

# The Role of Integrated Offline/Online Social Activity and Social Identification in Facebook Citizenship Behaviour Formation

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## **The Role of Integrated Offline/Online Social Activity and Social Identification in Facebook Citizenship Behaviour Formation**

**Purpose** – Drawing on social identity theory and prosocial behaviour research, this study explores how people’s integration of their offline and online social activities through Facebook cultivates their Facebook citizenship behaviour (FCB). It also offers further insight into the underlying mechanism of offline and online social activity integration–FCB relation by investigating people’s social identification with their offline and online social groups as possible mediators.

**Design/methodology/approach** – Based on social identity theory (SIT) literature, community citizenship behaviour, and offline–online social activity integration through Facebook, we developed a conceptual model, which we empirically tested using data from 308 Facebook users.

**Findings** – The results confirm that the participants’ offline–online social activity integration via Facebook is positively linked to their FCB. Further, the integration of offline and online social activity through Facebook positively affects how a person identifies with their offline and online social groups, which in turn causes them to display FCB. In addition, offline/online social identification mediates the integration–FCB relation.

**Practical implications** – In practice, it is interesting to see people’s tendency toward altruistic behaviours within groups they like to associate themselves with. Those who share their Facebook networks with their offline friends can use such networks to seek help and support.

**Originality/value** – From a theoretical perspective, unlike past research, this study examines how individuals’ offline–online social activity integration via Facebook helps them associate with groups. Additionally, this study investigates social identification from an offline and online perspective.

**Keywords** – Social identification, Online citizenship behaviours, Facebook, Perceived integration, Social networking sites

**Paper classification** – Research article

# The Role of Integrated Offline/Online Social Activity and Social Identification in Facebook Citizenship Behaviour Formation

## 1 Introduction

The research on discretionary prosocial behaviours, such as voluntarily helping others, has primarily focused on the offline life, however, there is increasing evidence individuals also depict such behaviours in the online world quite frequently (Chiu, Huang, et al., 2015; Guo et al., 2018). One reason is that online users do not need to leave their physical space to engage in online prosocial behaviour (Mano, 2014). Yu and Chu (2007) suggested that because technology-mediated online communities are self-organised, have weak-tie relationships, and lack formal reward systems, their members' online prosocial behaviours, which are discretionary behaviours displayed in an electronic context that aim to benefit others (Erreygers et al., 2018), play a critical role in the effective functioning of such communities.

According to extant research, social networking sites (SNSs) are important platforms for displaying online prosocial behaviours such as knowledge sharing, opposition to cyberbullying, online voicing, holding online charities, promoting community safety, and active civic participation (Bhatti et al., 2020; Dai et al., 2017; Kuem et al., 2017; Lavertu et al., 2020; Son et al., 2016; Wu et al., 2017). To be more specific, organisational citizenship behaviour (OCB), originally introduced by organisational behaviour studies (Freidlin and Littman-Ovadia, 2020; Podsakoff et al., 2009) to describe employees' display of discretionary extra-role behaviour to help their respective organisations (Organ, 1988), has been particularly important in online communities (Chiu, Huang, et al., 2015; Son et al., 2016; Wu et al., 2017). Xu et al. (2012) asserted that while OCBs are vital to physical organisations, they are even more essential to online communities because of the virtual nature, voluntariness, and self-organisation in these communities. In addition, Chiu, Huang et al. (2015) argued that since online communities such as those on SNSs are social entities in which people and their relationships are intertwined, the effective functioning of these groups depends on their members' online OCBs which benefit the community as a whole.

However, despite these insights into the potential usefulness of online citizenship behaviour, only a few studies have investigated it. For instance, Chiu, Huang et al. (2015) examined how online OCB is predicted by social support, perceived external prestige, and perceived community distinctiveness. Meanwhile, Jang et al. (2016) studied the posting of benevolent comments on SNSs (a form of citizenship behaviour) in campaigns against cyberbullying, arguing that there is a limited understanding of people's motivation to publish such comments online. Focusing on online OCB antecedents would help us understand why individuals engage in such behaviours especially on SNSs (Chiu, Fu, et al., 2019; Zhang and Pentina, 2012). Thus, this study aims to answer the question: *What makes individuals engage in FCB?*

Most studies on online citizenship behaviour have focused on SNS users' online lives (e.g., Son et al., 2016; Wu et al., 2017), but these are not separate from their offline lives; rather, both are integrated. This is another research gap that is worth addressing. Ploderer et al. (2008) argued that our knowledge of how offline activities are integrated on SNSs is limited. Similarly, Yang et al. (2016), who explored mobile SNS addiction, suggested that SNSs cause a particularly significant change in interaction, effectively leading to the integration of people's offline and online lives. SNSs provide an excellent platform for people to integrate with and remain connected to their offline communities. Most times, an individual's offline and online social connections overlap. Hence, this study proposes that people's offline and online lives intersect and that such an integration is thus facilitated by their use of SNSs, which help them extend their offline prosocial behaviour to the online world. Erreygers et al. (2019) suggested that adolescents spread their prosocial behaviours from one context to another, which also happens in offline-to-online context. However, to understand how users of an SNS (such

as Facebook) indulge in citizenship behaviours, we must clearly understand the type of connections they have on their SNSs as these are the people who would be witnesses to such behaviours (Chiu, Huang, et al., 2019). SNSs help strengthen one's existing offline connections (friends and family) as well as their formation of new connections (Boyd and Ellison, 2007). Studies have assumed that people use online communities to connect with others outside their pre-existing network. When one's online and offline social networks overlap, the directionality is from the former to the latter—that is, online connections lead to offline interactions (Ellison et al., 2007). This implies that individuals create new online connections and later meet them face-to-face rather than the other way around. Putnam (2000), who categorised social capital, suggested that individuals strengthen their existing connections through the “bonding” social capital and thus integrate their offline and online social activities. In such relationships, people emotionally bond and evoke a sense of reciprocity toward each other. Chen (2014) argued that the nature of relationships has been changed by people's rapidly growing use of Facebook, which has provided more bonding opportunities in which offline relationships may be extended to online lives. Hence, this study explores Facebook users' citizenship behaviours and how people tend to display helping behaviours to their existing (bonding) connections. While there are many SNSs, this study focuses on Facebook since it is the most widely used social network (with 2.47 billion active users (Internetlivestats, 2020)). We attempt to determine whether Facebook users' integration of their offline and online social activities helps them extend their prosocial behaviours to Facebook. *More specifically: How strongly does the perceived integration of an individual's offline and online social activities through Facebook predict their FCB?*

