Facebook vs. Twitter: An Examination of Differences in Behavior Type and Substance Based on Psychological Factors

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Abstract—In this paper, we discuss the differences between Facebook and Twitter users in terms of their activity on the sites and how this may be related to the personality and trait affect of users. Differences between the types of activity users create, comment on, share, and "like" may lead to further insight about the psychological factors that influence the use of social networking sites and how they may vary between Facebook and Twitter. In particular, we examine several specific types of activity which may help in this regard: 1) the frequency of use of the social networking platform; 2) the topic of a particular activity, and 3) the type of activity. The type of activities are the normal modes of interaction on a social networking site, such as creating a new post, or liking, sharing, or commenting on an existing one. Categories of content are generalized classifications, such as a political post versus a post that is more informational in nature. The results indicate that there are some similarities between users of both platforms related to their type and the content of their activities. However, there are some interesting differences.

Index Terms—social networking, Facebook, Twitter, personality, trait affect, survey, online behavior

I. INTRODUCTION

Social media has become a dominating presence in our lives. In its beginnings, it was viewed as a generally beneficial tool of online communication [30], but in recent years some studies have begun to question its positive role in human well-being [4], [17]. And the 2016 American presidential election brought to the forefront its possible influence in shaping views and curating access to information. Thus, its relevance in our lives is only increasing. The security and privacy implications of online behavior is also something of significance [7], [8].

Recent quarterly reports from Facebook show that its average user spends over forty minutes per day on the site [18]. The average Twitter user spends only four minutes per day on the site and only tweets twice per month, while 80% of tweets come from the top 10% most active users [22]. Given that more than two-thirds of Americans use Facebook, and almost one-quarter use Twitter [22], the social and psychological impact of these social media sites cannot be over-stated.

In the current study, we investigate the types of activity reported by users (n=662) about their usage of Facebook and Twitter and explore what conclusions, if any, may be drawn from that data, as well as what the data says in relation to the personality and trait affect of users. Since this is an exploratory study, we perform this inquiry by examining the correlations between Facebook and Twitter usage (frequency, activity type, activity topic) with measures for personality and trait affect. This research follows in the path of similar research that has examined psychological factors related to social networking behavior [1], [6], [10], [12].Next, we discuss other research that has helped inform the current study.

II. BACKGROUND

Weinberger et al. [28] have shown that depression has significantly increased in the past decade, and numerous studies [4], [13], [25] have linked increased social media usage with increased depression. It has also been shown that the most common outlet for cyberbullying is social media and that when targetted at people not known in person, online aggression was higher [29].

The differing forms of communication available to Facebook and Twitter users, provide and mold the manner in which users communicate, as well as how they process information. Where Facebook provides a public profile to share information and ideas, with messaging either in public or private, Twitter allows for anonymity with primarily public messaging and limited, 280 character, messages or "tweets" [12]. Twitter garners a growing population due to the anonymity it provides and the reduced social pressure of conformity. This is in stark contrast to Facebook's population with a desire to be recognized and "stay-in-touch" with close friends and relatives [13].

When questioned, most Facebook users found the social network to be "very good for networking" and "very convenient" and allows for quick and easy access to the user's social sphere [24]. Though all users of Facebook reported an increase in social capital gains, low self-esteem users were shown to have the largest benefit [24]. By allowing users to

curate how they are viewed to their friends and family, users of low self-esteem are able to hide their insecurities while boasting of their strengths. This in turn means friends will see each other in the best light they wish to show of themselves. Thus, to appeal to their friends, users will appeal to social pressures within their social groups and ostracize those outside of the social sphere due to fear of being ostracized themselves [19]. Another social networking risk involves the disclosure of personal information, which may result in this information becoming compromised [7].

In contrast to Facebook's conformity, Twitter's anonymity would thus allow for the freedom of self-expression in a public environment [1]. Twitter users generate a basic profile sharing a username, a profile picture, their interests and who they are following and followers. The user's tweets and "re-tweets" define the user, not on who they are, but based on their words and voice. In an open field for communication and reach, Twitter provides a truly unique experience where users can gain popularity no matter their status in life. This comes at the cost for users of low self-esteem who equate a large number of followers to having a healthy social capital.

