The impact of customer personality and online brand community engagement on intention to forward company and users generated content: palestinian banking industry a case

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ABSTRACT

Personality five characteristics are playing crucial role on intention to forward Online Company Generated Content and user generated content mediated by online brand community engagement. This paper is applied on a case of banking industry in order to perceive a long run relationship between banks operating in Palestine and their customers. The total of 685 valid questionnaires were collected from online banking sector in Palestine, who is member of online brand community in Facebook. Moreover, the data were analysed and processed by structural equation model. The results reveal that personality traits (extraversion, conscientiousness, and openness) have positive influence on online brand community engagement. It also found that online brand community engagement plays vital role in inducing clients to forward CGC and UGC. Simultaneously, the results provide banks with a valuable implication on how banking industry can attract more customers in online brand community website and perceived trust of banks services and products.

1. Introduction

Online brand communities have been evolved in last two decades and is considered a strategic marketing plan for developing firm's products in order to offer a unique brand experiences for these communities. Furthermore, it provides customers opportunity to benefit and share their opinions on services and products quality. Indeed, social media has been recognized as a highly effective channel for contacting with customers in the context of brand businesses.

Recently, online brand community is managed by both companies and individual investors who have the same interests and passion toward brand. They are

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participating in these online communities in order to make strong loyalty with their customers (Weman, 2011). Thus, most of brand communities are highly spending a part of their advertising budgets on the announcements in social media such as Facebook, Instagram, and twitter. Because they thought that this way is an explicit marketing investment in order to develop strong relationship with their customers (Baldus et al., 2015).

This marketing strategy improves the substantial returns of multinational firms and motivates the customers to participate in brand communities. Moreover, it reduces the operational costs and increases the profit of brands. As result, this idea assists brands in developing their products and competing with the others. In addition, it is considered a competitive advantage strategy for the banks to run a long-term relationship with their customers, especially in customer relation management (Kane et al., 2009).

Although number of influential factors of online brand community have proposed in prior literature. Nevertheless, this relationship is still debating. In particular, we had notice few empirical works addressing this issue (Hollebeek, 2011a; Islam et al., 2017). Particularly, the impact of customer's personality traits on their engagement with online banking community and intention to forward. Hence, the development of insight into impact of personality of bank customers could help managers make better investment decisions and maintain excellence by attracting more customers and achieving brand loyalty (Hollebeek et al., 2014).

Despite the fact that this practical evolved, marketing scholars has a struggle to have an approach in motivating customers to engage in these online brands communities (Cova & Pace, 2006). Secondly, the online brands communities have necessarily limited to extreme leader users in their social networks. Thirdly, this paper is considered the only one in Palestine that primarily focused on consumer's engagement to the online brands communities partially in banking industry context.

The purpose of this paper is to develop and estimate conceptual model of how customer's personality traits influence on their intentions to forward through their online brand engagement. Moreover, it seeks understand how customer's interaction with brand community contribute to their loyalty behaviour and intention with considering customer personality as crucial factor.

As result, this paper addressing the following research questions:

1. Does the customer's personality characteristics (conscientiousness, extraversion, emotional Instability, openness to experience, and agreeableness) play fundamental role in online brand community engagement?
2. Do customer's personality traits (conscientiousness, extraversion, emotional Instability, openness to experience, and agreeableness) of customer's personality influence on intention to forward CGC mediated by online brand community engagement?
3. Do customer's personality traits (conscientiousness, extraversion, emotional Instability, openness to experience, and agreeableness) of customer's personality influence on intention to forward UGC mediated by online brand community engagement?

The reminder of this study is organized as follows: next section describes theoretical framework and research hypotheses. Third section details the adaptive model and explains the research questionnaire design. Fourth section analyses the data and discusses the result. Final section concludes the findings and implications of research.

2. Theoretical Framework

2.1. Intention to Forward Company Generated Content (CGC)

Initially, Davis (1989) developed Technology Acceptance Model that measured the user's behaviours to accept information system and technology in different manners. Moreover, TAM is an adaptation of theory of reasoned action (TRA) that deals with customer's personality as external factor that can influence on customer's behaviour indirectly (Ajzen & Fishbein, 1980).

In fact, many marketing scholars argued that TAM model is positively related to customer intention to share or participate in social media activities such as Agag & El-Masry, (2016). Furthermore, they revealed that the perceived usefulness and ease to use are the important factors of adapted TAM model within online context.

2.2. Intention to Forward User Generated Content (UGC)

This concept is defined as the content created by social media users (Arrigara & Levina, 2008). Therefore, all social media activities that users share their experiences and opinion online in form of text, photos, comments, and videos are considered Consumer Generated Media or UGC. In general, UGC can be individually or collaboratively created, modified, shared and consumed. Moreover, it's obviously expressed all means that users exploit social media (Kaplan & Haenlein, 2010).

In fact, UGC holds are influential factor for attracting consumers to engage in social media. Therefore, Nielsen's Global Trust in Advertising Survey shows that the creditability is considered the subjective nature of UGC, and the consumer's reviews in social media are the second most trusted resource for the brand information (Nielsen, 2012). Similarly, Litvin et al. (2008) mentioned that the content posted by users or consumers as non-commercial information is perceived to be more credible. Further, Hovland et al. (1953) found that the consumer's perceptions are changing when the material was built on highly credible resources. On the other hand, users could engage to social media based on popularity or their relevant interesting information (Ung, 2011). Furthermore, the information and products are ranked in internet according to relevant interesting in order to facilitate users to find out what is the most interesting product. Hence, the influential UGC must hold the factor interestingness.

Theoretically, Spiggle (1994) has developed the ground model of online brand community engagement. He has developed a measurement that used to measure the brand community engagement. Moreover, McAlexander et al. (2002) argued that customer engagement to brand community relies on four components: geographical concentration, social context temporality, and identification. Further, Hollebeek (2011) mentioned that brand engagement is described as the level of customer physical, cognitive, emotional presence in direct interactions with brand. Whereas, Wirtz et al.

(2013) considered it as new way which users can interact with brand. Similarly, Baldus et al. (2015) described it as the customer's motivations for interacting with online brand communities.

2.3. Online Brand Community Engagement (OBCE)

Brand community engagement is defined as the consumer behaviour toward brand community. Initially, Baldus et al. (2015) Defined the Online brand community engagement as the compelling, intrinsic motivations resulting in continuous interacting between the customers and online brand community. Community engagement is defined by Algesheimer et al. (2005) as the key intrinsic motivational factors that may encouragecustomers to interact with other within the community. The online community share the common interest through computer-mediated mechanism by aggregation of self-select people (Hennig-Thurau et al., 2004; Shang et al., 2006).

The brand community from a customer perspective is a fabric of relationships between the customer and the brand, the customer and the firm, the customer and the product, and among fellow customers (McAlexander et al. 2002). Muniz and O'guinn (2001) Define the brand community as a specialized, non-geographically bound community. Algesheimer et al. (2005) develop in their research a conceptual model to estimate the customer's intentions and behaviors how influenced by the different aspects of customers' relationships with the brand community.

