in content sharing (C. S. Lee and Ma 2012), sharing political content may instead desocialise a person from those with opposing mindsets. In social media people feel that the political conversations on social media are angrier, less respectful and less civil than those in other areas of life; as a result many users block or unfriend someone for that reason (Duggan and Smith 2016). Therefore, the factors explaining the planned behaviour of sharing political content online are PSR and altruism, which are discussed below.

3.1.1 Perceived social recognition

Social recognition is a fundamental dimension that explains why people share information with their reference groups. According to the TPB, when human behaviour is followed by rewarding events, the behaviour is reinforced. The TPB also states that behavioural achievement depends on motivation. Consistent with this, the theory of social exchange claims that individuals engage in social interactions and offer help to others with the expectation of receiving some form of social reward in exchange, such as recognition, status or respect (J. H. Park et al. 2014). Social recognition, or reputation, is a social variable that is evaluated and endorsed by other people in a society. In the current context, PSR can be defined as the degree to which a person believes that active participation through sharing content on a social media platform will enhance their personal status among other users (adapted from Hsu and Lin 2008). PSR is a widely known variable in online knowledge sharing research that indicates that

people share information and knowledge because they wish to be recognised (mostly informally) as an expert or aware individual (Dwivedi et al. 2017). Specifically, PSR significantly affects people's attitude towards participation in online social media (Hsu and Lin 2008; J. H. Park et al. 2014). Building on the above argument, we postulate that:

H1a. Perceived social recognition will have a positive influence on peoples' behaviour towards sharing political content in online social media

3.1.2 Altruistic motivation

Altruism, or altruistic motivation, explains a person's tendency to consider the welfare of others without consciously considering the benefits to themself. Altruism refers to sharing behaviour that promotes the welfare of others without conscious regard for one's own interest, and without expectation of a return (Davenport and Prusak 1998; Hoffman 1978). Ma and Chan (2014) proposed that altruism is important for knowledge sharing, particularly in social media environments, where communities are formed based on common interests. They also suggested that in online social environments, altruistic users are more likely to show their care for others and offer help to others intentionally. Altruistic people contribute to communities because they enjoy helping others (He and Wei 2009) or feel a mental obligation to repay the benefits they have received earlier from the community (Parra-López et al. 2011). In social media, people share/disseminate information to help others without any expectation of reward (J. Lee et al. 2015). In tourism, altruism is a major incentive for sharing information through online social media (Parra-López et al. 2011). Further, Hsu and Lin (2008) provided an account explaining the effect of altruism on sharing information via blogs. In the current context, proactive online activists gather political content from various sources and provide it to others as a one-stop source; they share political content to educate the community, to establish a statement, and so on (Muhammad et al. 2017). Therefore, we hypothesise that:

H1b. Altruistic motivation will have a positive influence on peoples' behaviour towards sharing political content in online social media

3.2 Factors related to unplanned behaviour

Prior studies (e.g., Correa et al. 2010) considered user personality as an important antecedent of social media adoption and use. *Personality* can be defined as a pattern of behaviours that is characteristic of an individual and affects their cognitive, affective and behavioural reactions (Venkatesh et al. 2014). It distinguishes one individual from another based on the psychological characteristics they possess. With the prolific growth of research on Internet-based technologies, a variety of lenses has been used to understand individual differences and personality. IS scholars suggest that "a fruitful way to integrate individual traits into IS models and theories would be to adopt the five-factor model (FFM), a

parsimonious and comprehensive framework to personality" (Devaraj et al. 2008, p. 93). There is a considerable agreement among psychologists that 'personality' can be successfully explained using the FFM or the 'Big Five' personality traits model (Costa and Mac Crae 1992). Consequently, FFM is the most widely used theory in IS studies (e.g., Devaraj et al. 2008; Bansal et al. 2016; Stoughton et al. 2013). For a review on FFM and its use see (Giluk and Postlethwaite 2015). This model suggests that the majority of individual differences in personality can be classified into five broad domains: extroversion, neuroticism, agreeableness, conscientiousness and openness to experiences.

Among these five personality traits, extroversion and neuroticism have been identified as the most relevant to online activities (e.g., Ross et al. 2009; Olsen et al. 2016), while openness has received attention in only a few studies (e.g., Ross et al. 2009; Ryan and Xenos 2011; Olsen et al. 2016). Amichai-Hamburger et al. (2002) found that introverts and people with higher levels of neuroticism are heavy users of the Internet, perhaps as a means to reduce their loneliness (Ryan and Xenos 2011). They like the Internet because of its anonymity. These are people who otherwise have trouble making connections with others, but comfortably use the Internet as long as they do not need to reveal their identity, such as for anonymous instant messaging and participation in chat rooms. (Ehrenberg et al. 2008). However, recent studies reflect a reversal in the association between social media use and personality traits, mostly as a result of restrictions placed on anonymity (Lampe et al. 2006). All social networking sites and most social media (e.g., YouTube) require users to identify themselves, thus limiting their engagement with strangers. As a result, social media offers less appeal to highly neurotic individuals, who therefore seem to vanish from social media. In contrast, extroverts have many connections (i.e., group and/or individual) with others via social networking sites, such as Facebook (Lu and Hsiao 2010).

People do many things spontaneously; this natural behaviour is called 'trait impulsiveness'. Impulsiveness is a basic personality trait that leads to unplanned actions without considering the consequences (Strack and Deutsch 2006; Jin et al. 2016). As presented in Table 1, people may 'like' a picture related to a political incident simply as a spontaneous reflection of their state of mind; they do not necessarily judge the value of the content or evaluate how much benefit it would offer to the online community. Therefore, in this current study the factors related to unplanned behaviour when sharing political content online are extroversion and impulsiveness, which are discussed below.

3.2.1 Extroversion

Extroversion reflects a person's tendency to be sociable and able to experience positive emotions. It is the tendency to actively engage in activities and events and mingle with others in the social world, either online or offline (Quintelier and Theocharis 2013). Extroversion is generally characterised by many qualities including sociability, exuberance and energy and enjoying being the centre of attention. Extroverts are social and action oriented; they focus their energy on people and objects (Lu and Hsiao 2010); they actively seek information and also share information willingly with others as a part of their

nature (Venkatesh et al. 2014; McElroy et al. 2007). On the contrary, introverts are more interested in their internal environment and prefer to listen or consume than act/react.

The effect of extroversion (or introversion) on people's online behaviour has been considered an important issue in Internet user research. For example, Lu and Hsiao (2010) found that extroverts and introverts have different communication preferences and that extroversion affects user behaviour on the Internet. Recently, Venkatesh et al. (2014) found that extroverts use e-government portals more than do introverts. Extroversion has also been found to be positively associated with social media use (Correa et al. 2010). An increasing number of studies have explored the nature of extroversion and its effects on the behaviour of social media users. These studies have found that more extroverted people tend to belong to online groups such as Facebook (Ross et al. 2009; Lu and Hsiao 2010) and to join virtual groups (Ebeling-Witte et al. 2007), unlike introverted people.