III. METHODS

In order to obtain some initial data examining differences between Facebook and Twitter users, a large-scale survey was employed. Amazon's Mechanical Turk (MTurk) was used to recruit survey participants. MTurk provides researchers with a relatively low-cost and quick turnaround platform for participant recruitment [9], [23]. Participants generally represent a broader cross-section of the population than other methods often employed, such as college sophomores in an introductory psychology class [21]. IRB approval was on file prior to collecting data. Participants were compensated with $3 for their participation in the study. Two quality control questions were used. If participants failed either quality control question, the survey would conclude with an explanation of why it has concluded.

We used the Qualtrics survey platform. A total of 662 responses were collected. Participants are asked at the end of the survey how the effort and time required to complete the survey compared to similar work offered through the MTurk platform. Most participants indicated that it was either easier (29.81%) or comparable (64.08%) to other projects with a small number indicating more effort was required (6.11%). Of note, a pilot study was employed beforehand to check for any issues with the survey, including survey logic and question wording problems, as well as the same question noted above. The compensation was subsequently adjusted from the pilot study ($2) to better reflect a comparable amount of time and effort for research participants. Thus, we believe we accomplished this given the above results from this question in the final survey.

This study was developed to assess multiple types of behavior on both platforms. We were interested in three types of behavior:

1) The type of behavior, such as making a new post, commenting on an existing one, sharing a post, and liking a post.
2) The substance or topic of the activity, such as humor, political, happy, or controversial.
3) The frequency of use of the platform.

Our primary interest lies in how these behaviors vary by platform (i.e., Facebook and Twitter), as well as various psychological factors, such as trait affect and personality. We used previously developed and validated instruments for the psychological factors. In order to measure both the higher order and lower order dimensions of trait affect, we used the PANAS-X, which is an extended version of the original PANAS (positive affect negative affect schedule) [26], [27]. For personality, we employed the Big Five Inventory [2], [14], [15].

In the development of categories for the substance or topic of activity, as well as the classification of activity categories themselves, we employed the Delphi technique [5], [11], [20]. The Delphi technique is a method that is used to reach consensus on a matter. In the context of this study, we wanted to make sure there was appropriate coverage and general agreement on the topics identified and the types of activities noted by the group. We employed three rounds of the Delphi technique to a small group of participants, which is considered a good number of rounds that effectively balances robustness with fatigue that can set in from too many rounds. Additionally, we set a 75% threshold for consensus. In other words, if 75% of the participants involved in the Delphi technique were in agreement, then consensus was considered achieved.

Ultimately, seven categories of topics were uncovered. They include the following:

1) Funny
2) Heartwarming
3) Informational
4) Political
5) Controversial
6) Happy
7) Sad

Beyond these topic categories, four different types of activity were noted:

1) Making a new post
2) Commenting on an existing post
3) Sharing a post
4) Liking a post

The advantage of the topics and activity types developed is that they appropriately classify activity on both Facebook and Twitter. This provides us with an opportunity to do a direct comparison between the two social networking platforms.

Each indicator we measured through the survey contributed to two different factors. We had a separate question for each platform, for each type of activity, and for each of the topics noted. Thus, there were seven questions related to commenting on Facebook, each of them having a different topic related to it (i.e., heartwarming). Likewise, each topic had four different

questions for it to cover the different activity types. The means for all of the Facebook activity types were derived, as well as the means for each topic. This was repeated for the indicators used to assess Twitter activity.

IV. ANALYSIS

Of the 701 participants that chose to submit a code for a completed survey on the MTurk platform, 39 of them failed one or more quality control questions. Thus, this left us with 662 usable responses noted in the methods section. Other participants that failed a quality control question were taken to a message indicating that the survey has ended and were not given a code. Thus, more than the 5.56% noted here failed one or more quality control questions.

Additionally, we only analyzed participants that were users of the social networking platform. In other words, only those that indicated they used the social networking platform at least once every month or so. This resulted in a data set of 601 participants for Facebook and 494 for Twitter.

