

**CONTENT AND COMMUNITY:
DECODING ENGAGEMENT BY EXPLORING EMPIRICAL LINKS WITH
SOCIAL MEDIA ENGAGEMENT, BRAND EQUITY, PURCHASE INTENT, AND
ENGAGEMENT INTENT**

By

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ABSTRACT

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This dissertation looks at the value proposition of social media to firms. Specifically, it looks at what factors account for the empirical link between brand equity, purchase intention, and brand social media engagement intention. This study also looks into brand equity antecedents, specifically cognitive absorption and cognitive flow. In addition, this study looks at the effects of community engagement metrics on social media posts, to see to what extent brand equity, purchase intent, and/or brand social media engagement intent are the result of actual social media content or previous/other consumers engaging with the post.

Using a simulated Facebook environment and survey format, 858 Mechanical Turk participants were randomly assigned to one of three conditions, no community metrics shown, true community engagement metrics shown, and switched community engagement metrics shown (e.g. posts with established high engagement metrics were shown with low engagement metrics and vice versa). They were then randomly assigned once more into a high or low engagement post group. Participants were then shown three Facebook posts for McDonald's, and three posts for Delta Airlines, with engagement scores and presence based on their random assignments. Brands were selected to provide the maximum variety of purchase decision involvement, and Brand Awareness, Promotional, and Engagement post categories because they corresponded with the Buying Behavior Model (Coursaris, Van Osch, Balogh, 2013; Wind, 1978). Following each post, participants were presented a survey about their social media engagement intentions, purchase intentions, brand equity, as well as cognitive absorption and flow experiences when interacting with the post.

Based on these findings, this dissertation offers the following contributions. First, it empirically tests the relationship between social media-based brand engagement and purchase intention and therewith attempts to expose whether or not investments by companies in social media marketing communications are associated with a potential return on investment. Second, this study serves as a starting point for understanding antecedents of brand equity, and establishes cognitive flow as a highly likely predictor. Third, this study tests the new construct of brand social media engagement intention on a public sample. Fourth, this study draws on actual brand Facebook Page Posts that are classified according to their messaging content and objectively evaluated in terms of their impact (i.e. the evoked level of Likes, Comments, and/or Shares) before exposing them to participants to test the impact they may have on consumers' perceptions and behavioral intentions towards the brand in a natural, simulated exposure environment of Facebook. Brand communities are then actively tested to observe consumer engagement effects on a live, simulated platform, to see if consumers interact with posts based on the content, or the presence of community engagement metrics. Such results could demystify and assist in some of brand investments into practices such as purchasing engagement. If it is purely content that causes people to engage with brand posts, then companies can increase their organic value without investing in paid resources, thus increasing their ROI. Finally, active interaction was not established as an equivocal reflection of self-report metrics for engagement intention. Further understanding of the Facebook environment is still needed.

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For Sam.
Who put up with everything,
And never let me quit.
And taught me love.

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TABLE OF CONTENTS

LIST OF TABLES	ix
LIST OF FIGURES.....	xi
CHAPTER 1.....	1
INTRODUCTION.....	1
CHAPTER 2	6
LITERATURE REVIEW	6
BRAND EQUITY	7
COGNITIVE ABSORPTION	9
COGNITIVE FLOW	13
PURCHASE INTENT	16
SOCIAL MEDIA ENGAGEMENT INTENTION	18
POPULARITY & COMMUNITY ENGAGEMENT	20
PROPOSED THEORETICAL MODEL	23
CHAPTER 3	24
METHODOLOGY	24
MANIPULATION	24
ENVIRONMENT	26
ENGAGEMENT METRICS PRETEST & MANIPULATION	26
PARTICIPANTS.....	28
INSTRUMENT VALIDATION.....	31
CHAPTER 4	37
RESULTS	37
DEMOGRAPHICS	37
SOCIAL NETWORKING SITES USAGE	39
HYPOTHESIS TESTING	43
POST-HOC TEST FOR BRAND EQUITY, PURCHASE INTENTION, AND BRAND SOCIAL MEDIA ENGAGEMENT INTENTION EFFECTS	51
FURTHER EXPLORATORY INQUIRES.....	51
SIMPLIFIED MODEL.....	58
SUMMARY.....	62
CHAPTER 5	63
DISCUSSION	63
LIMITATIONS.....	65
DEMOGRAPHICS & PARTICIPANTS.....	66
COGNITIVE ABSORPTION & BRAND EQUITY	67
SELECTED BRAND RELEVANCE & SIMULATED ENVIRONMENT.....	68
THEORETICAL IMPACT	72
SELF-REPORT VS SIMULATION.....	73
POST POPULARITY/COMMUNITY METRICS.....	74