Extroverts may consider that sharing political content via social media contributes to their social value; they are likely to enthusiastically share political content with others as it gives them an opportunity to share information/their views with other like-minded people or with people from similar backgrounds. Alternatively, introverts prefer not to make themselves the centre of attention by sharing content. Given the ocean of information available on the Internet and the hundreds of online and offline social groups, only extroverts have the tendency to spend the time and effort required to identify interesting political content and share it with others (Quintelier and Theocharis 2013). In fact, the enormous amount of sharing of political content via online social media would not occur if all people were introverts; extroverts increase the amount of political content and initiate and contribute to discussion of political issues. Thus, the more a person behaves as an extrovert, the more likely they are to share political content on social media. Therefore, we hypothesise:

H2a. People's personality traits related to extroversion will have a positive influence on their behaviour towards sharing political content in online social media

3.2.2 Impulsiveness

Trait impulsiveness can be defined as the degree to which an individual is likely to take unintended, immediate and unreflective action (adapted from J. Park and Lennon 2006, p. 57). In other words, impulsiveness involves an inability to wait and insensitivity to consequences. It is the tendency to act without forethought and with little or no planning or reflection (S. C. Park et al. 2016). Impulsive behaviour occurs on the spur of the moment and leads some people to overeat, steal, have unprotected sex, among other things (Stanford et al. 1996). In marketing, impulsiveness is a trait of customers who make purchases based on instant judgements without any previous intent to make that purchase (Hostler et al. 2011; Olsen et al. 2016). Impulsive shopping has been speculated to account for as much as 80% of all purchases (Smith 1996).

The current study posits that impulsive individuals are more likely to act on a whim—to comment on

political content without considering the possible consequences. A Bangladeshi man who was sentenced to six months jail for 'copying and pasting' an 'innocent comment' in Facebook about a wish for the prime minister's death confessed that he did not mean the comment but that 'the comment was about driver licences being given to unqualified drivers' (Orr 2012). Individuals with high levels of impulsiveness have difficulty inhibiting their thought processes and rely more on their emotional urges. In other words, impulsive individuals are more likely to become emotionally caught up in the dynamics of the political content sharing process. Therefore, we postulate that individuals with high impulsiveness are more likely to share political content through social media without careful consideration of whether such behaviour will lead to an unpleasant consequence. Hence:

H2b. People's traits related to impulsiveness will have a positive influence on their behaviour towards sharing political content in online social media

3.3 Collective opinion

Studies have shown that people do not find trouble accepting 'good' music or rejecting 'bad' music; the popularity of music that falls between these two extremes varies depending on whether people know the number of downloads the music had (Salganik et al. 2006). Metzger et al. (2010) found that people tend to trust an information source based on its endorsement volume. Studies have strongly suggested that, in online environments, the behaviour of a person can be affected by other people's opinions (Lim and Ting 2014). Moe and Schweidel (2012) reported that in online markets, previous customers' ratings affect the purchase behaviour of future customers. In a social media environment, people 'like' a news item/story more when it has many existing supporters (Sakamoto et al. 2009); interestingly, people even switch their preferences when the assumed numbers are flipped. This is known as CO, which can be defined as the degree of propensity to exhibit share behaviour, and is primarily based on the actions/beliefs of others. This is similar to the 'bandwagon effect' (Moe and Schweidel 2012).

In our context, the influence of the antecedents of sharing behaviour in online media is not linear; rather, it is contingent upon CO. For example, Hostler et al. (2011) noted that end users' impulse purchase behaviour is influenced by suggestions, recommendations or ratings provided by previous users of online shopping platforms. Also, impulsive people are likely to share content online if they find that the content received attention from other people; they look for the number of shares or 'likes' in the same way as online shoppers look at user feedback—to avoid uncertainty. Therefore, trait impulsiveness that leads to sharing behaviour can be influenced by CO. Similarly, people may perceive that sharing content that has already received a number of shares or 'likes' can increase their social recognition if other people (e.g., friends and acquaintances) know about their actions/views. Based on the work of Lim and Ting (2014) and Hossain et al. (2016), our study investigates the moderating effect of CO on the antecedents of people's behaviour towards sharing political content:

H3. The relationship of social recognition, altruistic motivation, impulsiveness and extroversion to sharing behaviour is moderated by collective opinion.

4. Methods

4.1 Data collection and validation

We approached seven global online social networking groups from Facebook and Twitter that entertain political content. Among them, four agreed to host a link on their page inviting their members/followers to participate in our survey. We assured the administrators of the groups that the survey was for academic research purposes only and provided them with our privacy policy, demonstrating that the identity of the participants (e.g., profile and IP address) would not be disclosed at any stage or under any circumstances. In the first three weeks, we received 193 responses; 83 more responses were received over the next six weeks. In total, 257 responses were usable for data analyses, and 19 responses were discarded due to a large amount of missing data. To test whether the two waves of observations were different, we used Mann-Whitney *U*-test for the demographic variables and one random item from each construct. The test showed that in each instance the *z*-value for Wave 1 (163 sample) and Wave 2 (94 sample) samples were not significant at the 0.05 level, which confirmed that there was no significant difference between the early and the later responses, and that the responses could be combined for data analysis. The demographics of the valid responses presented in Table 2.

Table 2. Demographic statistics for the study participants ($n = 257$)

Characteristics	Distribution (%)	Characteristics	Distribution (%)
Gender		**Platform used**	
Male	62.01	Facebook	59.2
Female	35.87	Twitter	17.2
No answer	2.12		
Age		**Reason for following**	
18-28	28.39	Entertainment	60.8
29-39	16.23	Consolidated source	18.3
40-50	32.61	Politically concerned	13.2
50-60	12.13	Active in politics	7.7
>60	6.77		
No answer	3.87		

Partial Least Squares (PLS) implemented in SmartPLS (version 3.2.6, www.smartpls.de) was employed for data analyses. The rationale for using PLS is related to the exploratory nature of the research and the model complexity with some moderating relationships (Chin 2010): 'PLS is a superior approach for developing and refining theoretical models' (Robins 2012. p. 310). Unlike confirmatory studies where researchers begin with a well-established and rigorously developed baseline model, as ours is an incremental study, we build on integrating concepts from prior theories and hence the

relationships have not been previously tested. As we are in the initial development and assessment phase of theory building, PLS method is the best approach (Chin 2010).

4.2 Measures

This study employed six constructs measured using multiple items used in prior studies after contextualising them in the context of online social media. All of the measures operationalising the constructs were considered as reflective. We used a seven-point Likert scale ranging from 'strongly disagree' to 'strongly agree' because the psychometric literature (e.g., Nunnally 1978) suggests that while having more scale points is better, seven points tends to be a good balance between having enough points of discrimination without having to maintain too many response options. Specifically, altruistic motivation was measured with four items from the instrument from Shiau and Chau (2015) and Ma and Chan (2014); PSR from Shiau and Chau (2015); impulsiveness from (S. C. Park et al. 2016); and extroversion from the Big Five personality traits (e.g., McCrae and Terracciano 2005). The instrument for CO was developed based on Sakamoto et al. (2009). The items are listed in Appendix I.