Wang et al. (2002) identified the theoretical foundation for the virtual tourist community (characteristics of virtual communities and needs of community members). They focused on explaining of how to the virtual communities' work within the tourism industry. Baldus et al. (2015) was developed the conceptualized model of online brand community engagement. They proposed eleventh dimensions to measure OBCE that described by this study as follows:

2.3.1. Brand influence

Wirtz et al. (2013) argued that customer's engagement behavior is associated with brand community and traditional transactions. This means that customer's relationships with brand are more than purchasing or consuming the brands. Further, Gummerus et al. (2012) described that customers interact with brand community is divided into purchases behavior (purchasing the brand) and non-purchasing behavior (sharing or recommending the word of mouth. Therefore, the nurture and creation are considered the two important forces behind brand influence on the behaviour customer. Moreover, it is important to communicate with customers in order to influence their behaviour and pursue them to engage in the brand community. Thus, Baldus et al. (2015) defined brand influence as the degree to which community member willingness to influence a brand.

2.3.2. Brand Passion

Carroll and Ahuvia (2006) argued that passion is emotional relationship present between consumer behaviour and brand. Moreover, Whang et al. (2004) revealed customer can fall in passionate love with brand over period of time. Furthermore, Passion can assist producers persevere through inevitable setbacks. Therefore, this

concept is defined as the ardent affection a community member has for the brand (Baldus et al., 2015).

2.3.3. Connecting

Connecting is considered the emotional link for customers to engage in brand community. Malär et al. (2011) indicated that the connecting is considered the level of the customer feeling toward to become a member in brand community. Further, Baldus et al. (2015) defined it as the extent to which a community member feels that being a member of brand community connects.

In fact, Escalas (2004) argued that the creation of strong connection between customers and their brand community more likely occurs based on the customer's personality and their physiological needs.

2.3.4. Helping

It's defined as the degree to which the community member wants to help fellow community member through sharing knowledge, experience, or time (Baldus et al., 2015). The customers are motivated to communicate, and interact with the other members in the community. The community members are interested and motivated to participate in such activities and behaviour like, helping each other in the community, sharing and recommending the WOM, and the other engagement behaviors like writing comments (Algesheimer et al., 2005; Van Doorn et al., 2010) This indicates that users engagein online brand community because they want to share his experience and knowledge to other community member.

2.3.5. Liked Mind Discussion

This expression is defined as the extent which a community member is interested in talking with people similar to themselves about the brand (Baldus et al., 2015). This means that the conversation with others in brand community who have the same views push the customer to engage in online brand community.

2.3.6. Rewards (hedonic)

This concept is defined as the degree to which the community member is willing to gain hedonic rewards such as; social status, fun, and entertainment through participating on brand community (Baldus et al., 2015). This implies that customer engage in brand community in the aim of entertainment.

2.3.7. Rewards (utilitarian)

Utilitarian is defined as the degree to which the community member wants to gain monetary rewards through participating in brand community. This means that users engage to online brand community in order to gain money or prizes. Heller Baird and Parasnis (2011) indicated that the customers use their social media to connect and communicate with friends and family, if the companies want from the customers to communicate and interact with them via social media the companies must reward them in order to motive their participation.

Rewarding customers is the antecedents to increase the customer's involvement in the loyalty program, and they have greater engagement and involvement with the brands compared with the customers rewarded based on the financial transaction only. The loyalty for the customers who collect the loyalty points via social media is greater than the customers who collect the points based on transactions only.

Rehnen et al. (2017) found that Preferring the rewards types and perceived benefits depend on the gender differences according to online interaction. For example: Garbarino and Strahilevitz (2004); Bakewell and Mitchell (2006) indicated the differences between men and women considerations during the shopping, the women consider hedonic rewards, but the men consider the utilitarian rewards. On the other hand, Ko et al. (2005) indicated that the men prefer and seek hedonic benefits and values while female prefer and seek utilitarian benefits and values according to their internet usage and interactions

2.3.8. Seeking Assistance

The degree to which the community member wants to receive help from fellow community members who share their experiences and knowledge (Baldus et al., 2015). one of the main drivers of customer's engagement and interacting to participate in the community is seeking assistance (receiving help from the others) for example eBay created help Forums to share knowledge. Seeking assistance from the other help the community members to avoid or reduce the uncertainty that are related to their decisions in purchasing the products, services, and brands (Dholakia et al., 2009). And to increase the user's knowledge and experience in purchasing products (Mattila & Wirtz, 2002). This indicates the customers wants to engage to online brand community because they need a help or assistance. Therefore, this paper expects that seeking assistance is positively correlated to intention to forward CGC.

2.3.9. Self-expression

This concept is defined as the degree to which community member feels that community provides them with a forum where they can express their interests or opinions (Baldus et al., 2015). Belk (1988) indicate that the customers use brands to express themselves. Sprott et al. (2009) indicated that the brand engagement in self-concepts. the customers see and recognized the brand as part of themselves. Algesheimer et al. (2005) found that the brand community identification is the strong indicator for the strong connection with the brand, in addition the customers representing themselves when they belonging to the brand community. This means that the main reason for customer's engagement to online brand community is expressing their opinion and feelings. This paper argues that customer self-expression is positively related to intention to forward CGC.

2.3.10. Upgrade information

The result of the internet growth, enable the customers to share and distribute information about the brand when they participate in the online brand community engagement (Chang et al., 2013).

The customers tend to be a member and to participate in the brand community in order to get informational learning, self-identity, and self enhancement (Coelho et al., 2018; Wu et al., 2015). Baldus et al. (2015) defined upgraded information as a dimension of online brand community as the degree to which community member feels that brand community helps them to stay informed or up to date with brand related information. This indicates that customer engaged to online brand community in order to upgrade their brand information. This paper expects that upgrade information is positively related to intention to forward CGC.

2.3.11. Validation

This dimension of the online brand community engagement is related to how other members in the community evaluate my opinions, ideas and comments which result in influencing my participation in the community positively like increasing my participation in the community. Validation is defined as a community member that feeling of the extent to which the community member affirms the importance of their opinions and interests' information (Baldus et al., 2015). This means that customers engage to the online brand community because they receiving more affirmation of the value of their comments. This paper believes that validation has positive impact on intention to forward CGC.

2.4. Customers Personality Traits

Initially, Allport (1937) defined personality as the dynamic organization within the individual of those psychophysical systems that determine his unique adjustments to his environment. Moreover, Hogan (1987) referred to it as patterns of thought, feelings, and behaviour that are expressed in different circumstances.