As noted earlier, we assessed users based on two types of psychological factors: personality and trait affect.

A. Personality

Although there are varying theoretical perspectives on personality types, one common approach has been the identification of five specific personality types: extraversion, agreeableness, conscientiousness, neuroticism, and openness. This is the approach we will use here.

1) Extraversion: Individuals with higher levels of extraversion are generally more gregarious, outgoing, and assertive [16]. Our results indicate that these types of individuals are more likely to post, comment, like, and share content of various topics on both Facebook and Twitter. However, extraversion was only related to frequency of use of the social networking platform for Facebook ($p < 0.05$), but not Twitter. This might suggest that the use of a social networking platform may be associated with a variety of personality types. However, the active participation on a site, such as posting, commenting, liking, and sharing content, is more likely to be seen by those with higher levels of extraversion. Thus, many users may use a social networking plan, but it does not necessarily mean they are actively participating.

2) Agreeableness: Agreeableness is associated with trust, straightforwardness, compliance, and modesty [16]. For Facebook, agreeableness was associated with higher levels of several activity topics: funny ($p < 0.01$), heartwarming ($p < 0.01$), informational ($p < 0.01$), and happy ($p < 0.01$). Lower levels of activity related to controversial topics was also seen. Additionally, agreeableness was associated with higher levels of all activity types. With respect to Twitter, agreeableness was associated with higher levels of two activity topics, heartwarming ($p < 0.01$) and happy ($p < 0.01$), while lower levels of controversial ($p < 0.01$) and sad ($p < 0.01$) activity topics were observed. Unlike Facebook, higher levels of agreeableness did not result in higher levels of any activity type.

3) Conscientiousness: Conscientiousness can be described as competence, dutifulness, achievement striving, self-discipline, and deliberation [16]. For Facebook users, conscientiousness was associated with higher levels of topics related to being funny ($p < 0.05$), heartwarming ($p < 0.01$), and happy ($p < 0.01$). Additionally, lower levels of activity related to political ($p < 0.01$), controversial ($p < 0.01$), and sad ($p < 0.01$) topics were seen. No association between conscientiousness and activity type or frequency of use was observed with Facebook, which is in contrast to prior research [12]. Twitter users with higher levels of conscientiousness were less likely to engage in activity with content that was political ($p < 0.01$), controversial, or sad ($p < 0.01$). No other associations were observed.

4) Neuroticism: Neuroticism consists of anxiety, angry hostility, depression, self-consciousness, vulnerability, and impulsiveness [16]. Facebook users that are more likely to engage in activity topics related to sad things have higher levels of neuroticism ($p < 0.05$). In contrast, we see less activity related to topics that are funny ($p < 0.05$), heartwarming ($p < 0.01$), informational ($p < 0.05$), and happy ($p < 0.01$) for those that have higher levels of neuroticism. Facebook users were also less likely to post ($p < 0.05$) or comment ($p < 0.05$) on the social networking platform when they have higher levels of neuroticism. Twitter users were more likely to engage in activity related to sad topics ($p < 0.05$), but no other associations were observed. These findings suggest that to the extent individuals that are more neurotic use social networking to feel less lonely [12], do so in a particularly negative context.

5) Openness: Finally, openness is associated with ideas, fantasy, aesthetics, actions, feelings, and value [16]. Openness was associated with higher levels of all types of activity ($p < 0.01$), as well as activity related to the topics of funny ($p < 0.01$), heartwarming ($p < 0.01$), informational ($p < 0.01$), political ($p < 0.05$), happy ($p < 0.05$), and sad ($p < 0.05$). Openness was not related to how often people used Facebook, however. Similar findings were found with Twitter with openness being associated with higher levels of topics that were funny ($p < 0.01$), heartwarming ($p < 0.01$), informational ($p < 0.01$), and happy ($p < 0.01$). Greater activity types were also observed for posting and sharing ($p < 0.05$), as well as liking and commenting ($p < 0.01$).

