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ABSTRACT

Given that usage of social media is inherently active and discretionary, it is very likely to reflect consumers' dispositions, motives, needs, preferences, attitudes, and other individual attributes. But which ones really matter and how do they matter? A model examining the relations among five psychological constructs (Big Five personality, motives, involvement, content preferences, and usage) was derived from the cognitive-affective personality system theory and the 3M Model of Motivation and Personality. The proposed model was applied to a survey study of 656 YouTube users and assessed using exploratory structural equation modeling. The findings indicated that participation in social media can be parsimoniously understood as oriented toward the self (individualist) or others (relational). The psychological profiles obtained suggest that relational-oriented consumers make a better target group when seeding a campaign than traditional early adopters as they are more likely to generate word-of-mouth and can be targeted by messages emphasizing informational learning.

The idea of identifying different groups within a target market in order to develop different offerings for each group is a well-established marketing strategy. The prevalence of social media sites where consumers readily self-identify their tastes and preferences have made it easier for marketers to adjust their product and marketing effort to consumer differences. It has also become more necessary for marketers to engage with their customers and give them a reason to interact with marketing messages in a new media landscape of fragmented audiences. Understanding consumer attributes in relation to their intentions and the nature of participation can help in the initiation of social media campaigns and to identify target users for products or services. But although researchers continually observe novel relationships between consumer attributes (e.g., personality, attitudes, motives) and Internet usage, the theoretical and substantive insights obtainable from knowing people's online usage patterns, attitudes, and desires remains unclear. This paper helps to narrow this gap. It identifies the meaningful patterns that characterize individual differences in social media consumption, revealing the personality and motivations that underlie these patterns. The paper contributes to a better understanding of a dynamic approach toward personality and provides clear actionable guidance in applying the theoretical insights obtained.

THE PROMISES AND PITFALLS OF CONSUMER PERSONALITY RESEARCH

The search for nondemographic segmentation of consumers began decades ago when traditional demographic traits such as age, sex, education levels, and income, while important, were no longer deemed sufficient as a basis for marketing strategy (Wells, 1975). The psychological differences among consumers were once widely seen as a viable alternative, among which, dispositional personality traits have had a lot intuitive appeal to consumer researchers (Plummer, 2003). However, with the exception of brand personality, research into consumer personality and other "psychographics" has had limited success in providing actionable managerial advice (Plummer, 2003; Yankelovich and Meer, 2006). This can be attributed to two underlying problems in the study of consumer personality and

individual differences. First, the list of possible differences among consumers and the ways in which these differences operate is potentially limitless. Researchers have in the past proffered a whole host of personality and other individual difference constructs accompanied by a battery of scales to measure them. Charting a comprehensive set of possible individual differences in any given situation often leads to overly complex models that do little to account for the processes involved. Conversely, atomic studies of selected constructs without regard for how they fit within some larger domain or situational influences are often undermined by the weak relationships found (see Ajzen, 2005).

Second, there has been an overemphasis on the “having” side of personality as opposed to the “doing” side of it (Cantor, 1990). Allport asserts that “personality is something and personality does something” (1938, p. 48). The efforts of personality researchers in the past have mostly been concentrated on classifying and measuring person attributes. This is marked by the proliferation of personality scales and constructs. There has been little attention on the “doing” side of personality which refers to how people with a certain personality adjust to their environment. Until recently, there has also not been a theoretical framework that relates personality with other more contextual person attributes. The emphasis on the dispositional nature of personality led to an unrealistic expectation that personality predisposes a consumer to certain preferences or behaviors (Plummer, 2003). Consequently, the failure to meet those predictions or maintain cross-situational consistency (Mischel, 1968) led to the abandonment of personality altogether at one period of time.

Despite these problems, personality remains an attractive tool for consumer profiling. As the effectiveness of brand personality shows, personality offers a structured and meaningful way to compare the characteristics of the consumer and that of a brand or product. Its stable and non-conditional nature meant that it can serve as a baseline for comparison across different consumption contexts. Mischel and Shoda (1995) argue that the patterns of behavior variability across situations is not “evidence against the utility of the personality construct” but reflect “essential expressions of the same underlying stable personality

system that produces the individual's characteristic average levels of behavior” (p. 246). Moreover, the obstacles facing a wider adoption of the personality concept and its utility in consumer research have largely been addressed with the development of the Big Five personality dimensions.

The quasi-consensus over the Big Five personality factors as a comprehensive yet parsimonious taxonomy of person characteristics has provided researchers a common personality vocabulary to communicate and integrate empirical findings meaningfully. When measures of the full model are administered, the Big Five affords systematic exploratory research by ensuring that important personality traits are not overlooked (McCrae, 2009). The Big Five has facilitated the development of integrative models that provide an organizational structure to investigate individual differences. These models typically involve dynamic processes and causal pathways among a hierarchy of personality variables (e.g., theory of five-factor personality, see Costa and McCrae, 1994). One comprehensive attempt in the area of consumer behavior is Mowen's (2000) Metatheoretic Model of Motivation and Personality (3M). The 3M model describes how four hierarchical levels of traits successively motivate narrower behavioral consistencies: elemental traits (e.g., the Big Five factors), compound traits (e.g., need for play, need for information), situational traits (e.g., susceptibility to influence), and surface-level traits (e.g., healthy diet lifestyles). While the 3M model does provide a useful means of structuring personality characteristics, it is overly complex. It also makes an unrealistic a priori assumption that narrower individual characteristics can be neatly nested within broader personality traits. Baumgartner (2002) suggests that a more plausible approach would be to construct a framework which is mainly concerned with domain-specific constructs but which also investigates their relations with broader personality traits. The following study assesses the viability of such an approach.