Originally, Thurstone (1934) was developed five factors model of customer personality. This model assumes that personality can be explained by five key factors include; Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness. Orr et al., 2009) found these factors had a significant influence on brand attachment. Similarly, Roos (2017) argued that the five factors of personality are positively related to uses of internet pages. Ryan and Xenos (2011). argued that Australian Facebook users to tend to be more extraverted, narcissistic, and less consciousness. Thus, many scholars have used different topology to describe these five factors. Therefore, it could be described as follows:

2.4.1. Neuroticism

Barrick and Mount (1991) defined Neuroticism as the using of the words in a fearful, pessimistic and insecure manner. Moreover, Devaraj et al. (2008) described it as emotional instability and hostility. Ross et al. (2009) stated that people who are high in neuroticism are more likely to prefer using Facebook usage. Hence, we advance:

H1: Neuroticism is positively associated with online brand community engagement OBCE.

2.4.2. Extraversion

Extraversion is defined as the tendency of being sociable, talkative, and ambitious (Pervin, 1993). Further, Watson and Clark (1997) stated that the higher in

extraversion, the higher value on close and warm interpersonal relationships. Rogers (1983) argued that the high social and active customers are the most important motivation for individual in determining to adopt creation and innovation. Moreover, extraverted individuals would engage in more frequent use of social media (Ross et al., 2009). However, Roos (2017) argued that people with low in extraversion are reserved to use social media. Based on the notions above we advance:

H2: Extraversion is positively associated with on online brand community engagement.

2.4.3. Openness

Openness is described with adjectives imaginable, original, and intelligent (Barrick & Mount, 1991). Roos (2017) mentioned that individuals in high openness to expenses are willing to try new ideas and more creative. This indicates that the flexibility of thought and tolerance of new idea. Barrick et al. (2001) stated that openness is consistently related with engaging in learning experiences. Thus, Devaraj et al. (2008) believed that more openness in personality is strongly related with the preference to use new technology). Consistent with these findings, we hypothesize:

H3: Openness to experiences is positively associated with brand community engagement.

2.4.4. Agreeableness

Agreeableness refers to the people who are cooperative, cheerful, flexible and supportive others (Wang & Yang, 2007). Moreover, Roos (2017) argued that people high in agreeableness are trusting and forgiving. Thus, Barrick et al. (2001) found that agreeableness is important predictive of interpersonal interaction and teamwork and is considered a good instrument in helping and cooperating with others. Therefore, Devaraj et al. (2008) argued that Agreeableness is playing important role in determining the user preferences in using new technology. In light of these considerations, the following hypothesis is proposed:

H4: Agreeableness is positively associated with brand community engagement.

2.4.5. Conscientiousness

Conscientiousness is the tendency to be organized, efficient, reliable, and systematic (Barrick & Mount, 1991). Further, Jani and Han (2014) defined conscientious as individual achievement propensity. Further, Roos (2017) stated that conscientiousness is associated with planning and self-discipline, and efficiency. Muniz and O'Guinn (2001) considered it as the intrinsic connection that users feel toward others. In this sense, Devaraj et al. (2008) described it as the degree of organization, persistence, and motivation in goal directed attitude. They also argued that if the users found technology is not useful, their conscientiousness will increase this belief and decrease their intentions to forward the contents.

This research expects that the above user's personality factors reflect the unique facets of each human being. It also thought how customer's personality influence on the on online brand community engagement. Thus, customer personality has emerged as influence factor on intention for CGC and UGC mediated by OBCE. Few previous
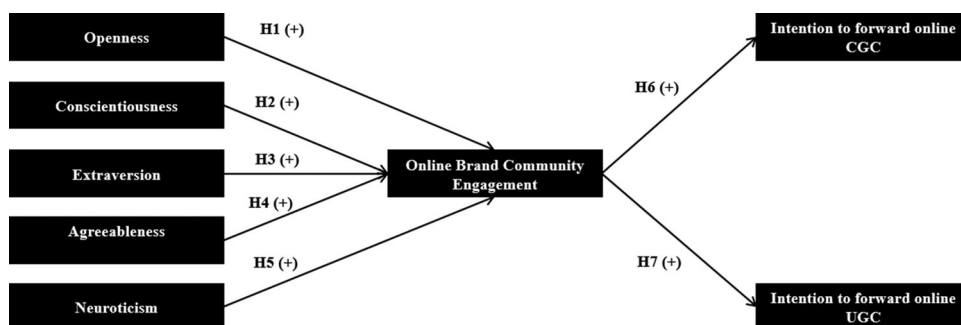
Figure 1. Research model.

studies primarily considered customer personality as an important predictor of OBCE. Therefore, the following hypothesis is put forward:

H5: Conscientiousness is positively associated with brand community engagement.

2.5. Personality and Intention to forward CGC and UGC

Ajzen and Fishbein (1980) argued that "people will generally intend to perform a behaviour when they have a positive attitude toward it and when they believe that important individuals think they should do so". Therefore, the mediating role of customer personality in Intention to Forward Online Company Generated Content can be estimated and analyzed through determining technology acceptance model (Davis, 1989). Partially, Devaraj et al. (2008) posit that personality constructs have a significant impact on ease of use, usefulness, and the subjective norms of the technology acceptance model. They developed a model to examine the effect of user personality on both perceived usefulness and subjective norms in order to understand user's attitude and beliefs toward intention to forward. Moreover, Acar and Polansky (2007) mentioned that personality is a particularly influential trait that predicts the online customer behaviour over the time and across different situations. This argument is also confirmed by Landers and Lounsbury (2006) as they found that customer personality is an important influential factor on intention and behavior of humans. Thus, this research proposes that the five dimensions affecting personality and psychological traits are expected to play a significant mediating role in the relationship between online brand community engagement and intention to forward CGC and UGC. The following hypotheses are put forward:

H6: Online brand community engagement positively associated with company-generated content (CGC).

H7: Online brand community engagement positively associated with user-generated content (UGC).

The proposed model is shown in Figure 1.

3. Research Methodology

3.1. Measurement Development

Data collection was performed through a questionnaire. On the other hand, constructs in the research model were measured through adopted scales from previous

studies on the subject matter of this research. A panel of ten professionals assessed the methodology as well as the scales in order to warrant content validity and the proper phrasing of the questions. In this sense, this study approaches 7-point Likert scales ranging from "strongly disagree" to "strongly agree" to measure items in the different constructs. The research questionnaire is seen in Appendix 1.

The initial questionnaire was piloted with a sample of 45 undergraduate and postgraduate students from two public universities in April 2018. This pilot study analyzed the questionnaire to verify the acceptance level, dimensionality, reliability and validity of the proposed measurement scales. Finally, after all the relevant tests were performed, and the scales and relationships had been evaluated and found to be appropriate, we analyzed the proposed model.

3.2. Data collection and Sample

Primary data were collected by using online questionnaire survey to test research hypotheses and conduct the research findings. Moreover, the internet versions of a survey sent to via E-mail. The survey was carried out among online banking customers who participated in the brand community engagement through the Facebook. Moreover, the customers used the convenience sampling method during June and April 2019. The respondents who participate in this study have been selected based on the following criteria; firstly, based on their bank accounts of the bank operated in Palestinian region. Secondly, Facebook account, and thirdly. He or she has to be member in the bank brand community page.