B. Trait Affect

Similar to personality, affect has been studied a variety of ways. For purposes of this study, we adopt the overall approach developed in the PANAS (positive affect negative affect schedule) [27]. In addition to an examination of positive affect and negative affect, we also examine the lower order dimensions of affect, which includes the following: fear, hostility, guilt, and sadness, which are all lower order dimensions under negative affect, as well as joviality, self-assurance, and attentiveness, which are the lower order dimensions associated with positive affect. Other lower order dimensions that are not associated with either positive or negative affect are not included in this

analysis. Since we included the lower order dimensions of affect, we used the PANAS-X [26].

It is also important to note that the concepts of positive affect and negative affect are distinct from one another. While we may expect in some instances that individuals with higher levels of positive affect have lower levels of negative affect, this is not necessarily the case.

Finally, we focused our attention on trait affect, which is a generally stable and lifelong type of affect [27]. This makes it similar in many respects to personality since they are both psychological factors that change relatively little over time. It also allows us to examine a context free type of affect.

1) Trait Positive Affect: Positive affect indicates how much a person is alert, active, and enthusiastic with full concentration, pleasurable engagement, and high energy [27]. Similar to extraversion, higher levels of trait positive affect were associated with greater activity across the board. This was also seen with Twitter users with the only exception being the frequency in which individuals use Twitter. Again, this is similar to extraversion.

2) Trait Negative Affect: Negative affect reflects unpleasurable engagement and subjective distress with anger, disgust, fear, guilt, and nervousness [27]. On Facebook, trait negative affect was found to be associated with higher levels of the activity topics political ($p < 0.01$), controversial ($p < 0.01$), and sad ($p < 0.01$), while lower levels of activity related to the topic of happy were observed ($p < 0.05$). Facebook users were also more likely to share posts when they had higher levels of trait negative affect ($p < 0.05$). Twitter users with higher levels of trait negative affect were more likely to engage in activity with topics that were heartwarming ($p < 0.05$), informational ($p < 0.05$), political ($p < 0.01$), controversial ($p < 0.01$), or sad ($p < 0.01$). Additionally, they were also more likely to engage in all activity types ($p < 0.01$), as well as use the social networking platform more frequently ($p < 0.05$).

3) Trait Fear: Fear consists of the descriptors afraid, jittery, shaky, frightened, and scared [26]. Individuals on Facebook that had higher levels of fear were more likely to engage in activity with topics that were political ($p < 0.01$), controversial ($p < 0.01$), or sad ($p < 0.01$). They were also more likely to post ($p < 0.05$) and share items ($p < 0.01$) and use the social networking site on a more regular basis ($p < 0.05$). Interestingly, Twitter users that had higher levels of trait fear not only used the platform on a more regular basis ($p < 0.01$), but also engaged in activities on all different types of topics and activity types.

4) Trait Hostility: Hostility is composed of the descriptors angry, hostile, scornful, disgusted, loathing, and irritable [26]. Facebook users with higher levels of trait hostility was associated with higher levels of activity with topics that were political ($p < 0.01$), controversial ($p < 0.01$), or sad ($p < 0.01$), while lower levels of happy topics were observed ($p < 0.05$). Additionally, individuals with higher levels of trait hostility were more likely to share content on Facebook ($p < 0.05$). For Twitter users, trait hostility was related to higher levels of activity with topics that were informational ($p < 0.05$), political

($p < 0.01$), controversial ($p < 0.01$), or sad ($p < 0.01$). Twitter users were also more likely to engage in all four activity types when they had higher levels of trait hostility ($p < 0.01$).

5) Trait Guilt: Guilt is made up of the descriptors blameworthy, angry at self, guilty, ashamed, disgusted with self, and dissatisfied with self [26]. Facebook users with higher levels of trait guilt were more likely to engage in activity that was political ($p < 0.05$), controversial ($p < 0.01$), or sad ($p < 0.01$), but less likely to on happy topics ($p < 0.05$). The same was seen for Twitter users with political ($p < 0.05$), controversial ($p < 0.01$), and sad topics ($p < 0.01$). They were also more likely to like tweets ($p < 0.01$), share them ($p < 0.05$), or use the social networking platform in general ($p < 0.05$).