This paper builds on the above arguments to examine the effect of offline–online social activity integration through Facebook, aiming to contribute to the existing literature in several ways. *First*, this study examines offline–online social activity integration through Facebook as an antecedent of FCB. Little research has been done on such integration via Facebook, which Wellman and Gulia (1997) referred to as “embeddedness.” Matzat (2013) pointed out the limited empirical evidence on how embeddedness affects online interaction. According to social network analysts, embeddedness should change online relationships (Wellman and Gulia, 1997), but how this happens remains unclear (Chiu, Fu, et al., 2019). Therefore, we seek to empirically test the relation between offline–online social activity integration and FCB.

*Second*, such a connection would not be fully understood without examining its underlying mechanism. Therefore, this study draws upon social identity theory (SIT) (Tajfel and Turner, 1985), which explains an individual's self-categorisation in a relevant social group, and proposes offline and online social identification as two parallel mediators by which Facebook users' offline–online social activity integration transmutes to citizenship behaviours on Facebook. We suggest that as individuals integrate their offline and online social activities, they see themselves as parts of both offline and online social groups. However, because of the overlap between offline and online connections, individuals tend to extend their citizenship behaviours to the online world.

This paper proceeds as follows: Section 2 presents the relevant literature on social identity, offline–online social activity integration, FCB, and a conceptual model based on the relations among these constructs. Section 3 describes the methodology while Section 4 analyses the data and presents the results. Finally, the paper discusses the results and provides implications, limitations, and future research directions.

## **2 Literature Review and Hypotheses Development**

### *2.1 Integration of Offline and Online Social Activities through Facebook*

An SNS facilitates a user's formation of new connections and strengthens their existing offline connections. Ellison et al. (2007) argued that the social capital formation process is strongly tied offline and online connections, as on Facebook, has not been fully understood. Williams (2006) pointed out that only a few empirical studies have been conducted on how the Internet affects “bonding” social capital though some have debated whether the Internet indeed complements or

replaces existing offline connections. Research has also explored social capital formation via the Internet. According to Nahapeit and Ghoshal (1998, p. 243), social capital is “the sum of the actual and potential resources embedded within, and derived from the network of relationships possessed by an individual or social unit.” Putnam (2000) categorised social capital into two: “bridging social capital” and “bonding social capital.” He explained that bridging social capital is created when people with different backgrounds connect via social networks. However, Williams (2006) implied that these relationships are weak and cautious but that individuals in such relationships have more connections rather than stronger ones. He also suggested that the diversity in such relationships consequently provides opportunities for new information and viewpoints for individuals, but these connections lack emotional support. Meanwhile, bonding social capital is formed when strongly connected individuals, which include family and friends, emotionally and substantively support each other; while they do not have much diversity in terms of background, they have stronger relationships.

Research on online virtual communities suggests that these groups include people mainly in bonding relationships since they share certain interests, thus restricting group differences (Mandelli, 2002). According to Williams (2006), online social interactions are in conjunction with an individual’s offline life. Studies focusing on the Internet have shown that the medium was initially considered potentially isolating as it features a time trade-off in that the time people use to spend with their offline friends in social activities (Williams, 2006) is now spent online. However, this isolation effect was found to subside after a user’s friends and family join them online (Kiesler et al., 2002). This shows that users intend to lead their online lives in conjunction with their offline existence, which Wellman et al. (2002, 2003) also found. Meanwhile, Dai et al. (2017) demonstrated how law enforcement integrated offline communities and Facebook groups to disseminate crime-related information.

Since people use SNSs to keep in touch with their offline contacts (Boyd and Ellison, 2007), they try to integrate their offline and online interactions to maintain these connections (Ploderer et al., 2008). Studies suggested that with Internet use comes either new or existing connections (Hlebec et al., 2006) while online social networking can also produce new offline social relationships (Zhao, 2006). Ellison et al. (2007) found that Facebook use strongly predicted the bonding of existing relationships; for example, Facebook’s birthday prompt feature allows users to easily send birthday wishes to their friends. Most studies on offline and online social interactions (e.g., Neves, 2013) have been conducted in the context of SNS users’ tendency to broaden their social capital or social ties. Matzat (2010) called this offline–online integration “social embeddedness,” in which public SNSs play a key role as they allow for asynchronous communication and help users stay up-to-date with their contacts. Therefore, SNSs help people address their social needs by integrating their offline and online activities. The recent growth in Facebook sign-ups makes the social platform a vital tool for such integration. A Facebook user’s online connections are called “Facebook friends” or “Facebook members”; we will use the former term in this study.

The increasing use of smartphones and tablets and Facebook’s availability in almost all technological gadgets and operating systems have facilitated users’ integration of their offline and online social activities. Also, the ubiquitous nature of wireless technology has allowed Facebook users to participate in offline social activities while simultaneously remaining in touch with their Facebook friends. As discussed earlier, most of these Facebook friends share an offline circle as well. Thus, Facebook also allows its users to widely extend their offline social activities, communication, and interaction to the online world. However, studies have not measured a user’s level of perceived integration; rather, researchers have mostly focused on the consequences of such embeddedness in professional development (Matzat, 2013), sociability issues caused by embeddedness (Matzat, 2010), or comparisons between offline and online interactions in building social capital (Antoci et al., 2012). In addition, most studies on offline and online interactions did not focus on SNSs and Facebook in particular but rather targeted online communities such as forums. In a pioneer study, Yang et al. (2016) empirically measured the concept of “perceived integration of offline and online channels” using mobile SNS applications. We adopted their definition of “perceived integration” and

contextualised it in terms of Facebook as follows: *the strength to which users perceive their offline and online social activities to be combined via Facebook.*

## 2.2 Social Identity Theory

Social identity theory, introduced by Tajfel and Turner (1985), posits that individuals categorise themselves according to their respective social groups, with the tendency to make skewed positive assessments of their in-groups as opposed to their out-groups to maintain a positive sense of self. Hence, people tend to identify with groups or organisations they perceive as highly prestigious and projecting an attractive image, believing that such identification can boost their self-esteem (Ashforth and Mael, 1989; Tajfel and Turner, 1985). According to Hogg and Reid (2006), high identifiers in a group are more likely to incorporate into that group's norms and values and behave in ways that highlight the group's social position.