On other hand, the questionnaire was prepared in English, and was translated into Arabic by professional translators to ensure the consistency and to be linguistically acceptable and understandable. Moreover, experts in the area of marketing and finance were also asked to review the items in order to ensure the consistency of each item. A total of 750 questionnaires were distributed among customers of financial entities operating in Palestine, resulting in 685 valid responses and 91.2% response rate, the higher response rate related to direct contact with respondents by phone or by personal interview.

When all the questions regarding respondents' behavior toward the variables included in the research model were answered the questionnaires were considered completed. Only those questions related to demographic factors could be skipped. The sample size in this research is substantial so the research model can be properly assessed. In this sense, the sample size to variable ratio is also appropriate. (Bentler & Chou, 1987).

3.3. Questionnaire Design

This study sought to measure the relationships among personality dimensions (five), online-brand community engagement, intention to forward online company generated contents (CGC) and intention to forward user generated contents (UGC). The questionnaire includes adaptations of some of the most recognized scales in the literature. Specifically, we adapted the personality dimensions

(Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness) from the International Personality Item Pool (Goldberg, 1999; IPIP , 2008). The Online Brand Community Engagement' scales (Brand influence, Helping, Connecting, Like-minded discussion, Rewards (Hedonic), Rewards (utilitarian), Seeking assistance, Self-expression, Up-to-date information and Validation) were taken from Baldus et al. (2015). Finally, Intention to forward online company generated content (CGC) and Intention to forward online company generated content (UGC) were adapted from Davis (1989).

3.4. Data Analysis Procedure

This research approached structural equation modeling (SEM) in order to empirically validate the proposed research model. SEM is a rather effective statistical instrument to analyze cross-sectional data. In addition, SEM has been used to perform a multiple regression and factor analysis to assess the reliability of the measurement instrument while testing the different hypotheses (Molinillo et al., 2019).

This research conducts the two stage procedure introduced by Anderson and Gerbing (1992). Firstly, this study tested the measurement model by checking the validity of the measurement instrument. Secondly, the structural model was analyzed through the SPSS 24.0 software suit. This software approached a descriptive analysis to obtain the demographic characteristics of the sample. In addition, Cronbach's alpha was also used to assess the reliability of the model. Lastly, Amos 23.0 performed a confirmatory factor analysis to validate the measurement instruments and a SEM analysis to test the proposed hypotheses.

3.5. Sample Descriptive Analysis

Table 1 presents the participants' demographic characteristics. The percentage is approximately distributed equally between the men and women, but the majority of respondents, with a preponderant age range of (31-35) years and least majority of respondents for the age less than 18. In addition, there are no respondents for the age group between (61-65) and over 65 years. The highest proportion of the educational level was undergraduate (36.9%). Finally, overall the respondents have a Facebook profile but 12.3% of respondents have no comments with regard to the bank page on social media.

3.6. Normality and Common Method Bias

Normality tests were also performed with regard to the skewness and kurtosis values of the different items (Table 2). Values were lower than 2 and 7 respectively. A maximum likelihood analysis reported similarity with the normal curve (Curran et al., 1996).

This research also conducted a Harman's single factor test to assess the impact of CMB (common method bias). In this sense, if a single item has a total variance above 50% it can affect CMB with regard to the data and the empirical conclusions (Podsakoff et al., 2003). In the case of this study the total variance for a single factor

Table 1. Descriptive Statistics for Demographic Variables.

Demographic Variables	Items	Frequency	Percentage (%)
Gender	Male	357	52.1
	Female	328	47.9
Marital Status	Married	368	53.7
	Unmarried	317	46.3
Education level	High school	34	5
	Professional training	91	13.3
	Diploma (2 years)	85	12.4
	1st university degree (4 years)	253	36.9
	Post-graduate studies	222	32.4
Age	Under 18	14	2
	18–25	121	17.7
	26–30	108	15.8
	31–35	165	24.1
	36–40	115	16.8
	41–45	108	15.8
	46–50	16	2.3
	51 -55	24	3.5
	56 - 60	14	2
	61- 65	0	0
	Over 65	0	0
Activity	Unemployed	81	11.8
	Student	165	24.1
	Retired	182	26.6
	Employed	257	37.5
Monthly income (US$)	Less than 500	49	7.2
	500–899	208	30.4
	900–1,299	137	20.0
	1,300 and above	291	42.5
Facebook profile	Yes	685	100
	No	0	0
Comment on FB	Yes	685	100
	No	0	0
Comments for the bank page on the social media	Yes	601	87.7
	No	84	12.3
Experience in FB	Same or Less than 1 years	56	8.2
	Between 2 and 3 years.	98	14.3
	Between 3 and 5 years,	192	28.0
	More than 5 years	339	49.5

is 22.97%. However, assessing all factors in the model would lead to a 63.42% of explained variance, suggesting that CMB is rather unlikely (Gao et al., 2018, Liébana-Cabanillas et al., 2014; Kalinic et al., 2019).

3.7. Validity of Constructs and Reliability

The different measurement scales were tested for reliability and validity. Firstly, three procedures were conducted in order to examine reliability: average variance extracted (AVE), Cronbach's alpha (α), and composite reliability (CR). The reliability of all the constructs assessed in this research is displayed in Table 2. In this regard, values are well above the thresholds suggested in the literature: 0.6 for Cronbach's alpha (Nunnally, 1978), 0.7 in the case of CR and, lastly, 0.5 with regard to AVE (Hair et al., 2014).

In the case of Online Brand Community Engagement, this research approached an analytical perspective that reported a marked correlation between the latent first-order factors examined in this study. Despite this similarity, isolated factors (Satorra, 2002) should be examined as sub-dimensions of a more significant factor (Del Barrio &

Table 2. Descriptive statistics, convergent validity and internal composite reliability.