COGNITIVE ABSORPTION	79
PRACTICAL IMPACT	81
CONCLUSIONS	82
APPENDICES	85
APPENDIX A. MANIPULATION - BRAND FACEBOOK PAGE POST SELECTIONS' ENGAGEMENT METRICS	86
APPENDIX B. SIMULATED FACEBOOK ENVIRONMENT.....	87
APPENDIX C. FACTOR LOADINGS	88
APPENDIX D. CONSTRUCT STATISTICS.....	90
APPENDIX E. LATENT VARIABLE CORRELATIONS.....	91
APPENDIX F. MATRIX OF LOADINGS AND CROSS-LOADINGS.....	91
APPENDIX G. DEMOGRAPHICS.....	96
APPENDIX H. MODEL FIT COMPARISONS	100
APPENDIX I. SURVEY	101
BIBLIOGRAPHY.....	134

LIST OF TABLES

Table 1. Constructs and Definitions	23
Table 2. Tradeoffs of Different Recruiting Methods	29
Table 3. Participant Count	30
Table 4. Factor Loadings	33
Table 5. Construct Statistics	34
Table 6. Latent Variable Correlations	35
Table 7. Matrix of Loadings and Cross-Loadings	36
Table 8. Participant Social Media Activities	39
Table 9. Participant Types of Liked Brand Pages	41
Table 10. Participant Facebook Brand Page Visits	42
Table 11. Hypothesis Testing	44
Table 12. Stepwise Linear Regression for R ² Partitioning	47
Table 13. ANOVAs for Post Popularity Metric Exposure Differences Compared with True Metrics Being Shown	48
Table 14. All Posts, Post Popularity Groups, MGA Community Metric R ² Means	53
Table 15. All Posts, Engagement Groups, MGA R ² Means	54
Table 16. McDonald's Brand Awareness Post, Culture Groups, MGA R ² Means	56
Table 17. McDonald's Brand Awareness Post, Engagement Groups, MGA R ² Means	57
Table 18. McDonald's Posts, Post Popularity Groups, MGA Community Metric R ² Means for Simplified Model	59
Table 19. McDonald's Posts, Post Popularity Groups, MGA Community Metric R ² Means for Brand Equity Antecedents	60
Table 20. Manipulation – Brand Facebook Page Post Selections' Engagement Metrics	86
Table 21. Factor Loadings	88

Table 22. Construct Statistics: No Manipulation	90
Table 23. Construct Statistics: No Post Popularity Metrics Shown.....	90
Table 24. Construct Statistics: Metrics Switched	90
Table 25. Latent Variable Correlations: No Manipulation	91
Table 26. Latent Variable Correlations: No Post Popularity Metrics Shown	91
Table 27. Latent Variable Correlations: Metrics Switched	92
Table 28. Matrix of Loadings and Cross-Loadings: No Manipulation	93
Table 29. Matrix of Loadings and Cross-Loadings: No Post Popularity Metrics Shown	94
Table 30. Matrix of Loadings and Cross-Loadings: Metrics Switched.....	95
Table 31. ANOVAs for Post Popularity Metric Exposure Differences Compared with True Post Popularity Metrics Being Shown	99
Table 32. Standardized Root Mean Square Residuals (SRMR) for Different Models Considered	100

LIST OF FIGURES

Figure 1. Companies Have Some Misperceptions Regarding Why Consumers Interact With Them Via Social Sites	19
Figure 2. Proposed Research Model	23
Figure 3. Cultural Scale Distribution of Participants	37
Figure 4. Personality Scale Distribution of Participants	38
Figure 5. Participant Social Networking Site Activities	40
Figure 6. Participant Facebook Brand Page Likes	41
Figure 7. Participant Facebook Brand Page Visits	43
Figure 8. PLS Model	44
Figure 9. PLS Model with No Post Popularity Metrics Shown	45
Figure 10. PLS Model with Post Popularity Metrics Matching Brand Content.....	45
Figure 11. PLS Model with Post Popularity Metrics Opposite Brand Content	46
Figure 12. PLS Model with Post Popularity as a Moderator.....	49
Figure 13. PLS Model, Brand Awareness McDonald's Post.....	50
Figure 14. PLS Model, Brand Awareness Delta Airlines Post.....	50
Figure 15. All Posts, MGA Post Popularity Metric Path Differences	53
Figure 16. All Posts, Engagement Groups, MGA Path Differences	55
Figure 17. McDonald's Brand Awareness Post, Culture Groups, MGA Path Differences	56
Figure 18. McDonald's Brand Awareness Post, Engagement Groups, MGA Path Differences	57
Figure 19. McDonald's Posts, MGA Post Popularity Metric Path Differences for Simplified Model.....	59
Figure 20. McDonald's Posts, MGA Post Popularity Metric Path Differences for Brand Equity Antecedents.....	61