Meanwhile, according to Ren et al. (2007), online social identity implies that members feel obligated to promote their respective online communities' purpose or theme. This identity may result in (1) social categorisation, which is the simple perception of a group as a collection of people of the same social category; (2) interdependence, which refers to having a common purpose or goal; and/or (3) intergroup comparison, in which a member identifies with a group and compares themselves with members of other groups, often associating positive or negative attributes with the group. Wong et al. (2018) noted that several studies have used SIT to explain user participation in online social networks. This study differentiates between offline and Facebook social identification in that we call *an individual's categorisation with an offline social group* as *offline social identification* while we refer to *an individual's categorisation with an online social group* (e.g., on Facebook) as *online social identification*. However, as argued earlier, people strengthen their offline relationships via SNSs, which implies an overlap exists between a person's offline and online social ties. Therefore, people tend to identify with their respective social groups both in their offline and online lives and, as a result, extend their citizenship behaviours toward them on Facebook. According to SIT, an individual's identification with an organisation persuades them to align with its perspective and considers organisational goals as their own, leading to increased motivation to engage in citizenship behaviours (Van Knippenberg, 2000). Meanwhile, studies have recognised identification as a major predictor of OCB (van Dick et al., 2006). In this study, we argue that individuals use Facebook to integrate their offline and online social activities, and thus, their identification with both their offline and online social groups (which overlap) facilitates their performance of citizenship behaviours on the social network (Chiu, Huang, et al., 2015).

According to Yocco (2014), Facebook has effectively incorporated the concept of social identity into its design and network. He argued that people create Facebook profiles primarily to be a part of a social group on Facebook, which illustrates self-categorisation, further adding that Facebook users are limited only by the extent to which they self-categorise. Furthermore, individuals often customise their profiles to identify with social groups they align with and to let other users conveniently discover opportunities to connect with them, which enforces in-group ties. Yocco (2014) asserted that Facebook has successfully incorporated this concept in its design to determine the mutual interests of members of similar groups, thus the display of relevant advertisements. Zhang et al. (2010) suggested that Facebook helps people achieve richer community experiences by strengthening existing community identities in tangible social interactions. Hence, this supports our argument that a person joins Facebook to be part of a group they identify with. Many of this group's members are also part of their offline lives; thus, Facebook is likely to increase one's interaction with this group. However, even though Facebook helps with a user's bonding ties in their offline and online lives, we refer to the social identification in each context as "offline social identification" and "Facebook social identification," respectively. Therefore, to explain an individual's FCB, we invoke SIT.

### 2.3 Facebook Citizenship Behaviour

For quite some time, discussions in psychology and organisational behaviour have focused on the concept of OCB because of its significance in organisational performance (Xu et al., 2012). Organ (1988) defined OCB as an individual's discretionary behaviour that is not directly monetarily rewarded and that in aggregate supports the organisation's effective operations. He defined five types of citizenship behaviours: (i) altruism, which consists of voluntary actions that help others with work-related issues; (ii) conscientiousness, which refers to voluntary behaviours that extend beyond the minimum, such as levels of attendance and punctuality; (iii) civic virtue, explained as one's responsible, constructive participation in an organisation's political process; (iv) sportsmanship, which pertains to a person's tolerance of unavoidable inconveniences without complaints; and (v) courtesy, which consists of gestures that aim to avoid problems with others. Online communities build upon their members' dedication and voluntary participation (Ren et al., 2007). According to Chiu, Huang et al. (2015), since online network users have more freedom in their actions (compared with those in traditional organisations), the success of online networks is more dependent on its members' discretionary behaviours such as citizenship behaviours. According to Xu et al. (2012), compared with traditional organisations, online virtual communities are loosely structured and self-organised, and the lack of a formal structure and authority makes them reliant on voluntary participation. Wasko and Faraj (2005) argued that despite voluntary participation in online virtual communities, some individuals display prosocial behaviours similar to those in physical organisations or groups. As part of the community, they feel obligated to show altruistic behaviours, among others, toward other community members. Xu et al. (2012) equated such behaviour with OCB and showed why people tend to engage in prosocial behaviours despite not receiving any evident benefits.

Several researchers studied the voluntary nature of OCBs in the perspective of online communities, focusing on organisational virtual community citizenship behaviour (VCCB) (Chiu, Fang, et al., 2015; Yong et al., 2011) and online community citizenship behaviour (OCCB) (Shin and Kim, 2010; Xu et al., 2012; Yen et al., 2011; Yoon and Wang, 2011; Yu and Chu, 2007). Son et al. (2016) mentioned that most studies in the online context have focused mainly on voluntary knowledge-sharing behaviour (Iskoujina and Roberts, 2015; Liu et al., 2015; Yao et al., 2015; Ye et al., 2015) among online communities but did not specifically examine SNSs. Thus, through a social capital perspective, they introduced the concept of SNS citizenship behaviour, arguing that different SNSs have different functional building blocks that they combine as required. For instance, Facebook focuses on relationships and identity functions whereas Twitter highlights conversations based on a short-messaging service. Adopting Son et al.'s (2016) definition of SNS citizenship behaviour, this study considers only Facebook and, consequently, FCB. In line with Organ's (1988) definition of OCB, we define FCB as *a Facebook user's discretionary behaviour that in aggregate promotes the overall effective functioning of their social network*.