Constructs	Items	Skew	Kurtosis	St. Coef.	α	CR	AVE
Neuroticism	NEURO1	−0.332	−1.074	0.764	0.825	0.829	0.493
	NEURO2	−0.447	−0.788	0.730			
	NEURO3	−0.608	−0.515	0.712			
	NEURO4	−0.584	−0.478	0.611			
	NEURO5	−0.731	−0.416	0.684			
Extraversion	EXTRAV1	−0.521	−0.561	0.737	0.836	0.837	0.563
	EXTRAV2	−0.513	−0.470	0.781			
	EXTRAV3	−0.528	−0.525	0.742			
	EXTRAV4	−0.715	−0.290	0.740			
Openness	OPEN1	−0.780	0.094	0.711	0.845	0.848	0.530
	OPEN2	−0.810	0.119	0.765			
	OPEN3	−0.917	0.644	0.827			
	OPEN4	−0.961	0.530	0.700			
	OPEN5	−0.939	0.467	0.622			
Agreeableness	AGREE1	−0.860	−0.020	0.762	0.766	0.792	0.560
	AGREE2	−0.723	−0.100	0.674			
	AGREE3	−0.974	0.524	0.803			
Conscientiousness	CONS1	−0.912	0.353	0.753	0.838	0.840	0.515
	CONS2	−0.868	0.236	0.784			
	CONS3	−0.890	0.466	0.764			
	CONS4	−0.712	−0.197	0.670			
	CONS5	−0.718	−0.082	0.601			
Brand influence	INFL1	−0.749	0.148	0.681	0.838	0.840	0.569
	INFL2	−0.752	0.019	0.813			
	INFL3	−0.629	−0.234	0.784			
	INFL4	−0.807	0.222	0.733			
Helping	HELP1	−0.707	0.029	0.698	0.774	0.796	0.493
	HELP2	−0.708	−0.173	0.710			
	HELP3	−0.882	0.435	0.720			
	HELP4	−0.895	0.479	0.681			
Connecting	CONN1	−0.829	0.497	0.734	0.818	0.822	0.607
	CONN2	−0.683	0.182	0.847			
	CONN3	−0.538	−0.011	0.752			
Like-minded discussion	LMD1	−0.710	0.032	0.707	0.812	0.812	0.520
	LMD2	−0.590	−0.183	0.734			
	LMD3	−0.846	0.314	0.736			
	LMD4	−0.795	0.378	0.707			
Rewards (Hedonic)	HEDO1	−0.670	−0.094	0.734	0.814	0.814	0.523
	HEDO2	−0.713	−0.166	0.759			
	HEDO3	−0.721	0.018	0.699			
	HEDO4	−0.673	−0.076	0.699			
Rewards (utilitarian)	UTIL1	−0.943	0.347	0.690	0.723	0.757	0.509
	UTIL2	−0.630	−0.224	0.743			
	UTIL3	−1.054	0.701	0.707			
Seeking assistance	SEEK1	−0.695	−0.136	0.760	0.735	0.736	0.582
	SEEK2	−0.951	0.587	0.766			
	SEEK1	−0.883	0.450	0.820			
	SEEK2	−0.982	0.565	0.723			
Self-expression	SELF1	−0.666	0.248	0.692	0.779	0.780	0.543
	SELF2	−0.577	0.225	0.770			
	SELF3	−0.843	0.609	0.746			
Up-to-date information	UPT1	−0.931	0.665	0.678	0.780	0.803	0.505
	UPT2	−0.952	0.579	0.727			
	UPT3	−0.778	0.264	0.692			
	UPT4	−0.728	0.417	0.744			
Validation	VAL1	−0.984	0.419	0.633	0.799	0.804	0.508
	VAL2	−0.989	0.682	0.729			
	VAL3	−1.129	1.060	0.781			
	VAL4	−0.985	0.697	0.699			
CGC	CGC1	−0.632	−0.179	0.732	0.823	0.824	0.539
	CGC2	−0.710	−0.120	0.738			

(*continued*)

Table 2. Continued.

Constructs	Items	Skew	Kurtosis	St. Coef.	α	CR	AVE
	CGC3	−0.479	−0.444	0.736			
	CGC4	−0.665	−0.169	0.731			
UGC	UGC1	−0.558	−0.333	0.620	0.790	0.837	0.508
	UGC2	−0.727	0.171	0.739			
	UGC3	−0.637	0.008	0.790			
	UGC4	−0.600	0.039	0.750			

Luque, 2012; Liébana-Cabanillas et al., 2014) comprised of several dimensions such as Like-minded discussion, Brand influence, Helping, Connecting, Hedonic, Self-expression, Utilitarian, Assistance seeking and Up-to-date information and Validation. The Brand Passion dimension was removed from the model.

A principal component analysis (PCA) was also conducted to assess the degree of unidimensionality of the different measurement scales. Obtained results show many correlations for several items that were organized into constructs (see Appendix 2). In this sense, a high value for communalities ($\lambda > 0.5$) was also found when examining the variables, meaning that they are properly distributed along the factor space. In addition, factor loads are higher than the thresholds found in the literature ($R^2 > 0.5$) (Viseu et al., 2018). In conclusion, this analysis revealed the unidimensional structure of the measurement scales.

Lastly, CFA (Confirmatory Factor Analysis) was conducted to test discriminant and convergent validity of the instruments. Factorial loads of the different indicators were used to assess convergent validity revealing coefficients different than zero and loadings higher than 0.7. With regard to discriminant validity, variances exceeded zero and the correlation between each pair of scales did not exceed 0.9 (Hair et al., 2014). Therefore, this study concluded that the assessed constructs had realiable measurement capabilities.

To verify the suitability of the measurement scales used in the study, we applied various types of analyses of reliability and validity, both exploratory (using SPSS 2.0) and confirmatory (AMOS 21.0). Measurement instruments are deemed to be valid when they truly measure what they are intended to measure. And they are considered reliable when they provide stable, consistent scores and the measurements match those taken using equivalent or very similar methods.

4. Research findings

4.1. Hypotheses Testing Results

Hypotheses were tested through SEM (structural equation modelling) by approaching the maximum likelihood analysis and a bootstrapping technique involving 500 consecutive steps with a significance level of 95%. Results corroborated a relevant goodness of fit for the model (see Table 3) (Bollen, 1989; Lai and Li, 2005; Muñoz, 2008). This model was then used to test the hypotheses.

Regarding the structure of the research model, a total of seven effects were tested (Table 4 and Figure 2). The results confirm the statistical significance of five of the seven tested effects. The independent variables explain a high percentage of the variance of OBCE ($R^2 = 43,2\%$), CGC ($R^2 = 27.8\%$) and UGC (R2 = 22.3%).

Table 3. Goodness-of-fit indicators in the structural model.

Fit indices	Recommended value	Value in the model
CMIN/DF	2 <CMIN/DF< 5	2.935
GFI	>0.90	0.885
RFI	> 0.90	0.888
NFI	> 0.90	0.847
CFI	> 0.90	0.887
TLI	> 0.90	0.819
IFI	> 0.90	0.887
RMSEA	< 0.08	0.053

CMIN/DF- normal chi-square/degrees of freedom; GFI - goodness-of-fit index; RFI - relative fix index; NFI - normed fit index; CFI - comparative goodness of fit; TLI - Tucker-Lewis Index; IFI - incremental fit index; RMSEA - root mean square error of approximation.

Table 4. Results of Testing Research Hypotheses.