Figure 21. Funding and Governance Combinations of Online Brand Communities.....	77
Figure 22. Example of Simulated Facebook Environment.....	87
Figure 23. Age Demographics: No Post Popularity Metrics Shown	96
Figure 24. Age Demographics: No Manipulation	96
Figure 25. Age Demographics: Metrics Switched.....	96
Figure 26. Age Demographics: All Manipulation Groups	96
Figure 27. Culture Demographics: No Post Popularity Metrics Shown	97
Figure 28. Culture Demographics: No Manipulation.....	97
Figure 29. Culture Demographics: Metrics Switched.....	97
Figure 30. Culture Demographics: All Manipulation Groups	97
Figure 31. Personality Demographics: No Post Popularity metrics Shown	98
Figure 32. Personality Demographics: No Manipulation.....	98
Figure 33. Personality Demographics: Metrics Switched.....	98
Figure 34. Personality Demographics: All Manipulation Groups	98

CHAPTER 1

INTRODUCTION

On March 21, 2005, the PEW Research Center started collecting social media data (Pew Research Center, 2017). At the time, only five percent of American adults were accessing social networking sites (Pew Research Center, 2017). By November 2016, PEW estimated that seven out of ten adults used social media for varying activities (Pew Research Center, 2017). As of 2016, Facebook held the majority share of social media activity (MarketingCharts). Within in a one month period, it is estimated that 42% of users' social media activity was conducted on Facebook (MarketingCharts).

And the numbers continued to grow. During the first quarter of 2017, Facebook averaged 1.28 billion users each day, and had 1.94 billion unique users monthly (Facebook, 2017). By 2020, it was projected that 2.95 billion people will have access to social networks - and Facebook is assisting with this (eMarketer, 2016). Facebook Lite, a less than one megabyte version of Facebook, was developed to enter markets with slower internet connections, and has already launched in India and the Philippines (Shankar, 2015; Statista, 2017).

Facebook allows for effective use of time while still generating revenue for a company. By dedicating as little as six hours a week towards social media planning and preparation, marketers are able to see increases in site traffic, lead generation, and brand exposure (Kusinitz, 2014). In terms of revenue, in the first quarter of 2017 alone, Facebook earned \$8.03 billion with 97.82% (\$7.86B) of that coming from advertising revenue (Facebook, 2017). Prior studies report on the growing budgets associated with social media marketing (Coursaris et al., 2013; Moorman, 2013). In 2009, the total United States market for virtual goods was over a billion dollars according to Inside Network (Huang, 2011). By 2010, that number had almost doubled. The sales for FarmVille, a Facebook social game, alone in 2009 were \$0.15 billion. From the brand side, in 2011 advertisement spending was \$3.8 billion worldwide (Pan, 2012). In the United States alone, \$840

million was spent on social media advertisements in 2011 (Pan, 2012). In 2012, the Pan article projected advertisement spending in the United States alone would reach \$3.1 billion by the end of 2016. Facebook was able to show more than doubled that in ad spending by the third quarter of 2016, having brought in \$6.8 billion in advertising revenue (LePage, 2016). Globally, social media advertisement spending is expected to increase 26.3% and is likely to exceed \$35 billion in 2017, and this represents only 16% of all digital advertisement spending projected for that year (LePage, 2016).

Facebook highlights their personalized and targeted advertisements by emphasizing their superior reach, relevance, engagement, and social context (Pan, 2012). As a platform that people join faster than they can incorporate ads into the news feed (Pan, 2012), this makes sense. Users are provided a communication platform integrated with indirect product experiences designed to facilitate brand communication in an unobtrusive way (Huang, 2011).

However, few studies attempted to solidify the value proposition of brand social media marketing communications. While Coursaris et al. (2014a) worked toward understanding the value of social media, further research was still needed to solidify these findings for the general population. Hence, this research set out to build on current understandings and address the overarching research question:

RQ: What is the value proposition of social media to brand marketing communications?