THE PRESENT STUDY: CONSUMER PARTICIPATION IN YOUTUBE

The social media site examined in this study is YouTube, a popular video-sharing site synonymous with clip culture and online videos. The fourth most visited website on the web (as at December 2009), YouTube serves over two billion video streams a day (since May 2010). Its massive popularity offers any user an unprecedented, potential shortcut to wide attention without the need for significant resources or interference from traditional media gatekeepers. The opportunity for a large audience and the low barrier to entry have enticed professional and ordinary consumers alike to create and upload their own videos. Popular user-generated videos on YouTube produced with little to no budget have been capable of attracting the attention of millions of other users, overshadowing even the audience size of large television networks. Given that the site thrives almost entirely on the efforts of its users in the production and distribution of contents, it is pertinent to understand the determinants and nature of their participation.

Theoretical Framework

Applying Mischel and Shoda's (1995) cognitive-affective personality system theory, the personality-situation interaction dynamics in this study is described as follows. Personality is conceptualized as a stable system that mediates how consumers select, construe, and process social information and generate social behaviors. Social media (in this study, YouTube) is conceived as the situation where its features activate a set of internal reactions — both cognitive and affective — based on the consumer's prior experience with those features. The focus of the theory is on the relations among these units “in terms of whether, and when, they become, in varying degrees, activated, deactivated, or are not influenced by each other” (Mischel and Shoda, 1995, p. 255). The relationships between the units are investigated along the lines of “if... then... situation-behavior profiles” and what these relationships reveal about the nature of social media participation. The specific connections between these units, however, are not proposed by the theory. Instead, it is left to individual

researchers to identify the functionally important units in the particular domain of application and their interrelationships in the processing system.

Model Specification

The proposed model in Figure 1 depicts the structural relations among five constructs commonly investigated in personality and media use research. The arrangement and classification of the constructs follow the four hierarchical levels of the 3M approach (Mowen, 2000). But rather than assuming that the narrower traits can be neatly mapped on to broader ones, the proposed model investigates the direct relations of the Big Five on all the succeeding constructs (see Baumgartner, 2002).

[Please insert Figure 1 about here]

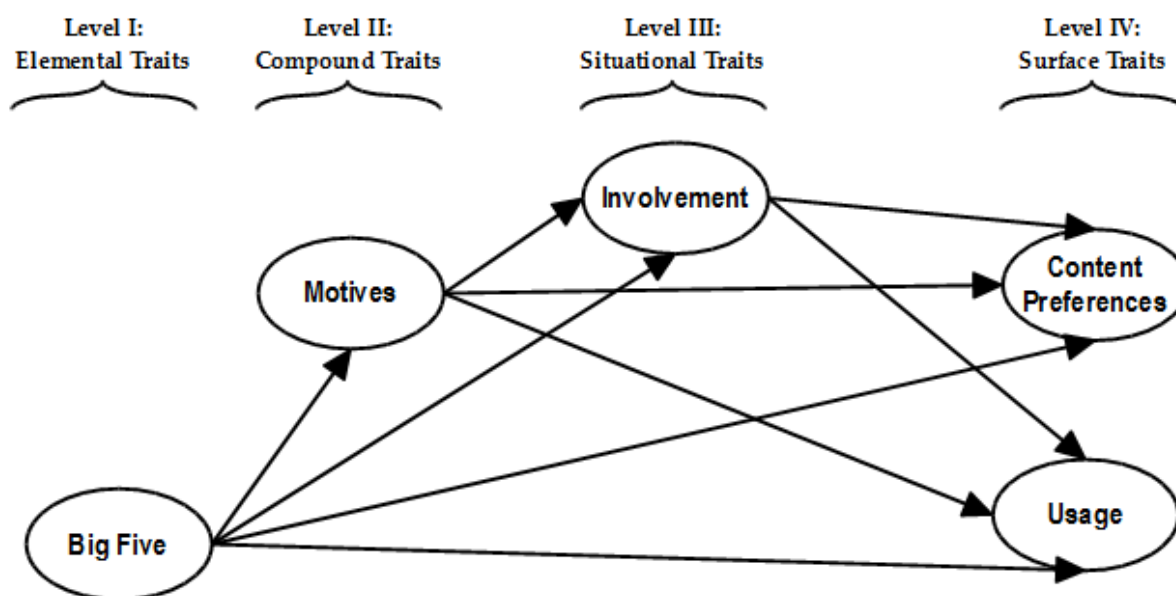


Figure 1. The proposed model.