We pre-tested the scales with a group of colleagues and 'real' respondents using convenience sampling. We used a convenience sample of 12 to ensure that the question instructions, content, wording, sequence, format, layout and question clarity were appropriate. The sample included three academic researchers working in the social media domain, two academics with no expertise in the subject, two PhD students and five randomly chosen individuals. Upon receiving the responses and comments from the pre-test, we made some adjustments to refine the questionnaire. We then conducted another phase of pilot study with six new respondents who were not familiar with this research topic; the respondents raised no issues about the questionnaire, suggesting that we could run the actual survey.

5. Results

5.1 Assessment of measurement properties

When assessing the measurement properties of the research model, we focused on the assessment of internal consistency reliability, convergent validity and discriminant validity. Internal consistency was measured as composite reliability. As shown in Table 3, all of the values for composite reliability were greater than the threshold of 0.70. Then, convergent validity was checked with two measures. First, all constructs met the acceptable criterion (>0.5) (Hair Jr et al. 2017) for the average variance extracted (AVE) (see Table 3). We then checked the item loadings. As shown in Appendix II, after discarding two items with low loadings, all individual item loadings were greater than the threshold of 0.60 (Igbaria et al. 1995). Finally, discriminant validity was checked with two measures. The first set of discriminant validity tests proves that a construct is more strongly related to its own measures than to any other construct in the model. To test this, first, we compared the square root of the AVE with the correlations among the constructs. As shown in Table 3 (see the bold diagonal values in the right-hand side), the

square root of the AVE used to construct correlations proves that each construct is more highly related to its own measures than to the other constructs. Then, we developed a cross-loading matrix to check whether the item loadings on their respective construct were greater than the loadings on other constructs (see Appendix II). The results indicate good discriminant validity.

Table 3. Psychometric properties of the constructs

Discriminant validity			Inter-correlations of the latent variables					
CR	AVE	Constructs	1	2	3	4	5	6
0.864	0.615	1. Altruistic motivation	**0.784**					
0.911	0.719	2. PSR	0.675	**0.847**				
0.853	0.661	3. Impulsiveness	0.122	0.241	**0.806**			
0.845	0.581	4. Extroversion	0.276	0.151	0.498	**0.758**		
0.781	0.556	5. Collective opinion	0.170	0.254	-0.045	0.074	**0.747**	
0.929	0.813	6. Sharing behaviour	0.653	0.755	0.093	0.422	0.283	**0.901**

Note. CR: composite reliability, AVE: average variance extracted, PSR: perceived social recognition; bold diagonal values are the square root of the AVE of the respective construct.

Because of the self-reported nature of the data collected, the observed relationships were potentially affected by common method bias (CMB) (Podsakoff and Organ 1986). We conducted two tests to evaluate the severity of this bias. First, Harman's one-factor test (Podsakoff and Organ 1986) showed that the first construct accounted for only 13.27% of the variance, indicating that CMB was not likely to be a serious concern. Second, we used the marker variable (MV) technique (Lindell and Whitney 2001). The theoretically unrelated MV deliberately added to the research variables possesses the highest correlation with PSR (~8.99%), indicating that CMB was not high. Additionally, we checked the measurement model for collinearity issues by examining the Variance Inflation Factor (VIF) values of the constructs. All VIF values (1.11–2.36) were well below the threshold of 5 (Hair Jr et al. 2017); hence collinearity was not an issue in our model.

5.2 Assessment of the structural model

To assess the structural model, the direction of the path coefficients, magnitude of the t-statistics and explanatory power of the independent variables (R^2) were checked. The results, summarised in Figure 2, reveal that three of our primary hypotheses (H1a, H1b and H2b) are supported. The t-value for impulsiveness (relating to H2b) is significant at $p < 0.005$ but the sign of the path coefficient is negative, suggesting that people do not share political content based on a whim; rather they take time to consider it before sharing it. Overall, our model explains 76.1% of the variance in people's intention to share political content via social media, which is 'substantial' (Henseler et al. 2009, p. 303). The control variables were not significantly related to sharing behaviour.
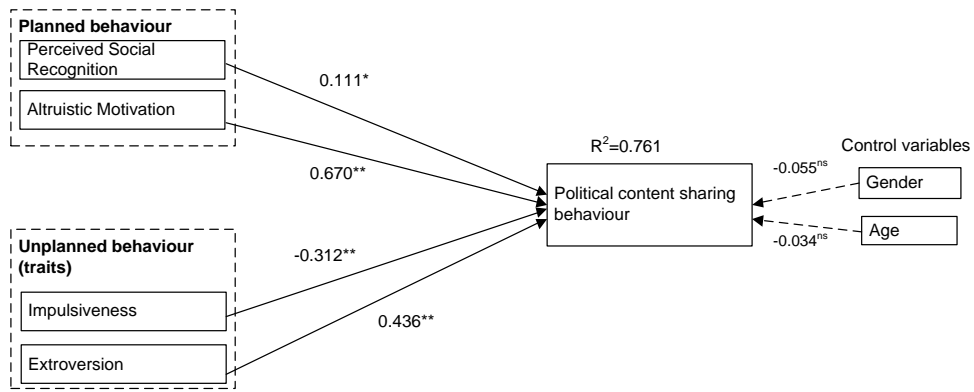
Figure 2. The structural model (main effects)

Note. Significance level *p<0.05, **p<0.001; ns, not significant

5.3 Assessment of moderating effects

Before we ran the moderation analysis, we first checked the measurement properties of the moderator. According to Appendix II and Table 2, all values (item loadings, composite reliability and AVE) associated with CO are above the threshold limit. Further, Table 2 indicates that the inter-correlations among the moderator and the other variables are satisfactory. To examine the moderating effect of CO, we used the two-stage approach because it 'is versatile and should generally be given preference for creating the interaction term' (Hair Jr et al. 2017, p.263). We used the 'moderating effect' function in *SmartPLS* and chose the 'standardised' product term generation method and 'automatic' weighing mode. The results indicate that CO has a significant moderating effect on the relationship between PSR and sharing behaviour (β = 0.144, t = 2.632, p = 0.009). Altruistic motivation has a similar effect (β = 0.112, t = 1.97, p = 0.048). However, a moderation effect of the relationship between personality traits (impulsiveness and extroversion) and sharing behaviour was not established. These results imply that CO of political content does have an influence on planned behaviour, but not on unplanned behaviour of people using social media.

6. Discussion

6.1 Main effects

In this study we have investigated people's planned and unplanned behaviour and confirmed that both are important. We therefore suggest that planned and unplanned behaviour together represent an insightful theoretical lens for investigating people's content sharing behaviour via online platforms.

Based on prior research findings, we expected that sharing political content via social media can largely be explained by planned behaviour. Specifically, we identified that PSR and altruistic motivation represent planned behaviour in this context. As predicted, PSR is strongly and positively related to

sharing behaviour. This indicates that administrators of social media groups should screen the content posted by their members and carefully promote content that has a greater possibility of attracting social recognition. At the core of the social capital literature, from the past to present, is that most people desire recognition. Although Richey et al. (2018) fear that sharing political content and other sensitive materials in social media may upset the colleagues, we found that individuals who expect social recognition are more likely to share political content with others in communities, consistent with prior studies (J. H. Park et al. 2014). Further, altruistic motivation drives people to share political content in social media. Helping others is a common tendency shared by most people; such 'other-regarding sentiments' give people the satisfaction of knowing that they contribute to the public good without requiring any direct personal benefit. Despite some researchers' doubt (Shiau and Chau 2015), our study revealed that altruism 'does exist' and is a part of human nature and inner desire, consistent with other studies (Piliavin and Charng 1990). Helping others is a natural tendency of most people; such 'other-regarding sentiments' give them contentment by contributing to the public good but providing little benefit to themselves. Specifically, in online media, the sacrifice made to fulfil this desire is minimal; sharing content on these platforms requires less effort, time and cost than sharing via traditional media. For political content in particular, a person may feel an obligation or a sense of social justice, which means that they believe that other people in their group should also be aware of that item. Generally, content related to corruption, incapability, conspiracy or mockery of a government is the most likely to be shared. Sharing such political content fulfils the need to form a collective outlook (e.g., liking or detesting a political entity).