While traditional marketing initiatives and their benefits for boosting brand equity and purchase intention had been studied extensively, the virtual relationship between brand and consumer still had yet to receive thorough inquiry. This study attempted to further link social media communications with consumer brand relations, by drawing on literature linking the likelihood of engagement to actual purchase intentions. From a company's standpoint, it must be demonstrated that there is financial benefit to social media marketing in order to justify increased marketing spending in digital domains (Aaker and Jackson, 2001). Agozzino's 2012 study showed that public relations professionals believed that social media marketing was effective for

maintaining brand reputation, awareness, search rankings, and web traffic. However, increasing the number of social media platforms a company used did not help user satisfaction with the consumer-brand relationship (Agozzino, 2012; Aaker and Jackson, 2001). When it was also considered that as of 2012, Facebook held 90% of the market share of active monthly social media usage, this became an interesting perspective (Lunden, 2012). This led to and reinforced the importance of answering the question of whether or not social media could offer a brand monetary value, and questioned what factored into a consumer's brand equity for that particular brand (Aaker and Jackson, 2001). By understanding brand equity contributors, marketers could better manage messaging content to increase brand equity and ultimately increasing consumer purchase intent. This led to the next research question to be addressed in this project:

RQ1: What mechanisms account for the link between brand equity and engaging content?

With one in four people using a social network as of 2013, social media can produce a huge audience for brands (Davis, Piven, and Breazeale, 2014; Hosea, 2011). And by April 2016, that number had increased to 68% of adults using Facebook as their social media platform of choice (PEW Research Center, 2017). Consumers interact with Facebook posts on a daily, sometimes hourly, basis, making social media an ideal platform for brands to foster close relationships with their consumers. Because social media functions in assisting at the input and output ends of the sales funnel – attract and delight stages – it facilitates customer attraction as well as retention and thus community involvement. And because 71% of consumers who have a good interaction with a brand on social media are likely to recommend the brand to others (Hainla, 2017), it is all the more important to understand the community aspect of social media interactions between consumers and brands.

Therefore, traditional offline marketing theories may not be appropriate for studying online word of mouth communications due to the friend role a brand assumes in digital and social media (Brown, Broderick, and Lee, 2007). In particular, as social media provides a platform to

bring like-minded consumers together to exchange ideas and opinions about their favorite brands, the otherwise simple relationship between brand and consumer becomes more multifaceted in this social space. The importance of the community and understanding these facets requires further understanding the following research question:

RQ2: What is the role of community in driving brand equity, purchase intent, and brand social media engagement intent?

Previous empirical research suggested that through increased interactions with a brand on social media, consumers did not merely build a relationship with the company but also with other consumers who are connected with that brand on social media (Wang, Yu, & Wei, 2012; Wirtz, et al., 2013; Zaglia, 2013). Suddenly, it was not just the initial consumer who “likes” something but a sense of community – the interactions with a group of people who shared a similar interest in the brand – that may have resulted in increased positive attitudes toward the brand (Coursaris et al., 2013, 2014a).

Therefore, this study set out to bring insight to four objectives. First, it looks to establish that exposure to high engagement messages did have an effect on consumers in the general public by using an external, volunteer sample pool as opposed to the student sample used to establish the baseline in Coursaris, et al., 2014a. Second, this research looked to explain the overall modeled relationship in Coursaris, et al., 2014a by looking at flow and cognitive absorption as possible contributors toward consumer brand equity. Third, it looked to establish or refute the significance of communication within a community by manipulating the exposure of community input to the brand message. And fourth, using an encapsulated environment, this research looked at the variance between actual social media engagement and self-report of engagement. Such findings were interesting to see how consumers actually interact with the brand versus how they perceived their interactions to be, and whether or not the presence of a social community had any effect on this.

Based on these findings, this dissertation offered the following contributions. First, it empirically tested the relationship between social media-based brand engagement and purchase intention and exposed whether or not investments by companies in social media marketing communications were associated with a potential return on investment. Second, this research tested the Coursaris, et al., 2014a new construct of Engagement Intention on a public sample. This metric aimed to measure an important behavioral outcome in the context of building brand equity and loyalty in the social space. Third, this study drew on actual brand Facebook Page Posts that were classified according to their messaging content and objectively evaluated in terms of their impact (i.e. the evoked level of Likes, Comments, and/or Shares) before exposing the impact they may have on consumers' perceptions and behavioral intentions towards the brand in its natural exposure environment of Facebook (Coursaris, Van Osch, & Balogh, 2013; Coursaris, et al., 2014b). Fourth, this study actively tested brand communities and consumer engagement effects on a live, simulated platform.