The elemental traits (level I) represented are the Big Five personality factors: Extraversion, Agreeableness, Conscientiousness, Neuroticism (versus Emotional Stability), and Openness to Experience (or Intellect/Imagination). Each factor comprises a domain of specific facets that define the personality dimension (see Hofstee, de Raad, and Goldberg,

1992; McCrae and Costa, 1987). Extraversion reflects a tendency to be sociable, talkative, confident, and enjoy change and excitement. Agreeableness refers to a tendency to be trusting, sympathetic, and cooperative. Conscientiousness describes the degree of organization, conformity, diligence, and socially prescribed impulse control in an individual. Neuroticism is characterized by a tendency to experience chronic negative emotions and to display related behavioral and cognitive characteristics. Openness to experience represents a willingness to consider alternative approaches, be intellectually curious, and enjoy artistic pursuits.

The compound traits (level II) involve consumer motives. Media use motives can be conceptualized as part of a consumer's attempts at coping with aspects of his or her environment. In this study, motives represent consumers' expectancies and beliefs about the outcomes associated with social media, which necessarily contain bases for consumers' attitudes and usage. Thus motives support explanations for the success or adoption of media products and services, and enable predictions and hypotheses about consumers' engagement with them. Motives are treated as endogenous predictors in this study where the extent to which they are influenced by personality traits were examined. Consumer motives generally fall within utilitarian and hedonic orientations. Utilitarian consumption is more rational and task-oriented (Babin, Darden, and Griffin, 1994) whereas hedonic consumption is concerned with more experiential aspects such as pleasure and escape (Holbrook and Hirschman, 1982). With respect to social media, utilitarian consumers are likely to be driven by features which they find useful or informative whereas hedonic consumers would be attracted by features that are fun and enjoyable.

The situational traits (level III) are represented by involvement which is generally conceptualized as perceived personal relevance (Petty and Cacioppo, 1979; Zaichkowsky, 1985). Media researchers found that consumers' media involvement can be related to their media use motives (Levy and Windahl, 1985). Media involvement, in turn, influences other dimensions of consumer media activities and satisfaction (Perse and A. M. Rubin, 1988).

More specifically, involvement has been found to influence cognitive aspects of behaviors such as information seeking, attention, and persuasion (Petty and Cacioppo, 1979; Santosa, Wei, and Chan, 2005). But involvement is not merely cognitive, Salam, Rao, and Pegels (2000) demonstrate that Internet involvement comprises both affective and cognitive dimensions (see also Zaichkowsky, 1994).

Two sets of surface traits (level IV) are investigated: content preferences and usage. Content preferences can be expressed as the selectivity dimension of consumers' media activities. Selectivity is "a process involving the nonrandom selection of one or more behavioral, perceptual, or cognitive media-related alternatives" (Levy and Windahl, 1985, p. 112). Prior research suggests that consumers' personality characteristics can be meaningfully related to their media content preferences. For example, extraversion was positively related to preference for comedy film while higher levels of neuroticism was linked to greater preferences for drama and information television programs, and lesser preferences for action programs and sitcoms (Weaver, 1991). Consumers' Internet usage is commonly measured as the amount of time spent on each activity within categories of activities or, for studies on individual websites, the frequency of use of selected functions (e.g., Ross et al., 2009). Three of the Big Five traits — agreeableness, conscientiousness, and extraversion — were known to influence patterns of Internet use (Landers and Lounsbury, 2006).

Method

Participants

The relatively heterogeneous sample (N = 656) comprised 332 (50.6%) women and 324 (49.4%) men with an average age of 26.2 years (SD = 7.9), of which there were 405 (61.7%) Caucasians, 192 (29.3%) Asians, and 59 (9%) of other ethnicities which included 8 (1.2%) Hispanic and 4 (0.6%) Black/African. One hundred eighty-three (27.9%) participants reported to be working while the remaining 473 (72.1%) participants not in full-time employment

included 444 (67.7%) students and 29 (4.4%) in-between jobs. Two hundred forty-one participants (36.7%) reported spending 1 to 2 hours per week on YouTube, 153 (23.3%) reported less than 0.5 hour, 113 (17.2%) reported 2.5 to 5.5 hours, 90 (13.7%) reported 0.5 hour, and 59 (9%) reported more than 6 hours. At the time of the survey, 276 participants (42.1%) had been using YouTube for between 1 to 2 years, 264 (40.2%) for more than 2 years, 77 (11.7%) for between 6 months to 1 year, and 39 (5.9%) for less than 6 months. Participants were recruited to complete the online questionnaire through announcements made on email lists of departments and student unions of a University in the east of England, external academic discussion groups, and social network sites.