With respect to unplanned behaviour, our study found that extroverted people are highly motivated to share political content via social media. This is consistent with prior studies in social media (Quintelier and Theocharis 2013; Correa et al. 2010; Ross et al. 2009). Extroverts, by nature, desire to be the centre of attention and are always looking to make connections with others. In social media, they constantly strive to be in the limelight by undertaking actions such as posting, sharing, liking or inviting new people/'friends'. It is not necessarily true that extroverts are more politically concerned but the current information technologies permit them to reach thousands of people in a simple and inexpensive way. They take the convenient option of making noise in a virtual society and thus becoming known to others. However, in contrast to our expectations based on the results of existing marketing and IS studies where the consequences of impulsiveness are personal (see S. C. Park et al. 2016 for a discussion on the consequences of impulse buying), trait impulsiveness in our study was negatively related to sharing behaviour. One possible explanation for this difference is that people do not share political content spontaneously; rather, they do this thoughtfully because of the sensitivity of such material. When shared, political content can lead to social judgement, making people wary and/or making them prospective targets for political attack, especially in countries where 'freedom of speech' is not practised.

6.2 Moderation effects

In an attempt to develop a comprehensive theoretical understanding that explains people's behaviour in relation to sharing political content via online social media, and to investigate the role of planned and unplanned behaviour in such action, we examined the effects of other people's opinions and if this shapes the process of sharing behaviour. The moderation analysis indicated that CO has a moderating role on constructs related to planned behaviour, but not for factors of unplanned behaviour.

CO has a positive moderating role in the relationship between PSR and sharing behaviour (see Fig. 3a). The two lines in Figure 3a represent the relationship between PSR and sharing behaviour for low (solid line) and high levels (dotted line) of CO. The figure shows that the relationship between PSR and sharing behaviour increases with higher levels of CO. Alternatively, with lower levels of CO, the relationship becomes weaker. People perceive that further sharing of political content, especially that for which merit has already been established by CO would enhance their prestige. They assume that such content might be further shared, contributing to sharers' social recognition (given that social media acknowledges the people who shared the same content previously). The outcome of this is that people do not usually share political content that has failed to receive attention by prior readers (indicated by shares/'likes' with respect to the elapsed time since the incident occurred).

Consistent with our prediction, CO has a positive moderating effect in the relationship between altruistic motivation and sharing behaviour (see Fig. 3b). In other words, people's psychological tendency to help others is more prominent when they find that a particular post has received substantial support from a collective group. They consider that as the post attracted a large audience, it might have benefited a number of people; thus, it has the potential to contribute to social justice and is worthy of sharing. Moreover, CO gives a sense of confidence to people about the authenticity or perceived truthfulness of content (Hossain et al. 2016). Hence, people hesitate to share political content that has a smaller audience, suspecting the 'quality' and 'value' of the content itself. Sharing such content may further affect their PSR.

The moderating effect of CO on the relationship between personality traits (impulsiveness and extroversion) and sharing behaviour is not established. The insignificant moderating effect of CO on unplanned behaviour is interesting. It is tempting to assume that people will share political content if it has already been shared or liked by a number of people; however, our results contradict this when inherent personality traits come into consideration. Our results suggest that CO does not influence factors related to unplanned behaviour. This means that inbuilt personality traits are not shaped by other people's opinion. Specifically, as noted earlier our results showed that extroverts are more fascinated with sharing; it does not matter whether the content has previously been shared or not. Similarly, supported by the negative direct effect of impulsiveness on sharing behaviour, our data indicate that people do not share political content as a quick and thoughtless action based on scores

indicative of others' opinions; rather, they consider the importance and the consequences of sharing such content. This is a subtle finding with respect to the cognitive decision making process of online media users even when they perform 'automatic' behaviour. The implications of this are discussed further later.
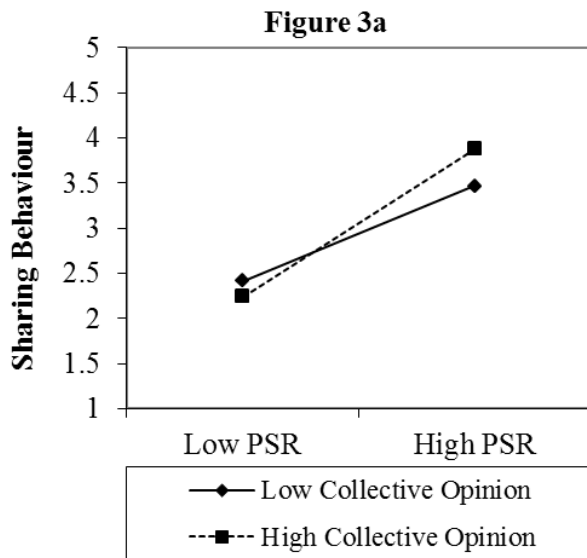
Figure 3a

Figure 3a: Slope plot of interaction between perceived social recognition (PSR) and collective opinion
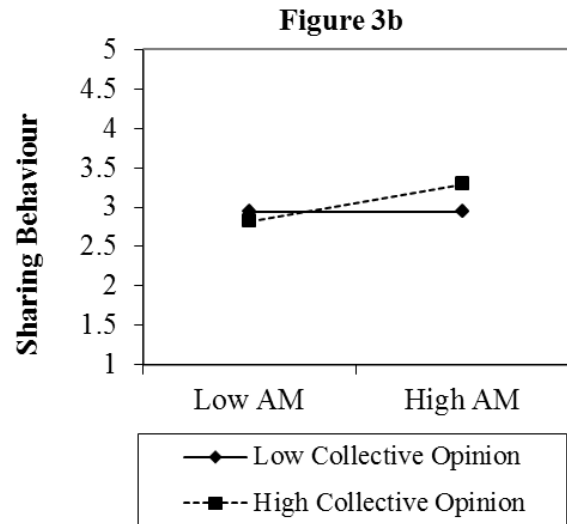

Figure 3b

Figure 3b: Slope plot of interaction between altruistic motivation (AM) and collective opinion

6.3 Implications for theory

This study makes several important contributions to theory. Previous studies have identified factors related to media characteristics, social characteristics and user attributes that influence the acceptance and use of social media (Ngai et al. 2015). To the best of our knowledge, this is the first study to investigate context-specific antecedents of people's behaviour related to sharing political content via online social media, which expands knowledge. Hence, the study's first contribution is increasing the existing body of knowledge by specifically analysing the factors related to political content sharing, given that this is becoming a serious concern in many countries, leading to severe punishment. Even when sharing of social media posts, especially political posts, is done deliberately (J. Lee et al. 2015), there appears to be a lack of understanding about possible consequences, especially in some cultures. If some of those who had posted had known that there may be implications, especially severe ones, then it is likely that they would not have done so. Hence, there is a gap in the understanding of the difference between actions and consequences. However, whether this is a curse of technology or the ugly side of social media use, should be decided in future debates.