Hypothesis	Effect	St. Coef.	S.E.	p-value	Support
H1	Openness → OBCE	0.204	0.047	0.000	Yes
H2	Conscientiousness → OBCE	0.205	0.031	0.000	Yes
H3	Extraversion → OBCE	0.135	0.036	0.000	Yes
H4	Agreeableness → OBCE	−0.039	0.035	0.261	No
H5	Neuroticism → OBCE	0.031	0.023	0.182	No
H6	OBCE → CGC	0.767	0.08	0.000	Yes
H7	OBCE → UGC	0.614	0.073	0.000	Yes
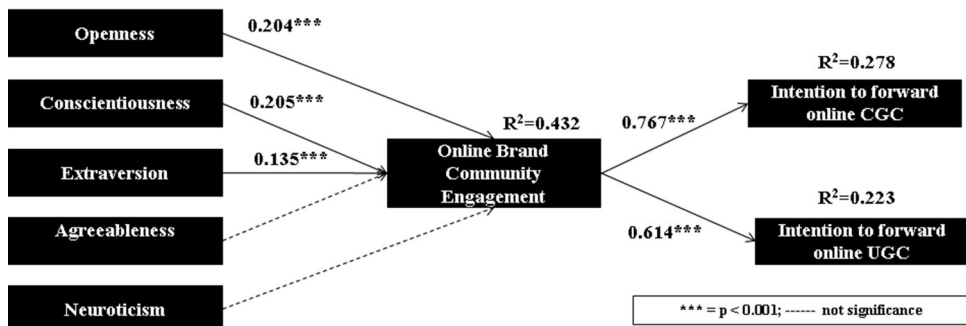
Figure 2. Results of the research model tests.

Figure 2 shows the standardized path coefficients and p-values. In addition, the second order construct (i.e., Online Brand Community Engagement) fulfils all the requirements for identification, reliability and validity.

The analysis confirms the statistical significance of the impact of three of the five antecedents on OBCE. H1, H2 and H3 are validated and H4 (Agreeableness) and H5 (Neuroticism) are not supported. As to the significance results, Openness ($\beta = 0.204$, $p < 0.001$) and Conscientiousness ($\beta = 0.205$, $p < 0.001$) had similar strengths, both much greater than Extraversion ($\beta = 0.135$, $p < 0.001$). As to the consequences of OBCE, the results support H6 ($\beta = 0.767$, $p < 0.001$), which means that OBCE impacts on CGC. Finally, H7, which posits that OBCE has a positive impact on UGC, is also supported ($\beta = 0.614$, $p < 0.001$. These findings are consistent with prior research that has investigated significant impact of big five personality factors on online brand community engagement (Ross et al., 2009; Orr et al., 2009; Hollebeek, 2011; Jani and Han., 2014; Islam et al., 2017).

5. Research Findings and Implications

This paper is aimed to investigate the influence of personality five factors on CGC and UGC mediated online brand community engagement. A total valid 685 questionnaires were distributed on banks customers in Palestine. The research hypotheses were tested by using structural equation model. The results revealed that personality traits (Openness, Conscientiousness, and Extraversion) have strongest drive of online brand community engagement. One other hand, this manuscript found that online brand community engagement has strong positive impact on CGC and UGC. Therefore, these results offer an important implication for the banks and financial entities in Palestine. The banks managers should emphasize the customer's behavior in the social media environment when they sharing, participating, and engaging with a bank online brand community. Especially through the Facebook as a social media, because the most people in Palestine are using the Facebook compared with other social media when sharing, participating and forwarding during their engagements. The result draws remarkable attention to level of customer- engagement to forward for online company generated contents (CGC), and user's generated contents (UGC). This could develop an online marketing campaigns through social media, in addition to motivational factors that motivate and encourage the customers and stimulate their behaviors when they are engaging on social Medias. This argument could support bank managers and decision makers in improving business performance, and making an informed decision to be competitive, and attract and retain the customers., in addition to knowing how to increase the customer's engagement levels with the firm's brand, to develop competitive campaigns through social medias and to prevent them for switching to another competing brand, since the internet and the social media shift the power for customers and they became more powerful. Thus, research findings provide the valuable guidelines for the bank managers to give the attention for the bank's Facebook page and the website as an important tool of engagement with the brand (Yap et al., 2010). From practical perspective, this study highlights how banks can capitalize their investments through develop online brand community engagement strategies based on their targeted customer's personality traits.

As result, customer's personality is the most important psychological aspects, to guide customer's behaviors through social media, and this study provides an evidence about how personality affects customer's intentions to forward online company generated contents CGC and UGC. Thus, it makes the concept of the personality more important for the banks, and marketing managers and also for advertising agencies who create and manage the promotional campaigns through social media.

6. Limitations and future research

Regarding the limitations of this research, we have addressed the following limitations: the first limitation is that generalizability of the findings should be taken into consideration. The characteristics of the sample represent a relevant limitation, since data were gathered from customers of financial entities operating specifically in the geographical area of the Palestinian authority, also the data were collected from specific social Medias (Facebook). Thus, future research is needed to test the proposed

model in other geographical areas for example the geographical areas under Israeli authority in addition to Gaza strip because all of these areas not allowed to be accessed according the Israeli borders and legislations. The second limitation is related to implementationof this study and generalization of the results on the financial sectors, therefore the researchers are encouraged to conduct research across other industries such as manufacturing or educational sectors, in order to expand the model of this study across many different industries to measure the impact of this model and to generates and compare the results and to get further investigation related to the influence of some of the variables included in this study. Finally, the researchers encourage future studies in testing the same relationships in banking services through a cross-cultural and using different social media for example (Twitter, YouTube) to implement the study and collecting data, in addition to test and measure this model in the future studies by adding the demographic information to this model, for example the role of the age, income level, and the gender in order to track the nature of the relationships between these constructs.

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Appendix 1.