Analysis

The survey data were analyzed using exploratory structural equation modeling (ESEM; Asparouhov and Muthén, 2009). Structural equation modeling (SEM) assesses the psychometric properties of measures used and estimates the relations among constructs that are corrected for biases attributable to random error and construct-irrelevant variance. ESEM allows the use of exploratory factor analysis (EFA) in addition to or instead of confirmatory factor analysis for the measurement components in SEM. The use of SEM enables a summary evaluation of the hypothesized relationships among the constructs. This is achieved through model fit statistics which indicate the degree to which the model is in agreement with the data. The χ^2 test statistic is the only inferential test of model fit but it is extremely sensitive to sample size, model complexity and violations of multivariate normality. Hence other fit indices are commonly reported in SEM studies. The following “rules-of-thumb” are generally recommended for interpreting the fit indices: comparative fit index (CFI) values greater than .90 and .95 typically reflect acceptable and excellent fit to the data. root mean square error of approximation (RMSEA) values of less than .05 and .08 reflect close and reasonable fit to the data — for its 90% confidence interval (CI), the recommended cutoff values are lesser than .05 for the lower bound and greater than .10 for the upper bound. Standardized root mean squared residual (SRMR) values less than .10 are generally

considered favorable.

Given that the objective of this study is to identify nondemographic traits, it is important to control for and assess the relative effects of demographics. Because several demographic variables were examined, one of the most suitable methods in controlling for their effects is the multiple-indicators and multiple-causes (MIMIC) procedure. This involved regressing all the latent variables on the six covariates (i.e., gender, age, ethnicity, work status, time spent per week, and time of adoption). By applying the MIMIC procedure, the direction, size, and nature of the relations between a background variable and the latent factors would be able to suggest if the biases were generalized or construct specific.

Measures

Big Five. The personality scale used was the Mini-IPIP which provides similar content coverage of the six facets of each Big Five dimension as its parent instrument IPIP-FFM (Donnellan, Oswald, Baird, and Lucas, 2006). The Mini-IPIP comprised 20 statements of which four statements measure each Big Five dimension. For example, a statement measuring extraversion was “Talk to a lot of different people at parties.” Participants were asked to indicate their agreement to the statements on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree). The fit statistics of all measures are reported in Table 1.

Motives. Participants’ motives for using YouTube were measured by 12 statements adapted from the Internet usage (Papacharissi and A. M. Rubin, 2000) and interpersonal communication (R. B. Rubin, Perse, and Barbato, 1988) motives scales. Each motive was measured using three items. There were one utilitarian motive — *informational learning* (e.g., “New way to do research”) — and three hedonic motives — *pleasure* (e.g., “Because it’s fun”), *escape* (e.g., “To get away from what I’m doing”) and *convenience* (e.g., “I don’t have to install anything to watch”). Participants were prompted to rate the statements by the question, “To what extent do the following statements indicate why you use YouTube?” using response options that ranged from 1 (*Not at all*) to 5 (*Exactly*).

Involvement. The Personal Involvement Inventory (PII; Zaichkowsky, 1994) was used to measure levels of involvement. Participants rated the ten PII items on a 7-point bi-polar scale in response to the prompt “To you, YouTube is....” The 10-item PII scale can be broken into cognitive involvement and emotional involvement subscales (Zaichkowsky, 1994).

Content Preferences. Unlike traditional media, contents on social media are not easily classified into neat categories. Intuitively, one would distinguish between amateur and professional videos on YouTube. But Burgess and Green (2009) who attempted to code the most popular videos on YouTube using a coding scheme that involved two primary categories — the apparent industrial origin of the video and the apparent identity of the uploader — failed to obtain clearly distinguishable categories or acceptable intercoder reliability. In this study, ten items were used to measure content preferences in the present study. The items were created inductively by coding the 50 most viewed videos each month in the quarter preceding the study. Participants were asked to respond to the list of items by the question, “What type of videos on YouTube appeal to you?” using options that ranged from 1 (*Not at all*) to 5 (*Totally*).

A satisfactory two-factor structure was obtained using EFA. Three items with the highest factor loadings and best content validity on each factor were chosen as indicators. The first factor labeled *light-entertainment* comprised three items that reflected videos that were mainly user-generated and non-serious (“Funny, silly videos,” “Cute babies/animals,” and “Fan-fiction/remix”); the second factor labeled *quality/informative videos* had items that reflected videos with some depth and quality of information (“News/politics/activism,” “Niche, specialized videos,” and “Educational/informational videos”).

Usage. The nine usage items measuring basic user activities on YouTube were “Watch videos,” “Search for videos,” “Rate a video,” “Favorite / bookmark a video,” “Recommend a video to someone,” “Embed / blog about a video,” “Post a comment about a video,” “Subscribe to someone’s videos,” and “Upload a video.” Participants were asked to rate the list of items by the question, “How frequently do you do the following activities via YouTube?”

and had response options ranged from 1 (Never) to 5 (Very often). The EFA pattern matrix indicated a clear distinction between passive consumption (labeled *read*) and active participation (labeled *write*). Three items with the highest factor loadings on write were chosen as its indicators (“Rate a video,” “Post a comment about a video,” and “Subscribe to someone’s video”) whereas read had only two indicators (“Watch videos” and “Search for videos”) because they were the only items with primary loadings on the factor.