The second contribution is scrutinising and integrating planned and unplanned behaviour in a single model. Although prior studies have extensively investigated the process and variables of planned behaviour, few studies discuss unplanned behaviour and no study has integrated these behaviours, which

complement each other during the process of making a decision. Our study theoretically and empirically demonstrates that when using social media platforms, people do not behave solely rationally and apply cognitive signals; their behaviour is also influenced by their emotional signals, which are mostly inbuilt. Further, people's behaviour cannot be fully planned or controlled; their personality also determines their decisions. They are neither solely governed by emotional behaviour, nor by only planning their behaviour. With respect to its theoretical implications, this study provides an insightful theoretical lens for future research to investigate these two behaviours simultaneously when examining people's behaviour in online social media.

As an addition to the second contribution, we admit that we did not 'extend' TPB whatsoever but adapted it to explain people's behaviour given that "'extended-TPB' models do a disservice to the novel ideas that such extensions test and provide unnecessary support to a model that in aggregate has been extended well-beyond recognition" (Sniehotta et al. 2014, p. 4). Following Sniehotta et al., we rather focused on theoretical development – one approach suggests "incorporated multiple goals and behaviours in theory" (p. 5). Here, to take existing knowledge further, we incorporated TPB and personality traits to understand two different behaviours of human – planned and unplanned. In essence, our model, as presently constituted, provides the rudiments of a midrange theory of people's sharing behaviour of political content, explaining the relationships between variables in a particular setting: online social media (Eisenhardt and Bourgeois 1988).

Third, the current study contributes to the social media literature by investigating the effects of a critical, but understudied factor, CO. The literature suggests that people behave differently to one another on social media. Before watching a video some people check how many times the video has been viewed. They tend to 'like' a post that has already been 'liked' by a number of people. This is something similar to e-word-of-mouth (Ladhari and Michaud 2015) or the 'bandwagon effect' (Moe and Schweidel 2012). However, to the best of our knowledge, no study has investigated the underlying mechanisms of this behaviour in the context of social media. Our inclusion of CO as a moderator demonstrates the contingent effects of PSR and altruism: in the presence of high CO, people are in a better position to feel that sharing political content will increase their social status and that it will benefit others if shared. It is plausible that to assess the credibility of a message, people tend to rely on previous viewers' judgements. Hence, extrinsic cues (e.g., the number of shares) can compensate for a lack of intrinsic cues (e.g., perceived usefulness and perceived truthfulness), consistent with some literature (Xu 2014).

Fourth, the insignificant influence of CO on the constructs of unplanned behaviour and sharing behaviour has substantial implications. The findings support and suggest that people's inbuilt personalities are not influenced by others' behaviour. People should not be impulsive and simply note the popularity of the content item, but be thoughtful about the value and consequences of sharing a

particular item. However, future studies are necessary before a generalised decision can be reached that CO does not affect an individual's personality (e.g., neuroticism or conscientiousness). Finally, the insignificant influence of control variables (gender and age) also has implications. Studies have shown that female and young people are more active on social media in terms of content sharing (Wang et al. 2017; Ladhari and Michaud 2015). However, our data show that sharing photographs of a tourist site and political content is not the same. Similar to Duggan and Smith (2016)'s finding we claim that some users – especially those with high levels of political engagement and political-concern but irrespective of their gender and age – enjoy talking, debating and posting about political issues on social media.

6.4 Implications for practice

We stress two practical implications derived from the research. First, it highlights the need to understand people's personality types and the extent to which they act emotionally. The findings support and suggest that people's inbuilt personalities are not influenced by others' behaviour. People should not be impulsive by noting the popularity of a particular post, but be thoughtful about the value and consequences of sharing it. Such behaviour is sensitive and necessary, especially in this age when government-controlled or owned organisations can harness social media data to gain insights into public opinion (Baur 2017) and when the government is intolerant of public opinion mocking its governance. If people are more self-aware they can consider their actions with respect to what they post, perhaps rephrasing it in a less controversial way to avoid potential retribution. Second, around the world, a number of media experts have been advising people to refrain from sharing 'sensitive content' on social media due to the possibility of this type of sharing leading to the loss of friends and potential clients (Antczak 2016), or the possibility of imprisonment (Legal-Aid 2016). It seems that people are largely unaware of the legal implications of posting on social media, which is often seen as an informal mode of communication where people can say anything; however, the reality is that this is not the case.

6.5 Limitations and Future Research

Although it contributes new insights to the online social media literature, this study suffers from some limitations that also indicate important future research areas that could be pursued further to enrich our understanding. First, the research model developed in this study was validated using data from two social networking sites: Facebook and Twitter. To understand the generalisability of our findings, it is important to conduct similar research on other social media platforms. Second, our study used cross-sectional data and therefore did not capture the changing nature of user behaviour on social media over time. Recently, the governments of several countries (including Bangladesh, Russia, Saudi Arabia, Thailand and Zimbabwe) have expressed concern regarding political content sharing via social media and have introduced laws accompanied by severe punishments for those who break them. The introduction of such laws may change people's behaviour; many prolific users may be less vocal if the government of their country introduces such punishments. Hence, as recommended by IS researchers

(see, e.g., Dwivedi et al. 2015b), further research should adopt a longitudinal approach to gain a better understanding of whether people's behaviour changes before and after harsh punishments are introduced. Third, although our study did not find any difference in age and gender towards sharing political content but future study is necessary to confirm this. Fourth and finally, although our ex-post assessments did not raise any issues regarding CMB, we cannot confidently guarantee that CMB was completely avoided. The possibility of such bias still remains, which could be better addressed with ex-ante measures.

7. Conclusion

The goal of this research was to understand the factors that contribute to people's behaviour with regard to sharing political content via online social media. Specifically, we decomposed personality traits into planned and unplanned behaviour, then identified the relevant factors and hypothesised that they may predict content sharing behaviour in social media. The empirical data collected from an online survey largely supported our model. Our work advances knowledge regarding the specific factors that are related to people's behaviour when sharing political content through social media. Our study is one of the unique initiatives in IS and social media that explains human behaviour as a combination of two opposite behaviours: cognitive and automatic. As many governments around the world are becoming increasingly sensitive to public comments on online platforms, our study is timely and provides important insights to understand the psychological mechanism behind content sharing.

References

Ajzen, I. (2012). The Theory of Planned Behavior. In P. V. Lange, A. Kruglanski, & E. Higgins (Eds.), *Handbook of theories of social psychology* (Vol. 1, pp. 438-454). London, UK: sage.

Ajzen, I. (2015). The theory of planned behaviour is alive and well, and not ready to retire: a commentary on Sniehotta, Presseau, and Araújo-Soares. *Health Psychology Review, 9*(2), 131-137.