Principal Component Analysis (PCA). Rotated components matrix a

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NEURO1	−0,033	0,039	−0,059	−0,115	**0,764**	0,052	0,089	0,029	0,034	0,005	−0,107	−0,023	0,004	0,020	0,142	−0,134	0,213
NEURO2	0,050	0,075	0,075	0,061	**0,733**	0,038	−0,084	−0,028	0,052	0,046	−0,096	0,091	0,011	−0,025	0,006	0,234	0,104
NEURO3	−0,014	0,107	0,101	0,112	**0,746**	0,038	0,010	0,143	0,084	0,030	0,002	−0,056	0,145	−0,011	−0,023	−0,024	−0,182
NEURO4	0,019	−0,021	0,016	0,060	**0,753**	0,074	0,075	0,186	−0,006	−0,023	0,014	0,025	−0,019	0,035	0,033	0,011	−0,115
NEURO5	0,037	−0,033	−0,085	0,040	**0,779**	−0,061	0,094	0,184	0,026	−0,041	0,061	0,080	0,069	0,025	−0,023	−0,085	0,014
EXTRAV1	0,063	0,149	0,182	0,164	0,270	0,007	0,009	**0,709**	0,082	−0,027	0,012	0,075	0,042	−0,080	−0,023	0,088	−0,014
EXTRAV2	0,124	0,060	0,092	0,028	0,160	0,065	0,046	**0,754**	0,029	0,114	0,028	0,093	0,198	0,117	0,001	−0,141	0,021
EXTRAV3	0,081	0,072	0,198	0,019	0,135	0,012	0,088	**0,765**	0,120	0,101	0,049	0,043	0,086	0,129	0,100	0,012	−0,019
EXTRAV4	0,071	0,161	0,285	0,048	0,078	0,098	0,004	**0,693**	0,050	0,031	0,088	0,170	0,083	0,004	0,074	0,109	−0,004
OPEN1	0,065	0,309	**0,494**	−0,075	0,026	0,273	−0,056	0,219	0,113	0,124	−0,094	0,048	0,087	0,164	0,193	−0,024	0,113
OPEN2	0,115	0,237	**0,680**	−0,084	0,063	0,108	0,071	0,197	0,123	0,108	0,022	0,061	−0,032	0,116	0,081	−0,066	0,008
OPEN3	0,125	0,188	**0,743**	0,089	−0,036	0,102	0,063	0,151	0,112	0,083	−0,033	0,120	0,170	0,025	−0,041	0,060	0,001
OPEN4	0,079	0,103	**0,789**	0,050	0,010	0,011	0,120	0,132	0,091	0,086	0,050	0,074	0,099	0,039	−0,057	−0,068	−0,011
OPEN5	0,077	0,094	**0,730**	0,113	0,004	0,095	0,083	0,124	0,020	−0,017	0,085	0,009	0,215	0,017	0,061	0,085	0,005
AGREE1	0,035	0,073	0,472	0,142	−0,008	0,108	−0,039	0,066	−0,018	−0,054	−0,026	0,063	**0,655**	−0,032	0,048	0,100	−0,026
AGREE2	0,046	−0,011	0,260	0,000	0,133	−0,026	0,064	0,076	0,107	−0,017	−0,003	0,093	**0,768**	−0,001	−0,019	−0,051	0,079
AGREE3	0,059	0,202	0,344	0,116	−0,020	0,121	−0,010	0,126	0,116	−0,011	−0,135	0,077	**0,632**	0,025	−0,090	0,209	−0,107
CONS1	0,107	**0,584**	0,060	−0,109	−0,010	0,195	0,054	0,045	0,056	0,118	0,041	0,084	0,060	0,094	0,052	0,489	−0,057
CONS2	0,078	**0,664**	0,165	−0,016	0,087	0,183	−0,040	−0,013	0,050	0,029	0,060	0,065	0,218	−0,010	0,086	0,127	−0,053
CONS3	0,076	**0,759**	0,083	−0,009	0,021	0,108	0,088	0,123	0,019	0,074	0,059	0,042	0,065	0,083	0,073	−0,017	0,054
CONS4	0,026	**0,780**	0,099	0,028	0,028	0,020	0,101	0,089	0,098	0,073	0,100	0,009	0,007	0,059	0,044	0,033	−0,005
CONS5	0,076	**0,767**	0,223	0,103	−0,027	0,016	0,024	0,023	0,046	0,032	0,091	0,106	0,057	−0,022	−0,013	−0,043	−0,061
INFL1	0,154	−0,208	0,132	0,122	0,040	0,074	0,110	0,148	0,201	0,081	0,169	0,332	−0,015	−0,008	−0,003	**0,512**	0,050
INFL2	0,249	−0,012	0,085	0,158	−0,019	0,062	0,106	0,198	0,286	0,024	0,056	0,478	0,078	0,008	−0,039	**0,444**	0,051
INFL3	0,101	−0,004	0,053	0,220	0,041	0,001	0,094	0,218	0,288	0,063	0,017	0,561	0,073	−0,069	−0,021	**0,405**	0,049
INFL4	0,140	−0,080	0,100	0,255	−0,016	0,179	0,170	0,206	0,266	0,087	−0,018	0,369	0,009	−0,086	−0,028	**0,381**	−0,002
HELP1	0,145	0,080	0,160	0,086	0,072	0,113	0,168	0,054	**0,724**	−0,006	0,066	0,202	0,082	0,048	0,056	0,037	0,005
HELP2	0,061	0,121	0,124	0,115	0,019	0,193	0,108	0,058	**0,782**	0,035	0,054	0,114	0,062	0,100	0,091	0,014	−0,046
HELP3	0,079	0,119	0,045	0,100	0,080	0,168	0,069	0,076	**0,752**	0,081	0,113	0,126	0,034	0,050	0,066	−0,027	0,067
HELP4	0,024	0,138	0,074	0,038	0,065	0,194	0,002	0,170	**0,454**	0,152	0,034	0,495	0,085	0,079	0,047	0,080	0,057
CONN1	0,089	0,125	0,105	0,003	0,077	0,246	0,049	0,116	0,223	0,082	0,109	**0,667**	0,045	0,074	0,121	0,117	−0,034
CONN2	0,080	0,054	0,181	0,086	0,052	0,492	0,126	−0,008	0,053	0,100	0,097	**0,521**	0,147	0,113	0,153	−0,043	−0,021
CONN3	0,194	0,023	0,219	0,085	0,061	0,492	0,077	0,030	0,076	0,084	0,064	**0,559**	0,130	0,127	0,126	−0,124	−0,077
LMD1	0,170	0,115	0,148	0,147	0,039	**0,683**	0,065	0,042	0,233	0,082	0,108	0,145	0,053	0,094	−0,072	0,036	0,169
LMD2	0,127	0,160	0,097	0,097	0,019	**0,710**	0,172	0,044	0,176	0,086	0,091	0,087	0,040	0,053	−0,040	0,159	0,138
LMD3	0,118	0,261	0,016	0,156	0,075	**0,613**	0,326	0,069	0,214	0,004	0,044	0,011	0,013	0,012	0,071	−0,094	−0,215
LMD4	0,077	0,243	0,091	0,132	0,031	**0,479**	0,345	0,164	0,297	0,091	0,009	0,010	−0,036	0,072	0,106	0,100	−0,283
HEDO1	0,101	0,122	0,065	0,135	0,067	0,225	**0,705**	0,027	0,188	0,031	0,066	0,044	−0,035	0,070	0,108	−0,027	−0,139
HEDO2	0,148	0,062	0,065	0,086	0,090	0,096	**0,790**	0,067	0,008	−0,026	0,042	0,076	0,071	0,106	0,102	−0,033	−0,087
HEDO3	0,072	0,053	0,148	0,227	0,003	0,109	**0,662**	0,022	0,114	0,135	0,022	0,048	0,107	−0,026	0,090	0,099	0,347
HEDO4	0,106	0,082	0,108	0,162	0,045	0,188	**0,588**	0,009	0,162	0,104	0,038	0,072	−0,006	0,015	0,205	0,084	0,479
UTIL1	0,160	0,199	0,084	0,186	0,073	0,131	0,347	0,027	0,147	0,002	0,037	0,186	0,047	0,000	**0,551**	0,085	0,065
UTIL2	0,011	0,074	0,034	0,239	0,088	−0,038	0,363	0,123	0,121	0,043	0,097	0,049	−0,022	0,012	**0,663**	−0,076	−0,029
UTIL3	0,187	0,080	0,007	0,575	0,069	0,088	0,091	0,094	0,140	0,038	0,167	0,026	−0,069	0,021	**0,499**	0,046	0,053
SEEK1	0,225	0,049	0,042	**0,689**	0,057	0,113	0,105	0,053	0,154	0,135	0,095	0,055	0,095	0,117	0,160	0,023	0,030
SEEK2	0,205	−0,021	0,051	**0,742**	0,034	0,037	0,116	0,056	0,088	0,084	0,129	0,027	0,079	0,186	0,097	−0,071	−0,044
SEEK3	0,152	0,052	0,053	**0,717**	0,020	0,167	0,162	0,062	0,078	0,111	0,064	0,106	0,110	0,214	0,026	0,034	−0,017
SEEK4	0,257	0,079	0,056	**0,630**	0,082	0,099	0,141	0,045	−0,005	0,086	0,035	0,101	−0,040	0,368	−0,029	−0,031	0,066
SELF1	0,174	0,043	0,065	0,282	0,037	0,036	0,140	−0,011	0,066	0,069	0,034	0,085	−0,046	**0,742**	0,036	0,034	−0,074
SELF2	0,223	0,016	0,051	0,215	0,015	0,203	0,061	0,100	0,057	0,061	0,119	−0,032	0,054	**0,673**	0,015	−0,014	0,106
SELF3	0,317	0,076	0,103	0,196	−0,023	0,016	−0,021	0,072	0,091	0,097	0,088	0,025	0,047	**0,694**	−0,035	0,029	−0,063
UPT1	**0,532**	0,005	0,054	0,054	0,026	0,081	−0,119	0,120	0,107	0,093	0,262	0,114	0,015	0,340	0,075	−0,026	0,112
UPT2	**0,606**	0,067	−0,002	0,145	0,034	0,243	0,013	0,129	0,057	0,040	0,140	−0,080	0,005	0,005	0,028	−0,072	0,272
UPT3	**0,633**	0,135	0,066	0,244	0,038	0,027	0,131	0,042	0,112	0,175	0,067	0,023	0,015	0,147	−0,017	−0,078	0,056
UPT4	**0,721**	0,099	0,136	0,200	0,035	0,054	0,083	0,060	0,092	0,061	0,018	−0,006	−0,099	0,025	−0,065	−0,087	0,117
VAL1	−0,045	0,040	0,080	0,117	0,039	−0,082	0,163	0,079	−0,002	0,134	0,062	0,256	0,055	0,160	0,003	0,036	**0,708**
VAL2	−0,103	0,096	0,082	0,148	−0,044	0,159	0,126	0,000	0,052	0,039	0,009	0,063	0,096	0,079	0,008	0,107	**0,737**
VAL3	−0,371	0,092	0,063	0,103	0,036	0,120	0,075	0,106	0,011	0,101	0,047	0,021	0,094	0,132	0,178	0,059	**0,649**
VAL4	−0,043	0,066	0,074	−0,030	−0,066	0,181	−0,055	−0,020	0,056	0,353	0,022	0,077	0,088	0,008	0,280	0,222	**0,571**
CGC1	0,180	0,051	0,082	0,072	−0,011	0,055	−0,062	0,068	0,074	**0,756**	0,165	0,041	−0,003	0,106	0,161	−0,004	−0,058
CGC2	0,149	0,127	0,105	0,140	0,006	0,033	0,070	−0,009	0,058	**0,743**	0,194	0,034	0,006	−0,009	0,053	−0,260	0,011
CGC3	0,111	0,065	0,023	0,118	−0,046	0,001	0,115	0,059	0,005	**0,746**	0,204	0,080	−0,045	0,088	−0,138	0,194	0,032
CGC4	0,139	0,087	0,055	0,067	0,062	0,149	0,042	0,101	0,034	**0,710**	0,202	0,074	0,030	0,056	−0,026	0,109	0,050
UGC1	0,112	0,066	0,004	0,082	−0,055	0,144	0,001	−0,010	0,002	0,150	**0,709**	0,047	−0,075	0,094	0,072	−0,056	0,007
UGC2	0,088	0,102	0,035	0,100	−0,041	0,052	0,008	0,031	0,049	0,211	**0,780**	0,020	−0,012	0,061	0,042	0,053	−0,014
UGC3	0,061	0,144	0,021	0,097	−0,007	0,026	0,064	0,057	0,123	0,161	**0,765**	0,042	−0,021	0,045	0,019	−0,073	0,018
UGC4	0,053	0,059	0,010	0,037	−0,009	−0,015	0,149	0,112	0,088	0,248	**0,606**	0,091	−0,030	0,021	−0,016	0,461	−0,017