[Please insert Table 1 about here]

TABLE 1. Model Fit Statistics of the Measures

Measures	χ^2	df	CFI	RMSEA	90% C. I.	
Big Five	248.53**	97	0.96	.048	[.041, .056]	.027
Motives	21.04	24	1.00	.000	[.000, .027]	.009
Involvement	152.27**	26	0.96	.086	[.073, .100]	.029
Preferences	12.71	4	0.99	.058	[.024, .095]	.017
Activities	4.35	4	1.00	.012	[.000, .061]	.009

** $p < .01$

RESULTS AND DISCUSSION

The ESEM MIMIC model of all six constructs as specified in Figure 1 obtained a satisfactory fit to the data, $\chi^2(1350) = 2450.27$, $p < .001$, CFI = .926, RMSEA = .035 with 90% CI [.033, .037], SRMR = .040. To cross-validate the structural components of the model, alternative specifications of the relations among constructs were tested. The first alternative model (see Figure 2) was an equivalent model based on the specification of constructs either as antecedent or outcome of media use (cf. Papacharissi and Rubin, 2000). The model fit statistics of the first alternative model were exactly the same as the original model and there were no noticeable changes in R^2 values (between 0 to .03 lower). The original model was retained because it provided a richer explanation of the structural relations without

deterioration in model fit. The second alternative model (see Figure 3) was based on a linear relationship with only direct effects between each successive set of latent variables was specified from personality to usage (cf. McCrae and Costa, 1996). The fit of the second alternative model was marginally worse than the original model but was adequate, $\chi^2(1396) = 2692.98$, $p < .001$, CFI = .91, RMSEA = .038 with 90% CI [.035, .040], SRMR = .045. The Akaike information criterion (AIC), a predictive fit index which assesses model fit in hypothetical replication samples, was used to compare the two models. The one with the smaller AIC is more likely to replicate and hence preferred. The AIC of the original model was 96818.50 which was smaller than 96969.21 for the second alternative model. This meant that the fit advantage of the more complex original model was enough to offset the penalty imposed by the AIC for having more parameters. It also suggested that narrower traits are not neatly mapped on to broader ones in a strictly sequential manner.

[Please insert Figures 2 and 3 about here]

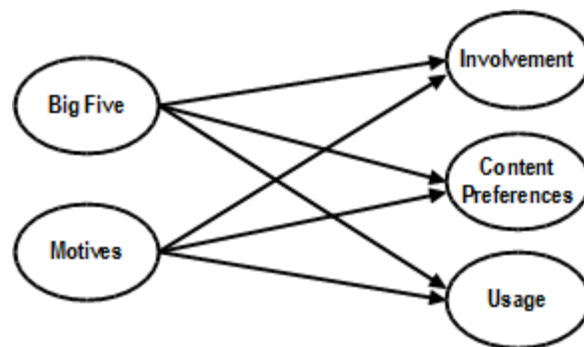


Figure 2. Alternative Model 1: Antecedence → Outcomes.

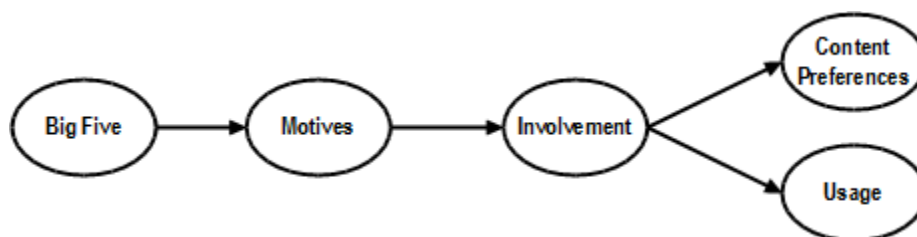


Figure 3. Alternative Model 2: Proximal-distal predictors.

Influence of Traditional Demographics

Variations associated with demographic variables (see Table 2) were mostly within expectations. Ratings on extraversion, emotional involvement, and preferences for quality/informative videos were statistically invariant across all covariates. Pleasure was associated only with the time variables. Women generally reported higher neuroticism and agreeableness whereas more men indicated greater openness and informational learning. Higher ratings of conscientiousness and cognitive involvement were reported with increasing age whereas convenience and read activities had higher endorsements from younger participants. Differences in personality ratings were very noticeable between ethnic groups in the sample. Asian participants generally reported higher neuroticism and conscientiousness but lower agreeableness and openness to experience than non-Asians. Higher endorsement of informational learning, write activities, and preferences for light-entertainment were also associated with Asian participants. Working professionals had higher endorsement of informational learning whereas non-working professionals (mostly students) indicated higher cognitive involvement and escape motive.

Differences in personality ratings associated with the two time variables were minimal and well within expectations. There were weak positive relations between time spent per week and neuroticism, and between time of adoption and openness to experience as well as a negative relation between conscientiousness and time spent per week. The more situational dependent constructs had greater variances associated with the time variables — especially time spent per week. Both earlier adopters and heavier users of YouTube had higher endorsements of all motives and read activities. But earlier adopters were more likely to prefer light-entertainment whereas heavier users had lower preferences for light-entertainment and higher endorsement of write activities.