Akbar, J. (2015). Saudi Arabia warns Twitter and Facebook 'rumour-mongers' they risk death penalty in first ruling of its kind. http://www.dailymail.co.uk/news/article-3261575/Saudi-Arabia-warns-Twitter-Facebook-rumour-mongers-risk-DEATH-PENALTY-ruling-kind.html.

Amichai-Hamburger, Y., Wainapel, G., & Fox, S. (2002). " On the Internet no one knows I'm an introvert": Extroversion, neuroticism, and Internet interaction. *CyberPsychology & Behavior, 5*(2), 125-128.

Amsel, E., Close, J., Sadler, E., & Klaczynski, P. A. (2009). ColLege students' awareness of irrational judgments on gambling tasks: A dual-process account. *The Journal of psychology, 143*(3), 293-317.

Antczak, S. (2016). When Your Friends Don't Share Your Politics. https://www.forbes.com/sites/nextavenue/2016/02/16/when-your-friends-dont-share-your-politics/#6bc583ba5c32.

Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *British journal of social psychology, 40*(4), 471-499.

Bansal, G., Zahedi, F. M., & Gefen, D. (2016). Do context and personality matter? Trust and privacy concerns in disclosing private information online. *Information & Management, 53*(1), 1-21.

Baur, A. W. (2017). Harnessing the social web to enhance insights into people's opinions in business, government and public administration. *Information Systems Frontiers, 19*(2), 231-251.

Bhutia, J. (2015). Man faces 32-year jail term for Facebook 'like' of doctored photo of king. http://www.ibtimes.co.uk/thailand-man-faces-32-year-jail-term-facebook-like-doctored-photo-king-1532851.

Brugmans, F. (2012). My Unplanned Journey. (Vol. 2017).

Brugmans, F., & Dis, E. v. (2013). The Curious Box of Right Sourcing. In R. Dijkstra, J. Gøtze, & P. v. d. Ploeg (Eds.), *Right Sourcing: Enabling Collaboration* (pp. 43-54). UK: AuthorHouse.

Bruns, A., Highfield, T., & Burgess, J. (2013). The Arab Spring and social media audiences: English and Arabic Twitter users and their networks. *American Behavioral Scientist, 57*(7), 871-898.

Chin, W. W. (2010). How to write up and report PLS analyses. In V. E. Vinzi, W. W. Chin, J. Henseler, & H. Wang (Eds.), *Handbook of Partial Least Squares* (pp. 655-690). Germany: Springer.

Chung, N., Koo, C., & Kim, J. K. (2013). Unplanned behaviour of exhibition attendees and the booth recommender system: The goal framing theory perspective. In *Information and communication technologies in tourism 2013* (pp. 460-471): Springer.

Correa, T., Hinsley, A. W., & De Zuniga, H. G. (2010). Who interacts on the Web?: The intersection of users' personality and social media use. *Computers in Human Behavior, 26*(2), 247-253.

Costa, P. T., & Mac Crae, R. R. (1992). *Neo Personality Inventory-Revised (NEO PI-R)*: Psychological Assessment Resources Odessa, FL.

Davenport, T. H., & Prusak, L. (1998). *Working knowledge: How organizations manage what they know*: Harvard Business Press.

Devaraj, S., Easley, R. F., & Crant, J. M. (2008). Research note—how does personality matter? Relating the five-factor model to technology acceptance and use. *Information systems research, 19*(1), 93-105.

Duggan, M., & Smith, A. (2016). The Political Environment on Social Media. Pew Research Centre.

Dwivedi, Y. K., Kapoor, K. K., & Chen, H. (2015a). Social media marketing and advertising. *The Marketing Review, 15*(3), 289-309.

Dwivedi, Y. K., Rana, N. P., Jeyaraj, A., Clement, M., & Williams, M. D. (2017). Re-examining the Unified Theory of Acceptance and Use of Technology (UTAUT): Towards a Revised Theoretical Model. *Information Systems Frontiers*, 1-16.

Dwivedi, Y. K., Wastell, D., Laumer, S., Henriksen, H. Z., Myers, M. D., Bunker, D., et al. (2015b). Research on information systems failures and successes: Status update and future directions. *Information Systems Frontiers, 17*(1), 143-157.

Ebeling-Witte, S., Frank, M. L., & Lester, D. (2007). Shyness, Internet use, and personality. *CyberPsychology & Behavior, 10*(5), 713-716.

Ehrenberg, A., Juckes, S., White, K. M., & Walsh, S. P. (2008). Personality and self-esteem as predictors of young people's technology use. *CyberPsychology & Behavior, 11*(6), 739-741.

Eisenhardt, K. M., & Bourgeois, L. J. (1988). Politics of strategic decision making in high-velocity environments: Toward a midrange theory. *Academy of management journal, 31*(4), 737-770.

Giluk, T. L., & Postlethwaite, B. E. (2015). Big Five personality and academic dishonesty: A meta-analytic review. *Personality and Individual Differences, 72*, 59-67.

Goh, D. H.-L., Ang, R. P., Chua, A. Y., & Lee, C. S. (2009). Why we share: A study of motivations for mobile media sharing. In J. Liu, J. Wu, Y. Yao, & T. Nishida (Eds.), *Active media technology* (pp. 195-206): Springer.

Google Adwords (2017). Political content. https://support.google.com/adwordspolicy/answer/6014595?hl=en.

Gulev, R. E. (2009). *Knowledge Sharing Across Cultures: Useful Guidance and Recommendations for Growing International Companies*. Cankarjeva, Koper: University of Primorska.

Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). USA: Sage Publications.

He, W., & Wei, K.-K. (2009). What drives continued knowledge sharing? An investigation of knowledge-contribution and-seeking beliefs. *Decision Support Systems, 46*(4), 826-838.

Henseler, J., Ringle, C., & Sinkovics, R. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing (AIM), 20*, 277-320.

Hoffman, M. L. (1978). Psychological and biological perspectives on altruism. *International Journal of Behavioral Development, 1*(4), 323-339.

Hossain, M. A., Chan, C., & Dwivedi, Y. Predicting People's Intention Towards Sharing Political Contents in Social Media: The Moderating Effect of Collective Opinion. In *Conference on e-Business, e-Services and e-Society, 2016* (pp. 646-657): Springer

Hostler, R. E., Yoon, V. Y., Guo, Z., Guimaraes, T., & Forgionne, G. (2011). Assessing the impact of recommender agents on on-line consumer unplanned purchase behavior. *Information & Management, 48*(8), 336-343.

Hsu, C.-L., & Lin, J. C.-C. (2008). Acceptance of blog usage: The roles of technology acceptance, social influence and knowledge sharing motivation. *Information & management, 45*(1), 65-74.

Hwang, Y.-H., & Fesenmaier, D. R. (2011). Unplanned tourist attraction visits by travellers. *Tourism Geographies, 13*(3), 398-416.

i-Scoop (n.d.). Content sharing and storytelling: why and how people share content. https://www.i-scoop.eu/content-marketing/content-sharing-storytelling/2017.

Igbaria, M., Guimaraes, T., & Davis, G. B. (1995). Testing the determinants of microcomputer usage via a structural equation model. *Journal of Management Information Systems, 11*(4), 87-114.