Extraction method: Principal component analysis.
Rotation method: Varimax with Kaiser normalization.
[a]Rotation converged in 14 iterations.

Appendix 2.

Correlation matrix

	CONS	AGREE	OPEN	EXTRAV	NEURO	OBCE	UGC	CGC	VAL	UPT	SELF	SEEC	UTIL	HEDO	LMD	CONN	HELP	INFL
CONS	1																	
AGREE	0,347	1																
OPEN	0,488	0,671	1															
EXTRAV	0,37	0,423	0,554	1														
NEURO	0,112	0,128	0,093	0,416	1													
OBCE	0,538	0,348	0,54	0,494	0,201	1												
UGC	0,254	0,164	0,255	0,233	0,095	0,472	1											
CGC	0,283	0,183	0,284	0,26	0,106	0,527	0,249	1										
VAL	0,368	0,238	0,37	0,338	0,138	0,685	0,323	0,361	1									
UPT	0,384	0,248	0,385	0,352	0,143	0,713	0,337	0,376	0,489	1								
SELF	0,324	0,209	0,325	0,297	0,121	0,602	0,284	0,317	0,412	0,429	1							
SEEC	0,38	0,245	0,381	0,348	0,142	0,706	0,333	0,372	0,483	0,503	0,425	1						
UTIL	0,389	0,252	0,39	0,357	0,145	0,724	0,342	0,381	0,496	0,516	0,436	0,511	1					
HEDO	0,357	0,231	0,358	0,328	0,133	0,664	0,314	0,35	0,455	0,474	0,4	0,469	0,481	1				
LMD	0,43	0,278	0,431	0,395	0,16	0,799	0,377	0,421	0,547	0,57	0,481	0,564	0,578	0,531	1			
CONN	0,37	0,239	0,371	0,34	0,138	0,688	0,325	0,363	0,472	0,491	0,414	0,486	0,498	0,457	0,55	1		
HELP	0,431	0,279	0,433	0,396	0,161	0,802	0,379	0,422	0,549	0,572	0,483	0,566	0,58	0,533	0,641	0,552	1	
INFL	0,402	0,26	0,403	0,369	0,15	0,747	0,353	0,394	0,512	0,533	0,45	0,527	0,541	0,496	0,597	0,514	0,599	1