6) Trait Sadness: Sadness consists of the descriptors blue, downhearted, lonely, alone, and sad [26]. Facebook users with higher levels of trait sadness were also more likely to engage in activity related to controversial ($p < 0.05$) or sad ($p < 0.01$) topics, but less likely to do so for topics that were happy ($p < 0.05$). For Twitter users, they were also more likely to engage in activity related to controversial ($p < 0.01$) or sad ($p < 0.01$) topics, as well as informational ones ($p < 0.05$). Additionally, they were also more likely to like tweets ($p < 0.05$) or share ($p < 0.05$) them.

7) Trait Joviality: Joviality is composed of the descriptors delighted, joyful, energetic, lively, enthusiastic, happy, excited, and cheerful [26]. Higher levels of joviality were associated with higher levels of all activity types, topic types, and overall engagement with Facebook ($p < 0.01$). For Twitter users, the same associations were seen ($p < 0.01$) with the only exception being the frequency of use of the platform.

8) Trait Self-Assurance: Self-assurance is made up of the descriptors fearless, bold, daring, strong, proud, and confident [26]. Similar to joviality, Facebook users with higher levels of self-assurance had higher levels of engagement across activity types and topics ($p < 0.01$), as well as the frequency of use of the platform ($p < 0.05$). As before, the same was seen with Twitter users ($p < 0.01$), but not for the frequency in which an individual uses with the platform.

9) Trait Attentiveness: Attentiveness consists of the descriptors determined, concentrating, alert, and attentive [26]. Finally, Facebook users with higher levels of trait attentiveness also had higher levels of activity with topics that were funny ($p < 0.01$), heartwarming ($p < 0.01$), informational ($p < 0.01$), and happy ($p < 0.01$). They were also more likely to engage in all four types of activities ($p < 0.01$). For Twitter users, a similar pattern emerged with respect to topics that were funny ($p < 0.01$), heartwarming ($p < 0.01$), informational ($p < 0.01$), or happy ($p < 0.01$). Likewise, they were also more likely to make new tweets ($p < 0.05$), like existing ones ($p < 0.01$), or comment on one ($p < 0.01$).

V. Discussion

Our findings seem to indicate that Facebook and Twitter have fairly different types of users, even though there is much overlap. Individuals with personality and trait affect components generally viewed as more negative find an outlet

on Twitter. They are more likely to use the platform on a regular basis, perhaps to have their voice heard or vent their frustrations. Facebook, despite its previously discussed link with depression and other social ills, seems to cater to a more agreeable and temperate environment.

There are many possible reasons for these results, which requires further study. However, these findings may not be too surprising given the differences in the structures of the platforms and the type of interactions most conducive to each one. Facebook is designed as a platform for interacting with people you know in person, with its "news feed" catering to longer posts. Twitter on the other hand markets users to "follow" celebrities, products, and other accounts not directly associated with users. It also purposefully limits what can be said in its short-form *tweet* message format. This disassociation between users and hindrance of longer discussions creates an environment that fosters many of the previously discussed negative relationships, such as Whittaker and Kowalski's findings [29] that a lack of in-person relationships between users correlates with aggressive posts being perceived as less negative than they otherwise would be.

To the extent that users with higher levels of neuroticism may seek social networking sites to reduce loneliness [12], it appears this may be done through largely negative interactions on such sites. However, the proposition that these individuals use social networking sites more frequently was not supported in the current study.

There are three primary contributions this work makes in examining differences in social networking behavior on the Facebook and Twitter platforms. First, most research has focused on understanding differences based on personality factors (e.g., [3]). The current study examined personality factors, but also included measures for both upper and lower order dimensions of affect. This allows us to go beyond personality and understand other types of psychological factors that may be at play. The results do suggest that this was worthwhile since some interesting differences were noted between the two platforms based on the lower order dimensions of trait affect, such as hostility and Twitter.