Examining antecedents to knowledge contribution in online communities, Yu and Chu (2007) argued that community members display altruistic behaviour when they share knowledge without any expectation of reciprocity. They further asserted that while sharing knowledge, members behave conscientiously, which is part of civic virtue. In the Facebook context, altruistic behaviour refers to knowledge sharing that may be intended for solving others' issues, helping others via personal experiences, giving time to Facebook friends in need, and/or sharing useful links. While Yu and Chu (2007) did not differentiate between the OCB dimensions of civic virtue and conscientiousness, the latter is a more relative measure of OCB in an organisational context. Yong et al. (2011), while developing a measure of VCCB, found that discriminant validity cannot be established between conscientiousness and civic virtue and therefore merged them. Following their lead, we dismissed the conscientiousness dimension from FCB. Also, in accordance with Organ's (1988) definition, we contextualised sportsmanship as the behaviour in which an individual is not bothered by what their Facebook friends are sharing and tolerates mundane issues. Courtesy in FCB refers to one's maintenance of a reasonable tone in their posts, avoiding problems with others, and respecting their Facebook friends' beliefs even in disagreement.

Hence, building on the above literature, we present our first hypothesis:

*H<sub>1</sub>: The integration of offline and online social activities through Facebook (ISAF) has a significant positive effect on FCB.*

## *2.4 Integration of Offline and Online Social Activities through Facebook and Social Identification*

Cheung et al. (2011) stated that SNS users feel a sense of belonging to their respective communities mainly because (i) they are emotionally involved with the community, (ii) they assess their self-worth based on their belonging to that group, or (iii) they feel self-conscious about being part of that community. One's shared values and emotional attachment with their group are considered as a bonding mechanism (Inkpen and Tsang, 2005). People tend to extend their offline relationships to "Facebook friends" to integrate their offline and online activities. According to Li et al. (2018), the Internet has transformed everyday life as it is integrated with one's online existence, and the ubiquitous nature of mobile devices has further eased this integration. Most users add their close family and friends as Facebook friends; when they go online, they extend their offline communication with their friends and family to the online world by sharing information and links with them, commenting on their statuses, and/or posting pictures and videos in different SNSs. This communication extension helps them interact asynchronously, therefore manifesting group identification in both environments. Furthermore, by following an offline discussion with their connections (friend or family) on a certain topic in the offline world, users can support their viewpoints or debates by sharing external sources of information with the same people as they are part of their online network.

Yamamoto and Nah (2018) found that people exhibit higher online information seeking in political participation when they engage in face-to-face interactions offline as well as online. Matzat (2013) showed that embeddedness with offline networks in the academic community helps people establish their reputation by actively contributing to online communities. Thus, people tend to identify with these groups both offline and online. If they are a part of an offline group, they also prefer to be a part of that group online. Therefore, we argue that a higher perception of integrating offline and online life via Facebook leads to a higher display of FCB. Such an association is mediated by a user's offline social identification (OFSI) as well as their online social identification (ONSI). Social identification is the most crucial factor of the relational dimension, which is an individual's conception of self with a group in that they are not separate individuals but rather members of a community (Zhou, 2011). Building on this argument, we propose hypotheses H<sub>2A</sub> and H<sub>2B</sub>:

*H<sub>2A</sub>: The integration of offline and online social activities through Facebook (ISAF) has a significant positive effect on online social identification (ONSI).*

*H<sub>2B</sub>: The integration of offline and online social activities through Facebook (ISAF) has a significant positive effect on offline social identification (OFSI).*

## *2.5 Social Identification and Facebook Citizenship Behaviour*

Studies have widely focused on social identification and organisational identification in the organisational context and suggested that the more people identify with a group, the more it leads to the incorporation of that group's interests into the individual's self-concept, and in turn, members tend to act in the best interest of their respective groups (Ashforth and Mael, 1989). More recently, researchers have highlighted the display of citizenship behaviours in online communities (Chiu, Fang, et al., 2015; Xu et al., 2012). According to Son et al. (2016), people like to get along with others by sharing characteristics and values. Armstrong and Hagel (1996) believe that the basic foundation of online communities is people's extensive support to others who share similar interests and values. Supporting this premise, Lin and Lu (2011), while exploring people's motivation to use SNSs, found

that people who share common values in a group identify with other members, building group membership. This social identification results in an emotional attachment to the social group, which then leads to prosocial behaviours (Kim et al., 2012). Song et al. (2016) argued that in SNSs, shared values lead to the display of voluntary prosocial behaviours. Also, Yu and Chu (2007) suggested that the level of shared values is positively associated with social identification and eventually altruistic behaviours on SNSs. Armstrong and Hagel (1996) found similar results regarding OCB in online gaming communities. Similarly, Chiu, Fang et al. (2015) observed that individuals who identify with a community engage in citizenship behaviours that benefit that community's members. Therefore, we argue that in bonding relationships with strong ties (family and friends), which have higher levels of shared values, leads people to display FCB. We suggest that people who perceive a high integration between offline and online social interactions tend to communicate more often with their Facebook friends and are more readily available to them for opinions, information, and/or advice, among others. They are also more likely to share information pertaining to their Facebook friends' interests. Since most of their Facebook friends are also their offline connections, they also tend to respect and agree with their beliefs and maintain a sensible tone in their online interactions. Another reason for such behaviour is that, as Facebook conversations are mostly public, people generally display more courteous and altruistic behaviours in this social platform. Following these arguments, we suggest the following hypotheses:

*H<sub>3A</sub>: Online social identification (ONSI) has a significant positive effect on Facebook citizenship behaviour (FCB).*

*H<sub>3B</sub>: Offline social identification (OFSI) has a significant positive effect on Facebook citizenship behaviour (FCB).*

Finally, based on the proposed H<sub>1</sub> to H<sub>3</sub>, we logically derive H<sub>4</sub>, highlighting the mediating mechanism:

*H<sub>4A,4B</sub>: The relation between offline–online social activity integration through Facebook (ISAF) and Facebook citizenship behaviour (FCB) is mediated by (a) online social identification (ONSI) and (b) offline social identification (OFSI).*

Figure I shows a graphical representation of these proposed connections.