The remainder of this paper is organized as follows. First, a review of the theoretical constructs that compose the conceptual foundation of this study is presented. Then, the research design of this study, including the experimental manipulation, participants, instrument validation, as well as data collection and data analyses is discussed. And finally, a discussion of possible findings in relation to industry value added to practice and social media communications design as well as marketing scholarship and future research ideas will be presented.

CHAPTER 2

LITERATURE REVIEW

When interactivity is incorporated into social media posts, control of the content is given to the consumer who in turn is able to pay attention to the brand responsiveness of the content as well as other consumers in that community (Davis, Piven, & Brazeale, 2014). Social media provides the ideal platform for brands to build social experience and symbolic value for the consumer, thereby potentially contributing to an improved brand image in the consumer's mind, thus enhancing the consumer's attitude toward the brand, or brand attitude.

The extent to which a social media message is engaging – i.e., resulting in consumer engagement in the form of Likes, Comments, or Shares – can affect brand image in two ways. First, an engaging message can facilitate the formation of positive brand attitude through the manipulation of textual and/or visual persuasion cues. For instance, a brand can manipulate content themes (e.g., for a messaging typology, see Coursaris, et al., 2013) as well as the richness of a message (e.g. by including a URL, photo, or video) that increase the level of engagement associated with the message. Second, an engaging message can positively affect brand equity by triggering a positive feeling state (Coursaris, et al., 2014b). Therefore, a brand can manipulate the appeal used in a message (transformational as opposed to informational) to elicit stronger emotional experiences and in turn more positive brand attitudes thus enhancing brand equity (Coursaris, et al., 2013).

Consumers are able to provide a persuasive effect over other consumers 22 times stronger than marketers (Goh, Heng, and Lin, 2013). Brands are able to provide a space for consumers to engage in thought provoking conversations and inspire resonant stories within this trusted community of the individual's social network (Briggs, 2010; Gensler, et al., 2013; Davis, Piven, & Brazaeale, 2014). Consumption within this community is based on the consumer's need for problem solving, information search, feedback, and evaluation of series offered in an environment

where real-time accessibility and exchange of these types of information is considered the social norm (Davis, Piven, & Brazeale, 2014; Hennig-Thurau, et al., 2010). By looking at social media posts that have previously attracted high engagement, this study capitalizes on the social interaction of, essentially, strangers within this brand community and gauge if consumers do in fact place a higher value on these posted based on their community support to accompany the initial marketer contributions (Davis, Piven, and Brazeale, 2014; Goh, Heng, and Lin, 2013). From here, a relationship with brand equity should first be established.

BRAND EQUITY

The incremental utility or value added by a brand name which contributes to the company's long-term profitability is brand equity (Chen & Chang, 2008). Brand equity can therefore be discussed in relation to the investor, the manufacturer, the retailer, or the consumer, and one must consider the perspective to be used for analysis (Cobb-Walgren, Ruble, & Donthu, 1995). This study looks at brand equity from the point of view of the consumer.

Consumer brand equity can be further divided into two parts: brand image and brand attitude, and any measurement attempts at brand equity must recognize these multidimensional aspects for proper consideration of all factors involved (Faircloth, Capella, and Alford, 2001; Chang & Liu, 2009). Drawn from the connections a consumer makes, brand image is defined and evaluated based on a cluster of attributes and associations to the brand name based on consumer perceptions of the brand's tangible and intangible associations (Chang & Liu, 2009; Faircloth, Capella, and Alford, 2001). Built by anything that allows consumers to experience the brand, brand awareness can work as a driver for brand image by influencing consumer choice among the purchase decisions set, even if there is no other knowledge or associations for the brand (Hutter, et al., 2013). Yet few marketing studies have examined the connections between positive brand image and brand equity as they drive purchase intention, much less in the social media realm, thus increasing the value of this study (Faircloth, Capella, & Alford, 2001).

One of the most widely examined constructs in consumer behavior and an important concept in marketing research for the past twenty years, brand attitude is defined as an individual's internal evaluation of an object such as a branded product (Faircloth, Capella, and Alford, 2001; Mitchell and Olson, 1981). Brand attitude is a function of salient beliefs, those from memory and considered by the consumer in a given situation (Mitchell and Olson, 1981). By better understanding causal dynamics of attitude formation and image interpretation, we can aid marketing researchers to understand the attitudinal and impression impact while assisting managers in developing more effective marketing strategies (Mitchelle & Olson, 1981).