Second, this study examined behavior on the social networking platforms by examining the type of activity that occurs. This included an examination of the four primary types of activities seen on both platforms: 1. posting/tweeting; 2. liking; 3. commenting, and 4. sharing/retweeting. By examining behaviors that were generally the same on both platforms, it allowed us to see how the types of interactions individuals have with the social networking platforms vary based on both personality and trait affect.

Finally, we also examined the substance of the activity—the topic of the interaction. This was done by identifying seven distinct topics that were common across both platforms. Again, this allowed us to do comparisons between the platforms themselves, as well as see how psychological factors may help explain the behavior of these users based on the distinct topic that is part of the underlying activity type (e.g., liking).

Future work will build on the results obtained herein. This will include further exploration of the theoretical underpinnings of the relationships found and the use of other analytical techniques, such as structural equation modeling. Given the exploratory nature of the current study, this was avoided so as to not obfuscate simple relationships that may or may not exist. Although challenging, it would also be worthwhile to obtain actual user data rather than relying solely on self-reports.

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VI. APPENDIX

Trait Affect	Frequency		Posting		Liking		Commenting		Sharing	
	FB	*TW*	*FB*	*TW*	*FB*	*TW*	*FB*	*TW*	*FB*	*TW*
Negative	0.065	0.1*	0.056	0.148**	0.053	0.142**	0.056	0.14**	0.092*	0.16**
Positive	0.095*	0.064	0.287**	0.213**	0.24**	0.201**	0.279**	0.222**	0.246**	0.165**
Fear	0.086*	0.118**	0.094*	0.205**	0.080	0.165**	0.073	0.188**	0.129**	0.206**
Hostility	0.024	0.077	0.077	0.175**	0.015	0.12**	0.062	0.154**	0.103*	0.162**
Guilt	0.062	0.101*	0.015	0.079	0.038	0.119**	0.031	0.082	0.043	0.1*
Sadness	0.045	0.058	0.016	0.083	0.034	0.099*	0.015	0.081	0.040	0.106*
Joviality	0.146**	0.082	0.354**	0.288**	0.276**	0.2**	0.299**	0.261**	0.301**	0.222**
Self-Assurance	0.104*	0.085	0.322**	0.266**	0.245**	0.204**	0.294**	0.256**	0.267**	0.216**
Attentiveness	0.036	0.023	0.169**	0.107*	0.156**	0.15**	0.179**	0.128**	0.137**	0.076
Shyness	0.052	0.081	0.028	0.082	0.035	0.073	0.018	0.074	0.064	0.074
Fatigue	0.080	0.020	-0.023	-0.016	0.018	0.035	-0.009	-0.023	-0.007	0.012
Serenity	0.003	-0.032	0.181**	0.078	0.128**	0.050	0.137**	0.062	0.121**	0.023
Surprise	0.094*	0.147**	0.332**	0.327**	0.212**	0.203**	0.283**	0.298**	0.302**	0.258**
Personality	*FB*	*TW*	*FB*	*TW*	*FB*	*TW*	*FB*	*TW*	*FB*	*TW*
Extraversion	0.089*	0.041	0.299**	0.259**	0.205**	0.177**	0.279**	0.259**	0.242**	0.229**
Agreeableness	0.060	-0.026	0.114**	-0.023	0.192**	0.023	0.136**	0.008	0.116**	-0.014
Conscientiousness	-0.039	-0.065	0.025	-0.053	0.049	-0.026	0.047	-0.017	0.006	-0.070
Neuroticism	0.073	-0.002	-0.095*	-0.047	-0.026	0.014	-0.082*	-0.036	-0.050	-0.015
Openness	-0.027	0.016	0.154**	0.112*	0.152**	0.133**	0.128**	0.146**	0.134**	0.098*
** = p <0.01 * = p <0.05										