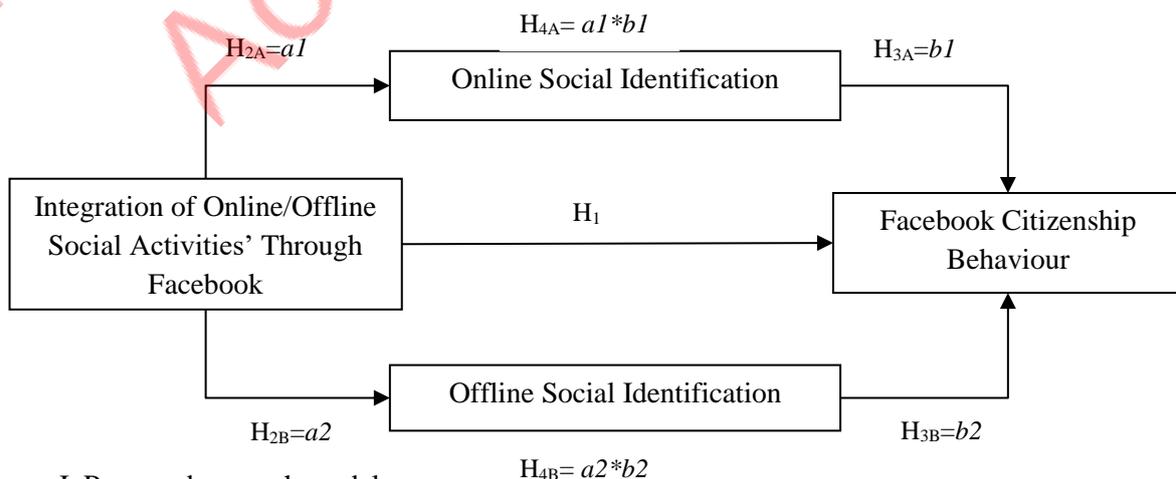


Figure I. Proposed research model

### 3 Methodology

#### 3.1 Sample, Data Collection, and Measurement Scales

To examine these hypotheses, we conducted an online survey of Facebook users hosted on a web link and shared on various Facebook group pages. It included a cover letter that briefed users on the study and sought ethical consent from the participants. To ensure the instrument's validity, we adapted all of its scales from well-established studies (Chiu, Huang, et al., 2015; Yang et al., 2016; Yong et al., 2011) and measured all constructs using multiple items. The study involved 309 participants, one of which was removed as a multivariate outlier, following Cook's and leverage test findings. We then performed further analysis on the 308 respondents. According to Rife et al. (2016), while some differences exist in samples collected through SNSs and more representative samples, minimal issues have been reported regarding Facebook sampling. Since this study was entirely conducted in the context of Facebook, we used random sampling to ensure representativeness among the Facebook population. Table I shows the demographics of the sample.

Measure	Item	Number ( $n = 308$ )	Percentage
Gender	Male	149	48.4
	Female	159	51.6
Age (in years)	< 18	9	2.9
	18–24	140	45.5
	25–34	100	32.5
	35–44	42	13.6
	45–54	10	3.2
	> 55	7	2.3
Education	High School	16	5.2
	Diploma (2 years)	4	1.3
	Undergraduate	130	42.2
	Graduate of above	158	51.3
No. of Facebook friends	< 50	66	21.4
	50–100	69	22.4
	101–200	64	20.8
	201–500	63	20.5
	> 500	46	14.9
Time since using Facebook	< 6 Months	30	9.7
	6 months to 1 year	8	2.6
	1–2 years	9	2.7
	2–5 years	61	19.8
	> 5 years	200	64.9

Table I. Respondents' demographic information

The questionnaire consisted of scales that measure perceived offline–online life integration via Facebook, Facebook social identification, OFSI, and FCB (see Appendix 1). All questions were measured on a scale of 1 (strongly disagree) to 5 (strongly agree) unless indicated otherwise. The composite reliabilities and average extracted variances for each construct were within acceptable limits (see Appendix I) (Hair et al., 2017).

We adopted Yang et al.'s (2016) scale to measure ISAF; a sample item here is "Facebook allows me to keep in touch with my online community members/friends, while I am participating in the offline social activities." This study reports that this scale's alpha reliability value is 0.85. Also, we measured ONSI and OFSI using Zhou's (2011) scale; sample items include "I am a valuable member of my Facebook community," and "I am a valuable member of my offline community," respectively. Similarly, the alpha reliability values for these scales are 0.91 and 0.91, respectively. To measure FCB, we adapted 14 items from the scales of Chiu, Huang et al. (2015) and Yong et al. (2011). A sample item here is "When I have the opportunity, I help Facebook members/friends solve their problems." The alpha reliability value for FCB is 0.92.

Since the study uses self-reported measures, common method variance (CMV) is likely to occur, as suggested by Podsakoff et al. (2003). However, to confirm that CMV would not be a major issue in our data set, we used Herman's single factor test. We also performed question randomisation on the online survey tool so that respondents are asked questions in a randomised manner. To control for potentially spurious effects in our proposed model, this study included gender, level of education, age, number of Facebook friends, and Facebook usage tenure as control variables.

## 4 Data Analysis and Results

The proposed factor structure was verified through confirmatory factor analysis (CFA) using AMOS version 21. All items had acceptable levels of factor loadings ( $> 0.6$ ) (Tabachnick and Fidell, 2013). To evaluate model adequacy, based on Byrne (2009) and Schreiber et al.'s (2006) recommendations, the following fit indices were used: normed chi-square (CMIN/df), Tucker–Lewis index (TLI), comparative fit index (CFI), and root mean square error of approximation (RMSEA). In line with Hair et al. (2010), the four-factor baseline model (Model 1) was found to have a good fit with the data. Furthermore, as suggested by Bentler and Bonett (1980), the two alternative models (Model 2 and Model 3) were tested and compared with the four-factor baseline model. In Model 2, all measures were loaded on a single factor while in Model 3, the mediating variables ONSI and OFSI were merged into a single variable (see Table II). Both alternative models showed poor fit with the data compared with the four-factor baseline model.