Jin, X.-L., Tang, Z., & Zhou, Z. (2016). Influence of traits and emotions on boosting status sharing through microblogging. *Behaviour & Information Technology*, 1-14.

Kahneman, D. (2011). *Thinking, fast and slow*: Macmillan.

Kapoor, K. K., & Dwivedi, Y. K. (2015). Metamorphosis of Indian electoral campaigns: Modi's social media experiment. *International Journal of Indian Culture and Business Management, 11*(4), 496-516, doi:10.1504/ijicbm.2015.072430.

Kapoor, K. K., Tamilmani, K., Rana, N. P., Patil, P., Dwivedi, Y. K., & Nerur, S. (2017). Advances in Social Media Research: Past, Present and Future. *Information Systems Frontiers*, 1-28.

Ladhari, R., & Michaud, M. (2015). eWOM effects on hotel booking intentions, attitudes, trust, and website perceptions. *International Journal of Hospitality Management, 46*, 36-45, doi:10.1016/j.ijhm.2015.01.010.

LaMorte, W. W. (2016). Behavioural change models: The Theory of Planned Behavior. http://sphweb.bumc.bu.edu/otlt/MPH-Modules/SB/BehavioralChangeTheories/BehavioralChangeTheories3.html2017.

Lampe, C., Ellison, N., & Steinfield, C. A Face (book) in the crowd: Social searching vs. social browsing. In *Proceedings of the 2006 20th anniversary conference on Computer supported cooperative work, 2006* (pp. 167-170): ACM

Lee, C. S., & Ma, L. (2012). News sharing in social media: The effect of gratifications and prior experience. *Computers in Human Behavior, 28*, 331-339.

Lee, J., Agrawal, M., & Rao, H. R. (2015). Message diffusion through social network service: The case of rumor and non-rumor related tweets during Boston bombing 2013. *Information Systems Frontiers, 17*(5), 997-1005.

Legal-Aid (2016). Social media - be careful what you say or send! https://www.legalaid.wa.gov.au/InformationAboutTheLaw/treatment/Pages/Socialmedia-becarefulwhatyousayorsend!.aspx.

Lim, W. M., & Ting, D. H. (2014). Consumer acceptance and continuance of online group buying. *The Journal of Computer Information Systems, 54*(3), 87-96.

Lindell, M. K., & Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of applied psychology, 86*(1), 114.

Lipoff, S. (2011). Decision making and right brain left brain. http://www.funderstanding.com/brain/decision-making-and-right-brain-left-brain/2017.

Lu, H.-P., & Hsiao, K.-L. (2010). The influence of extro/introversion on the intention to pay for social networking sites. *Information & management, 47*(3), 150-157.

Ma, W. W., & Chan, A. (2014). Knowledge sharing and social media: Altruism, perceived online attachment motivation, and perceived online relationship commitment. *Computers in Human Behavior, 39*, 51-58.

March, J. G., & Shapira, Z. (1987). Managerial perspectives on risk and risk taking. *Management science, 33*(11), 1404-1418.

McCrae, R. R., & Terracciano, A. (2005). Universal features of personality traits from the observer's perspective: data from 50 cultures. *Journal of personality and social psychology, 88*(3), 547.

McElroy, J. C., Hendrickson, A. R., Townsend, A. M., & DeMarie, S. M. (2007). Dispositional factors in internet use: personality versus cognitive style. *MIS quarterly*, 809-820.

Metzger, M. J., Flanagin, A. J., & Medders, R. B. (2010). Social and heuristic approaches to credibility evaluation online. *Journal of Communication, 60*(3), 413-439.

Moe, W. W., & Schweidel, D. A. (2012). Online product opinions: Incidence, evaluation, and evolution. *Marketing Science, 31*(3), 372-386.

Muhammad, S. S., Dey, B. L., & Weerakkody, V. (2017). Analysis of Factors that Influence Customers' Willingness to Leave Big Data Digital Footprints on Social Media: A Systematic Review of Literature. *Information Systems Frontiers*, 1-18.

Jailed for social media likes and reposts among 12 friends. (2016, *The Sydney Morning Herald*.

Ngai, E. W., Tao, S. S., & Moon, K. K. (2015). Social media research: Theories, constructs, and conceptual frameworks. *International Journal of Information Management, 35*(1), 33-44.

Nunnally, J. (1978). Psychometric methods. New York: McGraw-Hill.

Oh, S., & Syn, S. Y. (2015). Motivations for sharing information and social support in social media: A comparative analysis of Facebook, Twitter, Delicious, YouTube, and Flickr. *Journal of the Association for Information Science and Technology, 66*(10), 2045-2060.

Olsen, S. O., Tudoran, A. A., Honkanen, P., & Verplanken, B. (2016). Differences and Similarities between Impulse Buying and Variety Seeking: A Personality-based Perspective. *Psychology & Marketing, 33*(1), 36-47.

Orr, A. (2012). Facebook post could send Perth student to Bangladesh jail http://www.watoday.com.au/wa-news/facebook-post-could-send-perth-student-to-bangladesh-jail-20120115-1q119.html. Accessed 17/05 2017.

Paivio, A. (2014). *Mind and its evolution: A dual coding theoretical approach*: Psychology Press.

Park, J., & Lennon, S. J. (2006). Psychological and environmental antecedents of impulse buying tendency in the multichannel shopping context. *Journal of consumer Marketing, 23*(2), 56-66.

Park, J. H., Gu, B., Leung, A. C. M., & Konana, P. (2014). An investigation of information sharing and seeking behaviors in online investment communities. *Computers in Human Behavior, 31*, 1-12.

Park, N., Kee, K. F., & Valenzuela, S. (2009). Being immersed in social networking environment: Facebook groups, uses and gratifications, and social outcomes. *CyberPsychology & Behavior, 12*(6), 729-733.

Park, S. C., Keil, M., Bock, G. W., & Kim, J. U. (2016). Winner's regret in online C2C Auctions: an automatic thinking perspective. *Information Systems Journal, 26*, 613-640, doi:10.1111/isj.12075.

Parra-López, E., Bulchand-Gidumal, J., Gutiérrez-Taño, D., & Díaz-Armas, R. (2011). Intentions to use social media in organizing and taking vacation trips. *Computers in Human Behavior, 27*(2), 640-654.

Piliavin, J. A., & Charng, H.-W. (1990). Altruism: A review of recent theory and research. *Annual review of sociology*, 27-65.

Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of management, 12*(4), 531-544.

Pollay, R. W. (1968). Customer impulse purchasing behavior: a reexamination. *Journal of Marketing Research, 5*(3), 323-325.

Purcell, K., Rainie, L., Mitchell, A., Rosenstiel, T., & Olmstead, K. (2010). Understanding the participatory news consumer. *Pew Internet and American Life Project, 1*, 19-21.

Quintelier, E., & Theocharis, Y. (2013). Online political engagement, Facebook, and personality traits. *Social Science Computer Review, 31*(3), 280-290.

Richey, M., Gonibeed, A., & Ravishankar, M. (2018). The Perils and Promises of Self-Disclosure on Social Media. *Information Systems Frontiers*, 1-13.