TABLE I: Activity Type and Psychological Factors

	Funny		Heartwarming		Happy		Sad	
Trait Affect	*FB*	*TW*	*FB*	*TW*	*FB*	*TW*	*FB*	*TW*
Negative	0.011	0.057	-0.026	0.091*	-0.093*	0.050	0.178**	0.265**
Positive	0.277**	0.195**	0.321**	0.262**	0.273**	0.255**	0.13**	0.099*
Fear	0.047	0.096*	0.011	0.149**	-0.062	0.106*	0.201**	0.293**
Hostility	-0.008	0.058	-0.058	0.086	-0.092*	0.057	0.182**	0.264**
Guilt	0.005	0.026	-0.052	0.047	-0.099*	0.007	0.134**	0.207**
Sadness	-0.007	0.038	-0.060	0.035	-0.089*	0.006	0.128**	0.183**
Joviality	0.31**	0.204**	0.363**	0.307**	0.271**	0.279**	0.169**	0.176**
Self-Assurance	0.271**	0.222**	0.294**	0.277**	0.212**	0.239**	0.177**	0.181**
Attentiveness	0.197**	0.130**	0.224**	0.168**	0.218**	0.207**	0.056	0.002
Shyness	-0.018	0.019	-0.026	0.047	-0.051	0.014	0.12**	0.18**
Fatigue	-0.009	-0.006	-0.048	-0.001	-0.041	-0.037	0.077	0.064
Serenity	0.162**	0.064	0.161**	0.089*	0.174**	0.106*	0.016	-0.038
Surprise	0.222**	0.204**	0.255**	0.288**	0.128**	0.216**	0.245**	0.277**
Personality	*FB*	*TW*	*FB*	*TW*	*FB*	*TW*	*FB*	*TW*
Extraversion	0.272**	0.200**	0.291**	0.274**	0.214**	0.247**	0.147**	0.139**
Agreeableness	0.192**	0.026	0.339**	0.128**	0.292**	0.123**	0.004	-0.111*
Conscientiousness	0.094*	0.021	0.181**	0.001	0.213**	0.085	-0.088*	-0.158**
Neuroticism	-0.082*	-0.064	-0.141**	-0.065	-0.123**	-0.083	0.09*	0.098*
Openness	0.15**	0.173**	0.162**	0.164**	0.102*	0.121**	0.095*	0.055
** = p <0.01 * = p <0.05								

TABLE II: Activity Substance and Psychological Factors,
Part 1

	Informational		Political		Controversial	
Trait Affect	*FB*	*TW*	*FB*	*TW*	*FB*	*TW*
Negative	-0.001	0.095*	0.114**	0.139**	0.177**	0.207**
Positive	0.22**	0.186**	0.138**	0.098*	0.124**	0.091*
Fear	0.022	0.136**	0.131**	0.17**	0.176**	0.213**
Hostility	0.006	0.088*	0.124**	0.14**	0.223**	0.247**
Guilt	-0.033	0.057	0.081*	0.093*	0.139**	0.149**
Sadness	0.016	0.09*	0.065	0.084	0.09*	0.131**
Joviality	0.218**	0.18**	0.205**	0.142**	0.189**	0.161**
Self-Assurance	0.22**	0.173**	0.182**	0.127**	0.232**	0.193**
Attentiveness	0.152**	0.153**	0.044	0.023	0.012	-0.014
Shyness	0.020	0.041	0.063	0.053	0.094*	0.113*
Fatigue	-0.022	-0.011	-0.038	-0.031	0.054	0.046
Serenity	0.12**	0.055	0.066	0.008	0.099*	0.029
Surprise	0.173**	0.183**	0.265**	0.202**	0.296**	0.27**
Personality	*FB*	*TW*	*FB*	*TW*	*FB*	*TW*
Extraversion	0.17**	0.173**	0.184**	0.17**	0.167**	0.179**
Agreeableness	0.147**	0.044	-0.047	-0.063	-0.158**	-0.183**
Conscientiousness	0.072	0.053	-0.126**	-0.119**	-0.164**	-0.152**
Neuroticism	-0.098*	-0.035	-0.016	0.013	0.008	0.020
Openness	0.16**	0.167**	0.096*	0.031	0.019	0.014
** = p <0.01 * = p <0.05						

TABLE III: Activity Substance and Psychological Factors,
Part 2