	Measurement Model Comparison (CFA)	CMIN/df	CFI	TLI	RMSEA
Model 1	Four-factor baseline model: ISAF, ONSI, OFSI, and FCB (as a second-order construct consisting of ALT, COU, CV, and SP)	2.74	.91	.90	.07
Model 2	Single-factor model: all measures loaded on a single latent factor	8.53	.61	.58	.15
Model 3	Three-factor alternative model: ISAF, ONSI–OFSI merged into one construct, and FCB.	5.53	.77	.74	.12

Table II. CFA model fit indices

Note:  $N = 308$ ; CMIN/df = normed chi-square, CFI = comparative fit index, TLI = Tucker–Lewis index, RMSEA = root mean square error approximation

ALT: altruism, COU: courtesy, CV: civic virtue, SP: sportsmanship

Cronbach's alpha values were used to test the scales' reliability. Table III provides the reliability values diagonally along with the mean, standard deviation, and inter-correlation values of all the constructs, including the demographic variables.

Variables	Mean	SD	1	2	3	4	5	6	7	8	9
1. Gender	1.52	.50									
2. Education	3.40	.76	-.17**								
3. Age	2.76	.99	-.34**	.43**							
4. FB Friends	2.85	1.3	-.30**	.31**	.25**						
5. FB Use	4.28	1.2	-.15**	.26**	.7**	.49**					
6. ISAF	3.22	.87	-.04	.19**	.17**	.31**	.26**	.85			
7. ONSI	2.96	.99	-.17**	.23**	.24**	.40**	.28**	.56**	.91		
8. OFSI	3.42	.90	.13**	.23**	.18**	.23**	.12**	.90**	.31**	.91	
9. FCB	3.35	.74	-.13**	.28**	.31**	.39**	.33**	.65**	.62**	.46**	.92

Table III. Descriptive statistics and inter-correlations

Note. Gender was coded as 1 = male and 2 = female; education as 1 = high school, 2 = diploma (two-year college), 3 = undergraduate, and 4 = graduate or above; age as 1 = less than 18 years, 2 = 18–24 years, 3 = 25–34 years, 4 = 35–44 years, 5 = 45–54 years, and 6 = 55 years or above; number of Facebook friends as 1 = less than 50, 2 = 50–100, 3 = 101–200, 4 = 201–500, and 5 = more than 500; Facebook use tenure as 1 = less than 6 months, 2 = 6 months–1 year, 3 = 1–2 years, 4 = 2–5 years, and 5 = more than 5 years.

All proposed hypotheses were then tested using PROCESS macro for SPSS (Hayes, 2013). Table IV summarizes the hypothesis test results for all the direct relations. Since the PROCESS macro provides an unstandardized  $\beta$  coefficient, standard error values were provided for each  $\beta$  estimate. The PROCESS macro uses a bootstrapping procedure to calculate indirect effects via mediation. Table V shows the indirect effect of ISAF on FCB via FSI and OSI, respectively. The upper and lower limits of confidence intervals are shown for each effect, and the effects of demographic variables were controlled in the analysis.

All hypotheses for direct and indirect relations, that is, H<sub>1</sub>–H<sub>4</sub>, were then tested. H<sub>1</sub> hypothesised a direct relation between ISAF and FCB. The results showed that ISAF has a direct positively significant effect on FCB ( $\beta = .32$ ;  $p = .000$ ); therefore, H<sub>1</sub> is validated. Next, H<sub>2A</sub> referred to the direct relation between ISAF and ONSI, and the results in Table IV show that ISAF has a significant positive effect on ONSI ( $\beta = .54$ ;  $p = .000$ ), which supports H<sub>2A</sub>. Moreover, H<sub>2B</sub> pertained to the direct relation between ISAF and OFSI, and the hypothesis test results revealed a significant positive relationship between ISAF and OFSI ( $\beta = .20$ ;  $p = .000$ ) as proposed, validating H<sub>2B</sub>. Meanwhile, H<sub>3A</sub> and H<sub>3B</sub> proposed a direct relation between ONSI and FCB, and OFSI and FCB, respectively. The results confirm the significant positive effects of ONSI ( $\beta = .19$ ;  $p = .000$ ) and OFSI ( $\beta = .19$ ;  $p = .000$ ) on FCB, which support H<sub>3A</sub> and H<sub>3B</sub>, respectively.

	ONSI				OFSI				FCB			
	$\beta$	SE	P	R <sup>2</sup>	$\beta$	SE	P	R <sup>2</sup>	$\beta$	SE	P	R <sup>2</sup>
<i>Direct Effects</i>												
ISAF	.54	.05	.000	.39	.20	.05	.000	.12	.32	.03	.000	.61
ONSI									.19	.03	.000	
OFSI									.19	.03	.000	
Gender									.05	.05	.377	
Education									.01	.04	.692	
Age									.07	.03	.015	
FB Friends									.02	.02	.280	
FB Use									.04	.02	.064	

Table IV. Synthesis of direct effects

Finally, H<sub>4A</sub> and H<sub>4B</sub> proposed indirect relations between ISAF and FCB via the mediation of ONSI and OFSI, respectively. The mediation analysis results in Table V show the indirect effect of ISAF on FCB via ONSI and OFSI. The results also showed that ISAF had a significant positive indirect effect on FCB through both ONSI ( $\beta = .14$ ; LL = .058; UL = .159) and OFSI ( $\beta = .04$ ; LL = .012; UL = .084). We therefore confirm that hypotheses H<sub>4A</sub> and H<sub>4B</sub> are also validated. Note that a partial mediation was observed since both the proposed direct and indirect hypotheses were significant (Hayes, 2013), implying that with ONSI and OFSI as mediators, ISAF has both direct and indirect significant effects on FCB.

	FCB					
	$\beta$	SE	LL	UL	P	R <sup>2</sup>
<i>Indirect Effects</i>						
ISAF → ONSI → FCB	.14	.02	.058	.159		.50
ISAF → OFSI → FCB	.04	.01	.012	.084		
Gender	.00	.06			.884	
Education	.05	.04			.216	
Age	.10	.03			.005	
FB Friends	.07	.02			.010	
FB Use	.04	.02			.127	

Table V. Synthesis of mediation analysis with the bootstrapping method

Note:  $\beta$  values are unstandardized estimates; standard errors (SE) are provided with  $\beta$  estimates.  
LL: lower limit of confidence interval; UL: upper limit of confidence interval

Figure II below summarizes the hypothesis results.