Robins, J. (2012). Editorial" partial-Least Squares. *Long range planning, 45*(5-6), 309-311.

Ross, C., Orr, E. S., Sisic, M., Arseneault, J. M., Simmering, M. G., & Orr, R. R. (2009). Personality and motivations associated with Facebook use. *Computers in Human Behavior, 25*(2), 578-586.

Russian Times (2013). Jailed for Facebook 'like': Palestinians endure Middle-East-wide 'social media crackdown' https://www.rt.com/news/facebook-user-jail-palestine-106/.

Ryan, T., & Xenos, S. (2011). Who uses Facebook? An investigation into the relationship between the Big Five, shyness, narcissism, loneliness, and Facebook usage. *Computers in Human Behavior, 27*(5), 1658-1664.

Sakamoto, Y., Ma, J., & Nickerson, J. V. 2377 people like this article: The influence of others' decisions on yours. In *Proceedings of the 31st Annual Conference of the Cognitive Science Society, 2009*

Salganik, M. J., Dodds, P. S., & Watts, D. J. (2006). Experimental study of inequality and unpredictability in an artificial cultural market. *science, 311*(5762), 854-856.

Schoemaker, P. J. (1993). Determinants of risk-taking: Behavioral and economic views. *Journal of Risk and Uncertainty, 6*(1), 49-73.

Shiau, W.-L., & Chau, P. Y. K. (2015). Does altruism matter on online group buying? Perspectives from egotistic and altruistic motivation. *Information Technology & People, 28*(3), 677-698.

Shiau, W.-L., Dwivedi, Y. K., & Yang, H. S. (2017). Co-citation and cluster analyses of extant literature on social networks. *International Journal of Information Management, 37*(5), 390-399.

The Joy of Candy. (1996, *National Petroleum News Supplement.* .

Sniehotta, F. F., Presseau, J., & Araújo-Soares, V. (2014). Time to retire the theory of planned behaviour. Taylor & Francis.

Stanford, M. S., Greve, K. W., Boudreaux, J. K., Mathias, C. W., & Brumbelow, J. L. (1996). Impulsiveness and risk-taking behavior: Comparison of high-school and college students using the Barratt Impulsiveness Scale. *Personality and Individual Differences, 21*(6), 1073-1075.

Starbird, K., & Palen, L. (How) will the revolution be retweeted?: information diffusion and the 2011 Egyptian uprising. In *Proceedings of the acm 2012 conference on computer supported cooperative work, 2012* (pp. 7-16): ACM

Stoughton, J. W., Thompson, L. F., & Meade, A. W. (2013). Big five personality traits reflected in job applicants' social media postings. *Cyberpsychology, Behavior, and Social Networking, 16*(11), 800-805.

Strack, F., & Deutsch, R. (2006). Reflective and impulsive determinants of consumer behavior. *Journal of Consumer Psychology, 16*(3), 205-216.

Thaler, R. H., & Sunstein, C. R. (2009). Nudge: Improving Decisions About Health, Wealth, and Happiness. HeinOnline.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *Mis Quarterly*, 425-478.

Venkatesh, V., Sykes, T. A., & Venkatraman, S. (2014). Understanding e-Government portal use in rural India: role of demographic and personality characteristics. *Information Systems Journal, 24*(3), 249-269.

Vonkeman, C., Verhagen, T., & van Dolen, W. (2017). Role of local presence in online impulse buying. *Information & Management*.

Wang, C., Zhou, Z., Jin, X.-L., Fang, Y., & Lee, M. K. (2017). The influence of affective cues on positive emotion in predicting instant information sharing on microblogs: Gender as a moderator. *Information Processing & Management, 53*(3), 721-734.

Xu, Q. (2014). Should I trust him? The effects of reviewer profile characteristics on eWOM credibility. *Computers in Human Behavior, 33*, 136-144, doi:10.1016/j.chb.2014.01.027.

Appendix I: Survey items

Altruistic motivation (AM)

AM1. I enjoy helping others

AM2. Have a great deal of interest in other people

AM3. Care about others

AM4. Feel empathy and concern for other people

Perceived social recognition (PSR)

PSR1. Sharing improves my image

PSR2. Increases prestige when shared

PSR3. Sharing improves recognition (discarded because of low loading)

PSR4. I earn respect by sharing

PSR5. Enhances personal status

Impulsiveness (IMP)

IMP.1 I usually do things on impulse

IMP2. I often behave without thinking of the consequences

IMP3. I often say the first thing I think

IMP4. I often act on the spur of the moment (discarded because of low loading)

Extroversion (EXT)

EXT1. Have a wide social circle of friends and acquaintances

EXT2. Enjoy being the centre of attention

EXT3. Feel energised when I am around other people

EXT4. Say things before I think about them

Sharing behaviour (B)

B1. I share political contents regularly

B2. In the last month my sharing of political contents has increased compared to before

B3. I recommend political contents to others

Collective opinion (CO)

CO1. High numbers of likes/shares/followers are important to me

CO2. High numbers of likes/shares/followers shape my judgement

CO3. High numbers of likes/shares/followers receive my higher attention

Appendix II: Mean, standard deviation, and cross-loadings of the measures

			Cross-loadings					
	Mean	SD	AM	PSR	IMP	EXT	B	CO
AM1	4.677	1.598	**0.841**	0.609	0.063	0.305	0.619	0.207
AM2	4.700	1.535	**0.742**	0.564	0.193	0.255	0.562	0.177
AM3	4.412	1.817	**0.785**	0.451	0.015	0.092	0.404	0.055
AM4	4.304	1.674	**0.762**	0.447	0.081	0.103	0.388	0.037
PSR1	3.420	1.693	0.616	**0.840**	0.253	0.057	0.630	0.182
PSR2	3.595	1.812	0.650	**0.880**	0.303	0.083	0.727	0.211
PSR4	3.685	2.048	0.501	**0.846**	0.131	0.174	0.598	0.205
PSR5	4.335	1.831	0.513	**0.824**	0.109	0.209	0.589	0.264
IMP1	4.280	1.335	0.092	0.213	**0.767**	0.359	0.043	-0.067
IMP2	4.623	1.303	0.080	0.225	**0.923**	0.444	0.106	-0.032
IMP3	4.132	1.537	0.149	0.144	**0.712**	0.418	0.049	-0.016
EXT1	5.720	1.244	0.123	0.083	0.419	**0.832**	0.365	0.054
EXT2	5.479	1.216	0.134	0.171	0.458	**0.897**	0.442	0.057
EXT3	5.331	1.477	0.428	0.070	0.290	**0.626**	0.149	0.085
EXT4	5.152	1.485	0.399	0.109	0.311	**0.638**	0.178	0.054
B1	4.315	1.542	0.497	0.606	0.118	0.257	**0.846**	0.253
B2	4.988	1.435	0.636	0.692	0.063	0.433	**0.927**	0.252
B3	4.755	1.494	0.619	0.733	0.081	0.425	**0.929**	0.263
CO1	4.121	1.910	0.152	0.231	-0.022	0.074	0.237	**0.835**
CO2	5.179	1.990	0.137	0.200	-0.024	0.051	0.251	**0.850**
CO3	4.677	1.598	0.082	0.120	-0.073	0.040	0.120	**0.611**