However, effects on brand equity can be industry specific. A 2012 study by Bruhn, Schoenmueller, & Schafer found that brand created social media communications had a greater indirect effect on consumer brand attitude and purchase intention than user-generated social media communications or traditional media communications. Looking at brand image, the study found that brand generated content has a greater influence on telecommunication and pharmaceutical industry communications, while user-generated social media communications have a greater influence in the tourist industry, specifically on the areas of brand awareness and brand image (Bruhn, Schoenmueller, & Schafer, 2012). They also saw significant differences in effect sizes for the varying industries, and indicated that social media campaign implementation should be part of the marketing mix. However, consideration of audience, source, and credibility direction should be carefully considered when putting together content messages in order to enhance consumer-based brand equity (Bruhn, Schoenmueller, & Schafer, 2012).

Brand equity provides the insulation needed to protect brands from competitors (Cobb-Walgren, Ruble, & Donthu, 1995). High equity has been associated with consumer satisfaction, brand preference, premium price, and high profit values (Chang & Liu, 2009). Definitions have ranged from Keller's 1993 definition that brand equity is the effect of brand knowledge on consumer response to brand marketing to simply the customer's perceived value (Chen & Chang, 2008). This study uses Chang & Liu's 2009 definition of brand equity as the brand name's added

attractiveness to the consumer for the product or service (see Table 1). Therefore the following hypothesis is established to provide additional insights toward linking consumer brand equity and social media activities:

H1: The higher the elicited engagement level of a brand's post, the more positive the consumer brand equity.

However, while previous studies have shown that there is a relationship between consumer engagement and consumer brand equity (Coursaris, et al., 2014a; Bruhn, Schoenmueller, & Schafer, 2012), research has not been done to look at what factors into brand equity in a virtual environment. Understanding of these predecessors would allow a brand to perhaps influence consumer acceptance of the brand even earlier in the buying process thus building higher brand equity and leading to higher purchase intentions later on. By considering the cognitive absorption and flow dimensions, further understanding can be gained of what thoughts are being processed to make it into a consumer's memory and, in turn, creating consumer brand attitude and brand image to form brand equity.

COGNITIVE ABSORPTION

Cognitive absorption is considered in this study due to its unification of control, curiosity, and focused attention attributes which drive salient beliefs, a key representation of brand attitude, which is a driver of brand equity (Agarwal & Karahanna, 2000). Cognitive absorption can also be described as the culmination of three areas of research: the cognitive absorption, flow, and cognitive engagement dimensions (Agarwal & Karahanna, 2000). This study defines cognitive absorption as the extent in which a user is absorbed when using the system (see Table 1; Burton-Jones & Straub, 2006). That is to say, how immersed a person is while using technology.

Rooted in psychology, cognitive absorption is defined by a person's deep involvement/attention in a task, specifically, a job involving a computer (Agarwal & Karahanna, 2000;

Chandra, Srivastava, & Theng, 2012; Elmezni & Gharbi, 2010). It is defined by the individual losing the concept of time and becoming so intensely involved in an activity that nothing else matters (Elmezni & Gharbi, 2010). The experience is characterized by being so enjoyable that people will continue to do the activity at hand, no matter the cost, for the sake of doing it (Elmezni & Gharbi, 2010). At this point, the person is able to subconsciously process task objectives, while still experiencing enjoyment in the activity (Elmenzni & Gharbi, 2010).

A psychological state, cognitive absorption represents an experience in which the participant is immersed in a task of pure enjoyment, specifically with technology/software (Wakefield & Whitten, 2006; Leger, et al., 2014; Elmezni & Gharbi, 2010; Chandra, Srivastava, & Theng, 2012). There are two ways to look at this construct. The first looks at the factors that influence the construct and organizes them into three dimensions of cognitive absorption, flow, and cognitive engagement (Agarwal & Karahanna, 2000; Leger, et al., 2014). While cognitive absorption looks at the deep attention being given to something, the theory of flow is meant to explain how involved people get in an activity that nothing else matters (Agarwal & Karahanna, 2000; Chandra, Srivastava, & Theng, 2012). Accompanying these, cognitive engagement considers the playfulness and inherent interest someone has in the activity at hand (Chandra, Srivastava, & Theng, 2012). Chandra, Srivastava, & Theng (2012) acknowledge that these are very similar concepts, but together work as a triangulation of three streams of research used to describe the behavioral state of someone being cognitively absorbed in an activity (Chandra, Srivastava, & Theng, 2012).

The second way to look at cognitive absorption is that it is comprised of five dimensions: temporal dissociation, focused immersion, heightened enjoyment, control, and curiosity (Agarwal & Karahanna, 2000; Elmezni & Gharbi, 2010). Temporal dissociation is the inability for the participant to register the passage of time while in focused immersion in which all other stimuli are ignored (Agarwal & Karahanna, 2000; Elmezni & Gharbi, 2010). Heightened enjoyment is what captures all of the pleasure aspects of the activity. The participant's control allows them to

focus on the task at hand while curiosity is what allows the interaction to tap into their sensory and cognitive functions (Agarwal & Karahanna, 2000; Elmezni & Gharbi, 2010).