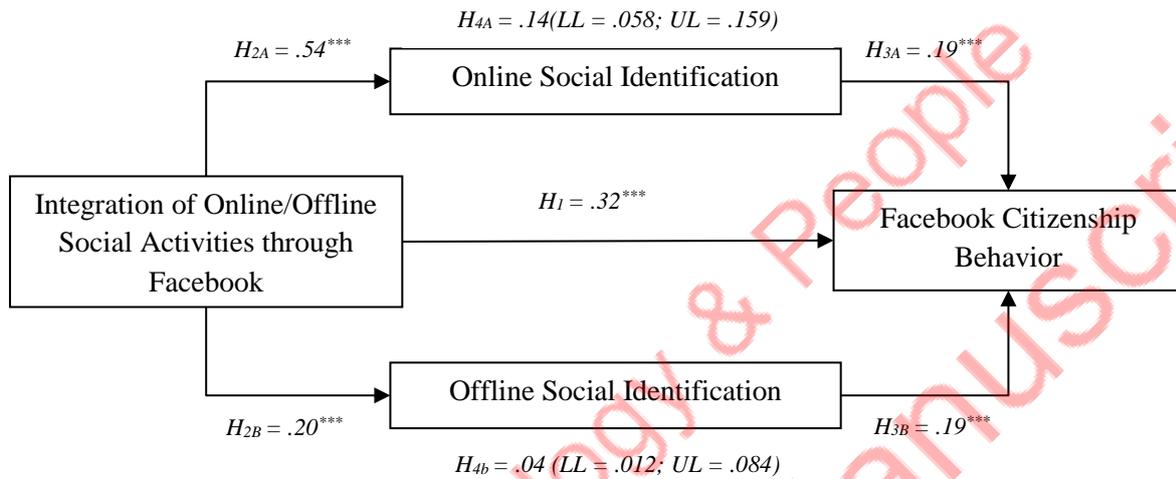


Figure II. Summary of hypothesis results

Note:  $***p < 0.001$

Next, Table VI provides the conclusions for each hypothesis.

Hypothesis	Description	Conclusion
H <sub>1</sub>	The integration of offline and online social activities through Facebook (ISAF) has a significant positive effect on Facebook citizenship behaviour (FCB).	Accepted
H <sub>2A</sub>	The integration of offline and online social activities through Facebook (ISAF) has a significant positive effect on online social identification (ONSI).	Accepted
H <sub>2B</sub>	The integration of offline and online social activities through Facebook (ISAF) has a significant positive effect on offline social identification (OFSI).	Accepted
H <sub>3A</sub>	Online social identification (ONSI) has a significant positive effect on Facebook citizenship behaviour (FCB).	Accepted
H <sub>3B</sub>	Offline social identification (OFSI) has a significant positive effect on Facebook citizenship behaviour (FCB).	Accepted
H <sub>4A,4B</sub>	The relation between offline–online social activity integration through Facebook (ISAF) and Facebook citizenship behaviour (FCB) is mediated by (a) online social identification (ONSI) and (b) offline social identification (OFSI).	Accepted

Table VI. Conclusion of proposed hypotheses

#### 4.1 Discussion

This study sought to explain how offline–online social activity integration through Facebook affects FCB. Using social identification theory, we explained how offline social identification and Facebook social identification serve as the underlying mechanisms that maintain such an association. The findings showed that using Facebook allows people to identify with their respective groups in the offline and online world, effectively bridging their offline and online social activities. The facilitation of being connected with a group through a social network such as Facebook enables people to extend their citizenship behaviours to Facebook interactions with their preferred groups. The results showed that offline–online social activity integration through Facebook affects both offline social identification and Facebook social identification, the latter effect being much stronger. Studies have

reported similar findings where offline and online activities affected an individual's sense of belonging (Lin, 2007) and community fit (McCully et al., 2011) in virtual communities. This supports the fact that people use Facebook to integrate their offline and online social activities and to identify with particular groups. The ease at which they communicate with all group members at a single setting, such as a Facebook group conversation, explains the stronger impact on Facebook social identification. The results also revealed that both offline and Facebook social identification affect a user's FCB, which is also consistent with previous studies that found a significant relation between organisational identification and OCB in an organisational context (Riketta, 2005; Smith et al., 1995). Similarly, Matzat (2010) found that integrating online communication with offline interaction positively affects future activities. Again, the degree of impact on FCB for online social identification is greater than that for offline social identification, showing that people tend to exhibit citizenship behaviour more frequently while identifying with the online (Facebook) group. As argued earlier, while most offline and online contacts tend to be the same, it would still take much less effort and time to display such altruistic behaviours online rather than in the physical world because an individual does not have to leave their physical space. Such behaviours may be in the form of sharing information, articles, links, solutions to problems, and updates regarding friends' activities, among others. Finally, with the establishment of the abovementioned relations, this study found that both offline social identification and Facebook social identification mediate the connection between FCB and offline-online social activity integration via Facebook. When the level of identification was high, the level of FCB displayed increased as well. Chiu, Huang et al. (2015) observed a similar finding while exploring online community citizenship behaviours.

#### 4.2 *Theoretical and Practical Implications*

This study offers significant theoretical and practical implications. From a theoretical standpoint, this study extends the literature on citizenship behaviour—which has been largely focused on the organisational context—by offering novel insights into limited online community citizenship behaviour, particularly FCB. One of this study's significant contributions is an investigation of the integration of social activities through Facebook and its effect on FCB. The findings highlight that one's integration of offline and online social activities through social media such as Facebook plays a significant role in their display of prosocial behaviour in such platforms. This research offers new knowledge by examining the impacts of offline and online social identification in terms of how they mediate the relation between integration and FCB. Therefore, this study helps people understand how social life integration influences the formation of individuals' social identification and prosocial behaviours such as FCB. Unlike previous studies, this research explores how individuals integrate their offline and online social activities via Facebook to identify with their respective social groups both online and offline. This study explains offline-online social activity integration and how it shapes FCB through the lens of SIT (Tajfel and Turner, 1985), which serves as the underlying mechanism. Research in organisational behaviour has also adopted SIT to explain employee citizenship behaviour (Callea et al., 2016; Newman et al., 2015). Our study, meanwhile, broadens the literature on both prosocial and online user behaviour by asserting that since individuals lead both offline and online lives, they identify with their respective social groups both offline and online. Their use of SNSs such as Facebook helps them integrate their offline and online lives by expanding their offline relationships to the virtual world. People use Facebook to identify with groups to extend their offline relationships to the online world and vice versa. In addition, social identification has been studied from both offline and online perspectives, and the results show that individuals identify with the same groups in both offline and online contexts. Another contribution by this study is that both offline and online social identification lead to FCB, which demonstrates how altruistic attitude is extended from the offline to the online world.