[Please insert Table 2 about here]

TABLE 2. Effects of Demographics Variables

	Gender (1 = Women)		Age		Ethnicity (1 = Asian)		Work status (1 = working)		Time spent per week		Time of adoption	
	Est.	S.E.	Est.	S.E.	Est.	S.E.	Est.	S.E.	Est.	S.E.	Est.	S.E.
Extraversion	-.070	.127	-.031	.055	.028	.131	.052	.130	.016	.046	.015	.044
Neuroticism	.380**	.093	-.020	.053	.437**	.110	-.216	.125	.093*	.045	-.052	.043
Conscientiousness	-.021	.102	.162**	.057	.294*	.119	-.064	.134	-.114*	.048	-.023	.046
Agreeableness	.566**	.087	-.041	.052	-.556**	.104	-.053	.120	.007	.043	.016	.042
Openness to Experience	-.282**	.091	.078	.052	-.843**	.099	-.045	.122	.039	.044	.121**	.042
Pleasure	-.136	.097	-.028	.050	-.115	.111	-.191	.114	.388**	.039	.158**	.039
Informational Learning	-.206*	.097	.078	.049	.417**	.109	.312**	.113	.285**	.041	.095*	.040
Escape	-.028	.097	-.089	.049	-.160	.109	-.413**	.111	.204**	.041	.121**	.039
Convenience	.129	.099	-.169**	.050	.155	.113	-.037	.116	.368**	.040	.169**	.040
Cognitive Involvement	-.047	.088	.113*	.046	-.071	.104	-.242*	.109	.201**	.042	.115**	.036
Emotional Involvement	-.055	.093	-.005	.048	-.084	.109	.002	.115	.045	.046	.054	.039
Quality/info videos	.007	.105	.090	.055	-.201	.123	-.194	.131	-.045	.052	.081	.044
Light-entertainment	-.049	.105	-.029	.055	.456**	.122	.007	.130	-.189**	.051	.133**	.044
Read	-.102	.076	-.090*	.040	.044	.090	.055	.097	.435**	.037	.067*	.032
Write	-.109	.096	-.064	.050	.233*	.112	.087	.120	.134**	.047	.072	.040

* $p < .05$; ** $p < .01$.

Effects of Personality and Motives

The standardized path coefficients (see Table 3) indicated that the influence of personality on motives was mostly limited to escape and informational learning — only a weak relation between extraversion and pleasure, and no significant relations with convenience were found. Mischel and Shoda (1995) suggest that the relative contributions of personality and situational factors are activated by the configuration of features present in the situation. Pleasure, convenience, and escape are hedonic motives which commonly focus on the experiential aspect of usage. But unlike escape, participants' pleasure and convenience motives are more likely to be activated by the situation-specific features of the website (pull factors) than external circumstances (push factors) that may be more attributable to individual dispositions. This difference might explain the weak predictability of personality on pleasure and convenience. Unsurprisingly, openness to experience — which is associated with more active usage — and conscientiousness — which reflects tendencies for diligence

and emotional control — were both negatively related to escape. The three Big Five factors associated with relational aspects of personality, extraversion, neuroticism and agreeableness, were all significantly related to informational learning which helps to guide social behaviors. The lack of significant relations between personality and involvement constructs supports the role of involvement as situational traits.

[Please insert Table 3 about here]

TABLE 3. Standardized Path Coefficients.

Parameters	Est.	S. E.
Extraversion → Pleasure	.092 [*]	.047
Extraversion → Informational learning	.183 ^{**}	.047
Extraversion → Quality/informative videos	-.118 [*]	.053
Neuroticism → Informational learning	.229 ^{**}	.045
Conscientiousness → Escape	-.261 ^{**}	.047
Agreeableness → Informational learning	-.202 ^{**}	.066
Openness to Experience → Escape	-.132 [*]	.054
Openness to Experience → Quality/informative videos	.183 ^{**}	.059
Openness to Experience → Write	.151 ^{**}	.054
Pleasure → Cognitive Involvement	.270 ^{**}	.060
Pleasure → Emotional Involvement	.451 ^{**}	.061
Pleasure → Quality/informative videos	-.214 ^{**}	.078
Pleasure → Light-entertainment	.562 ^{**}	.077
Pleasure → Read	.141 [*]	.056
Escape → Read	.108 [*]	.050
Escape → Write	.126 [*]	.062
Informational learning → Cognitive Involvement	.440 ^{**}	.075
Informational learning → Emotional Involvement	.208 ^{**}	.079
Informational learning → Quality/informative videos	.548 ^{**}	.101
Informational learning → Light-entertainment	.270 [*]	.108
Informational learning → Read	-.188 [*]	.073
Informational learning → Write	.402 ^{**}	.091
Convenience → Light-entertainment	-.139 [*]	.065
Cognitive Involvement → Quality/informative videos	.188 [*]	.088
Cognitive Involvement → Read	.204 ^{**}	.064
Emotional Involvement → Read	.120 [*]	.051

* $p < .05$; ** $p < .01$.