It makes sense that these two structures exist, in that they possibly overlap each other with similar concepts. To parallel the first structure of looking at cognitive absorption as a construct, one could consider the similarities of the dimension of cognitive absorption to align with the control and part of the curiosity aspect of the second structure, while the dimension of flow could align with the temporal dissociation and focused immersion aspects, and cognitive engagement could align with heightened enjoyment and part of the curiosity dimensions (Agarwal & Karahanna, 2000). While Agarwal & Karahanna (2000) utilize both models, it is not clear why two different structures have been proposed and one not selected as the accepted practice for analyzing cognitive absorption states in technology usage. Chandra, Srivastava, & Theng (2012) utilize the smaller model of three dimensions as a prime second-order construct being evaluated as a single collapsed indicator, a reflected construct, while acknowledging this option can cause measurement and validity problems. They simply indicate that this is common practice to sub-construct larger dimensions; perhaps for initial investigation. Therefore, for the purposes of this research, the first model, considering three dimensions that make up the cognitive absorption construct will be further analyzed for an overarching analysis, to investigate if cognitive absorption and flow, as dimensions, possibly impact brand equity in a consumer-brand purchase and interaction involvement model.

Cognitive Absorption is an interesting construct to consider when looking at behavioral intention. Agarwal & Karahanna's 2000 study proposed a theoretical model in which cognitive absorption was an antecedent to perceived usefulness and perceived ease-of-use. In turn, these dimensions could lead to intent of a specified behavior. By intrinsically motivating consumers with increased cognitive absorption, cognitive burden is lowered, thus increasing the perceived ease of use and usefulness of working with a technology (Shang, Chen, & Shen, 2005; Agarwal & Karahanna, 2000). Agarwal & Karahanna (2000) argue that that increased perceived usefulness

shows significant influence on utilizing a technology system because user performance is enhanced by the increase in job/activity performance due to the decrease in cognitive burden to perform required job functions. The focused immersion aspect of cognitive absorption also works to facilitate dedication to a task thereby reducing the cognitive burden associated with performing the task (Argarwal & Karahanna, 2000; Burton-Jones & Straub, 2006). Decreased cognitive burden and increased cognitive absorption are therefore important factors for a user to form beliefs and use intentions (Wakefield & Whitten, 2006).

While there has been research linking intrinsic motivations and cognitive absorption, the application of these motivations to social media is relatively new with the new medium (Leger, et al., 2014). Lin's 2009 study promotes user friendly design in virtual worlds as a way to promote cognitive absorption and facilitate usage intentions through increased pleasure with the experience. This suggests that Facebook's design is created to facilitate further use of the community and their media environment. Just as it is important for cognitive absorption to be an intrinsic motivator for user acceptance of a virtual environment, it is also important for the community provider to try and keep members online as long as possible (Lin, 2009).

By building longevity and loyalty with a technology, companies are able to keep users engaged with the brand longer and potentially increase the consumer's trust and loyalty in the brand, ultimately increasing brand equity (Chandra, Srivastava, & Theng, 2012). Cognitive absorption becomes a relevant dimension both to increase the longevity and time spent by users in virtual worlds as well as building trust with the promoted/hosting brand of the environment, therefore decreasing any perceived risks associated with virtual worlds and adaptive use intentions (Chandra, Srivastava, & Theng, 2012; Kang & Hur, 2012). With the increasing popularity of relationship based marketing in social platforms, trust becomes of the utmost importance. Multiple studies – Laroche, Habibi, & Richard, 2013; Manara & Roquilly, 2011; Sashi, 2012; Kang & Hur, 2012; to name a few – have established trust as an important predecessor to relationship marketing and increasing brand equity. Therefore, it makes sense to consider the

impact of a participant's cognitive absorption with a social platform (Kang & Hur, 2012), to see how such deep involvement impacts a consumer's brand equity and therefore devotion to the brand. Saade & Bahli's 2005 study even goes so far as to suggest that such brand equity can even be linked to other return on investment benefits such as reduced marketing costs, trade leverage, price premiums, and increased market share. And Leger, et al.'s 2014 study found that participants with higher cognitive absorption have better training outcomes. This further strengthens the reasoning to investigate cognitive absorption as a factor of brand equity and ultimately, social media brand engagement.