On the other hand, from a practical perspective, it is interesting to see the way people show altruistic behaviours in groups they identify with. People who share their Facebook network with their offline friends can seek help and support via the social network. This also implies that Facebook's ubiquity via smartphone apps and web programs can help users offer or obtain group support from

anywhere and at any time. This would also explain why certain users indulge in certain citizenship behaviours and why some do not, which may eventually clarify social network ties. A further implication here is that when people tend to ask help from others online (for instance, a donation), individuals who are more likely to help are those they already know in their offline lives.

Indeed, this study offers useful implications for SNS managers. This study's results demonstrate the significance of offline–online social activity integration in developing people's prosocial behaviours such as FCB. The integration of users' social activities has emerged as a significant predictor of FCB, suggesting that SNSs need to develop strategies and mechanisms to support both online and offline communication channels and social activity integration within these channels. This research also explains that individuals' offline and online social identification are key intervening factors; thus, managers need to take initiative in improving their brand image, which will help users enhance their social identification by participating in such communities. Social media page/group administrators must also ask their page/group members to invite their connections to those pages as this will help generate more conversations around members' posts on such pages/groups. Companies such as Facebook need to develop strategies that allow people to connect their offline and online social activities and focus on community members' well-being and happiness. This will also help users develop strong social identification ties with the community and indulge in prosocial behaviours.

### 4.3 Limitations and Future Research

Despite its careful research design planning, this study has several limitations. It employs a cross-sectional design with a time-based restriction in the accurate measurement of associations among the perceived integration of offline and online life via Facebook, social identification, and FCB; indeed, a longitudinal study conducted at a different time would have produced a more precise analysis. Therefore, future studies can implement such a research design to verify the causality that this study established. Also, we tried our best to disseminate the survey throughout Facebook. Considering that Facebook posts are more visible to a user's friend network than to people outside such network, users within our network were more likely to respond to the survey after re-sharing the survey link. However, we ensured that the survey link was posted in diverse groups and from different geographical locations to ensure random sampling. Since Facebook is a public SNS, the individuals who would respond to the survey was beyond the researchers' control. Another limitation here is that the public nature of SNSs may lead many people to discuss controversial topics. From a methodological perspective, while the survey link was shared with groups that do not focus on a specific topic/event/product/technology, contentious debates on such controversies may provoke people into engaging in non-prosocial behaviour. Finally, the generalizability of this study's results is restricted because it focused on a single social network (Facebook). For more comprehensive results, future research may investigate the proposed relations across multiple social networks. Moreover, user demographics, such as personal identity and community experience, may affect various connections in the conceptual model; thus, future studies would be prudent in investigating such factors.

## 5 Appendix 1. Measurement Scales

Item Code	Item
<b>Integration of Online/Offline Social Activities through Facebook (Yang et al., 2016) [CR: .840, AVE: .576]</b>	
<i>The strength to which users perceive their offline and online social activities to be combined by using Facebook (adapted from Yang et al., 2016)</i>	
ISAF1	Facebook allows me to keep in touch with my online community members/friends, while I am participating in the offline social activities.

- 
- ISAF2 Facebook allows me to instantly respond to my online community members/friends, while I am participating in the offline social activities.
- ISAF3 Facebook effectively reduces the conflicts between my offline and online social activities.
- ISAF4 Facebook effectively integrates my offline and online social activities.

**Online Social Identification (Yang et al., 2016) [CR: .913, AVE: .778]**

*An individual's categorisation with an offline social group*

- ONSI1 I am a valuable member of my Facebook community.
- ONSI2 I am an important member of my Facebook community.
- ONSI3 I am an influential member of my Facebook community.

**Offline Social Identification (Yang et al., 2016) [CR: .912, AVE: .777]**

*An individual's categorisation with an online social group (on Facebook)*

- OFSI1 I am a valuable member of my offline community.
- OFSI2 I am an important member of my offline community.
- OFSI3 I am an influential member of my offline community.

**Facebook Citizenship Behaviour (Chiu, Huang, et al., 2015; Yong et al., 2011) [CR: .847 AVE: .737]**

*A Facebook user's individual behaviour that is discretionary and in aggregate promotes the overall effective functioning of the individuals social network (adapted from Organ, 1988)*

- FCB1 When I have the opportunity, I help Facebook members/friends solve their problems.
- FCB2 I share personal experiences with Facebook members/friends to help them.
- FCB3 When I have the opportunity, I give my time to help Facebook members/friends when needed.
- FCB4 I recommend useful links or reference information to Facebook members/friends who are in need.
- FCB5 I maintain a reasonable tone, even in unreasonable circumstances on Facebook.
- FCB6 I am cautious to avoid creating problems for Facebook members/friends.
- FCB7 I do not abuse the rights of Facebook members/friends.
- FCB8 I respect Facebook members/friends' views and beliefs even if I do not agree with them
- I actively attend activities/events organised by Facebook members/friends.
- FCB9 I keep myself updated with announcements, posts, by Facebook members/friends.
- FCB10 I actively express my opinions that are not obligatory but would help Facebook
- FCB11 members/friends.
- I do not complain about trivial (insignificant) matters with Facebook members/friends.
- FCB12 I do not try to find faults with what Facebook members/friends are sharing/posting.
- FCB13 I tolerate minor imperfections with Facebook members/friends.
- FCB14

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*Note: N = 308, CR: composite reliability, AVE: average variance extracted*

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