Note: Only parameters statistically significant under at least one approach are shown.

Individualist and Relational Consumption Profiles

Because motives have been demonstrated to play a central role in the present study, their associations with the other constructs can be used to contextualize the participatory dynamics involved. Pleasure, convenience and escape are hedonic motives which commonly focus on the experiential aspect of usage. But unlike escape, participants' pleasure and convenience motives are more likely to be activated by the situation-specific features of the website (pull factors) than external circumstances (push factors) that may be more attributable to individual dispositions. This difference might explain the weak predictability of personality on pleasure and convenience. By contrast, extraversion, neuroticism and agreeableness were all significantly related to informational learning — a utilitarian motive which also carries a social integrative meaning. Because pleasure and informational learning serve as the best mediators of personality and predictors of the other usage constructs, profiles of user participation can be meaningfully constructed around these two motives.

A replication test was conducted to empirically verify the salience of the two motives and identify only the most important causal relations among focal constructs to form the profiles. The sample was randomly split into equal halves ($n = 328$) and estimated using the same specifications. Both subsamples achieved adequate model fits, $\chi^2(1350) = 1950.19$, $p < .001$, CFI = .92, RMSEA = .037 with 90% CI [.033, .040], SRMR = .044, for the first subsample; $\chi^2(1350) = 2139.58$, $p < .001$, CFI = .90, RMSEA = .042 with 90% CI [.039, .046], SRMR = .049, for the second subsample. Ten statistically significant parameters in the total sample were replicated in the two random half-samples (see Table 4).

[Please insert Table 4 about here]

TABLE 4. Replicable Parameter Estimates.

Parameters	Full sample		Half sample 1		Half sample 2	
	Est.	S. E.	Est.	S. E.	Est.	S. E.
Extraversion → Informational learning	.183**	.047	.244**	.067	.183**	.068
Neuroticism → Informational learning	.229**	.045	.152*	.065	.312**	.065
Conscientiousness → Escape	-.261**	.047	-.163*	.065	-.388**	.066
Pleasure → Emotional Involvement	.451**	.061	.488**	.091	.391**	.079
Pleasure → Cognitive Involvement	.270**	.060	.215*	.092	.313**	.072
Pleasure → Light-entertainment	.562**	.077	.584**	.159	.587**	.093
Informational learning → Cognitive Involvement	.442**	.075	.580**	.104	.368**	.115
Informational learning → Quality/informative videos	.548**	.101	.541**	.144	.596**	.175
Informational learning → Write	.403**	.091	.407**	.139	.421**	.144
Cognitive Involvement → Read	.204**	.064	.255*	.108	.214*	.094

* $p < .05$; ** $p < .01$.

A more succinct model, based on the replicable parameters and the two most salient motives, was tested using the same data in the study but only involving the relevant constructs and their indicators (see Figure 4). For consistency, all latent constructs were regressed on the six covariates as per the original model. A satisfactory model fit was obtained, $\chi^2(661) = 1459.06$, $p < .001$, CFI = .92, RMSEA = .043 with 90% CI [.040, .046], SRMR = .047. The R^2 values were .56 for light-entertainment, .33 for quality/informative videos, .57 for read and .36 for write.

[Please insert Figure 4 about here]

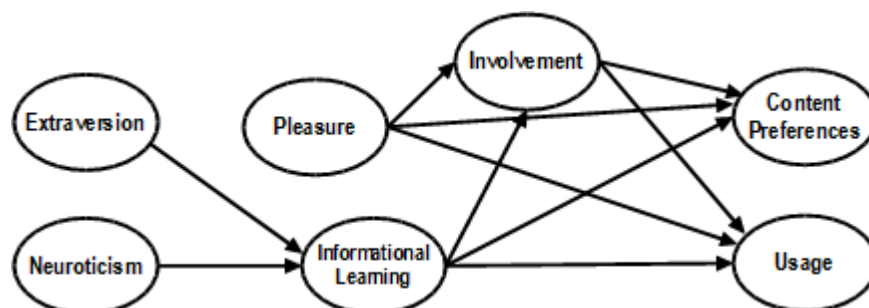


Figure 4. Simplified Model.

The simplified model suggests that YouTube use can be redefined by two participatory dynamics — individualist and relational — to capture their basic psychological features. These two dimensions express users' engaged participation on YouTube that excludes apathetic usage motivated by convenience or escape. As mentioned earlier, apathetic motives did not significantly predict usage patterns. Both participatory dimensions include an element of user involvement. Individualist participation is more hedonic and situation-dependent. Individualist-oriented users are motivated by pleasure, possess at least a minimal degree of emotional involvement, prefer lighthearted videos and engage mainly in more passive activities such as watching and searching for videos. Relational participation, likely to be influenced by personality, is more task-oriented, cognitively involved, and motivated by the desire to learn about surrounding phenomena in order to engage with others — which leads to preferences for informative videos. Relational-oriented users may also engage in more interactive activities on the site such as rating or commenting on videos.

IMPLICATIONS AND CONCLUSIONS

Although the study is only based on YouTube usage, because a wide range of relatively generalizable individual attributes and motives were investigated, there are good reasons to believe that the individualist and relational orientations can be applied to other social media platforms or consumption settings. For example through content analysis, Peddibhotla and Subramani (2007) found that the motivation for contributing reviews on sites like Amazon and Wikipedia can be differentiated between self-oriented motives (self expression, personal development, utilitarian motives and enjoyment) and other-oriented motives (social affiliation, altruism and reciprocity).

This paper contributes to our understanding of the personality-situation dynamics in two ways. First, the empirical study showed that despite their broad, decontextualized nature, the

direct effects of the Big Five personality on consumers' preferences and usage patterns were nontrivial. Notably, each personality factor had a significant effect on at least one motive. Some personality factors even had a greater influence on usage patterns than certain motives. This indicates that the effects of personality are not merely channeled hierarchically as suggested in existing literature. Second, it illustrates a new way of organizing individuals' cognitive-affective reactions to situational features. The findings indicate that the processes by which consumers select products, services, or experiences in social media can be parsimoniously understood as oriented toward the self (individualist) or others (relational).

One important objective of consumer profiling is to understand how a customer would respond to products or features that have not yet been introduced. For social media products, researchers have repeatedly found unequal levels of participation. A survey of 10,000 American users of user-generated content sites by Forrester Research in December 2006 only found a small minority of active participants. Of the six categories of user types surveyed, only 13% of those surveyed identified with 'active creators' (producing and uploading content such as blogs, videos, or photos) while 'critics' (rating and evaluating) had about 19% endorsements. The most popular categories 'inactives' and 'passive spectators' were endorsed by 52% and 33% of participants respectively. The descriptive statistics in this study for usage indicate similar participatory inequality, $M = 3.70$, $SD = 0.89$ for *Read* and $M = 1.44$, $SD = 0.66$ for *Write*. Given that only a small minority of consumers would be active participants in social media activities, identifying the most appropriate target group to initiate the campaign is crucial for campaigns that are dependent on user participation.

Beyond Early Adopters: Leveraging Relational-Oriented Interactions in Social Media

Assume that a marketer is planning for a social media campaign featuring an interactive micro-site showcasing a certain brand and the objective is to drive traffic to the site and encourage user participation in the site. Intuitively, early adopters seem like the most appropriate group to target as seed users. This study suggests that Openness to Experience

is significantly associated with earlier adoption and ostensibly these users would respond most favorably to the campaign. However, there is no evidence to suggest that these early adopters would play the role of evangelists and draw other consumers to the micro-site. The marketing effort would be better off targeting relational-oriented consumers in the first wave of the campaign not least because these individuals are more likely to participate in the micro-site. More importantly, because their participation is relationally motivated, they are more likely to engage with other users in their interactions on the micro-site — thereby generating word-of-mouth recommendations. But relational-oriented consumers may not take to the site as readily as early adopters. The key to attracting, retaining and encouraging greater word-of-mouth recommendations among these relational-oriented consumers would be to appeal to their informational learning motive.

This study suggests that relational-oriented consumers may be identified through their personality attributes, particularly extraversion and neuroticism. To obtain information of users' personality, very brief personality questionnaires can be included during user registration or through personality quizzes such as those on social networking sites. Researchers have also found that personalities and other profiles of users can be interpreted using the comments posted by them (Argamon, Koppel, Pennebaker, and Schler, 2009). The marketing messages should be designed to enable relational-oriented consumers to learn more about something relationally useful and the contents on the micro-site must allow these users to create conversations with their friends. The second wave of the campaign should appeal to the individualist-oriented consumers. While this group of consumers may not be identifiable through personality, this study suggests that they would generally seek out more lighthearted contents with a higher entertainment value than relational-oriented consumers. Individualist-oriented consumers are also more likely to be attracted by the experiential and hedonic aspects of the product rather than their instrumental value. Because individualist consumers are oriented toward greater self-determination, they are less likely to respond favorably to overt advertising messages. Thus the marketing campaign in the second wave

should identify and emphasize brand-congruent emotional cues that would appeal to these consumers.

This research demonstrates that profiles of YouTube users can be meaningfully constructed through their personality and motives. It also highlights the dynamic nature of the psychological profiles of consumers. Apathetic and engaged users are differentiated by a dynamic difference in involvement level and apathetic usage is very much dependent on situational influences. Therefore a better understanding of consumers' situational circumstances of usage and target them at appropriate situations would be essential to convert a large number of these apathetic users into engaged ones. Similarly, individualist and relational orientations are non-mutually exclusive. Taken together, they highlight consumption as a continuing dialogue between individualistic and relational aspects of consumers' cognition and action with respect to the product. Future research should examine how the relational orientation may be activated to generate word-of-mouth. It is particularly pertinent to identify the cues or situations that make group conditions more salient (see Beenen et al., 2004).

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