COGNITIVE FLOW

An important element to understanding human-technology interactions (Agarwal & Karahanna, 2000), cognitive processing flow represents an affective state when individuals are so involved with computer usage activities thus resulting in playful and exploratory behavior with their usage intentions (Jiang & Benbasat, 2004). First proposed in 1975, Csikszentmihalyi originally intended for flow to represent a psychological state of immersion in an activity or behavior (Cheng, Chieng, M.H., & Chieng, W.H., 2014). According to Gao & Bai (2014), flow is when one's skills and challenges overpower the baseline experience that a user will experience a state of flow. For this study, flow is defined as the perceived sense of intrinsic enjoyment form interacting with the virtual environment (see Table 1; Animesh, et al., 2011).

Similar to cognitive absorption, there is dispute over the number of dimensions that feed into flow as its own construct. Two dimensions seem to be constant across several studies: intense concentration and a sense of control (Agarwal & Karahanna, 2000; Leger, et al., 2014; Csikszentmihalyi, 2014). Intense concentration refers to when an individual pays such strong attention to something that their focus is on a very narrow stimulus represented by the technology (Trevino & Webster, 1993; Agarwal & Karahanna, 2000). Sense of control refers to the individual's

perception that they control their interaction with the technology (Agarwal & Karahanna, 2000). Trevino & Webster's 1993 study utilizes curiosity and intrinsic interest as two additional dimensions to define the flow construct. However, in another study by the same group of researchers, they were unable to distinguish between the curiosity and intrinsic interest dimensions and therefore recommended combining the two for the third dimension leading to the construct of flow (Webster, et al., 1993). The curiosity dimension is meant to indicate that during the flow experience, there is an increased arousal of sensory and cognitive inquisitiveness, while intrinsic interest indicates an individual's interaction with technology extends beyond pleasure and enjoyable in itself (Trevino & Webster, 1993; Agarwal & Karahanna, 2000). Essentially, it makes sense that they might have trouble distinguishing between the two groups, when curiosity can work hand in hand with pure enjoyment thus making them concepts that essentially fuel each other. Finally, Csikszentmihalyi in 1990 proposed in addition to intense concentration and a sense of being control, that the dimensions of loss of self-consciousness and transformation of time be included as dimensions that build to the flow construct. Jiang & Benbasat (2004) probably categorize it the best when they kept the control and focus/concentration dimensions, but considered the other disputed areas as cognitive enjoyment.

Hoffman and Novak (1996) state that flow is accompanied by a loss of self-consciousness and is therefore self-reinforcing. Additionally, when the level of difficulty of a task matches a individual's skills, the individual will intrinsically motivated to dedicate attention to a task and while entering a state of cognitive flow in which they experience a relaxed state of calm and control while completing the task (Leger, et al., 2014). In their 2011 study, Animesh, Yang & Oh note that too many avatars in a virtual world increases the possibility of sensory overload which forces participants to engage in undesired actions, thus weakening involvement and engagement, and therefore flow, in the virtual world. However, they also argue that if a community has a stable population, then perhaps the consumer will enjoy their time and participation in the environment (Animesh, Yang & Oh, 2011; Gao & Bai, 2014). Individuals who have experienced flow reported a

more positive experience, and a higher likelihood of satisfaction and loyalty (Animesh, Yang & Oh, 2011). Finally, they showed that individuals who experience flow have a significant impact on purchase intention, while Cheng, Chieng, M.H. & Chieng, W.H.'s 2014 study showed that flow is positively related to loyalty. So perhaps there is a relationship between flow and loyalty through the brand equity area thus leading to the idea that consumers who frequently visit a brand's page have greater loyalty to the brand and therefore higher brand equity than compared to consumers who do not frequently visit brand pages (Cheng, Chieng, M.H. & Chieng, W.H., 2014).

Social interactions are a basic need of humans (Animesh, Yang, & Oh, 2011). Multiple studies have shown that increased social interactions correlates to experiences of flow (Kim, et al., 2005; Animesh, Yang, & Oh, 2011; Huang, 2014). As a basic human need, social interactions have been shown create enjoyable experience, which technology only enhances and facilitates the enjoyment (Park, et al., 2012; Animesh, Yang, & Oh, 2011). A sense of psychological closeness created by social interactions has been shown to lead to flow experiences, and therefore increasing the longevity of engagement with social platforms and virtual worlds (Animesh, Yang, & Oh, 2011; Drengner, Gaus, & Jahn, 2008). Drenger, Gaus, & Jahn's 2008 study recommends managers provide an environment and the opportunities for facilitating communication and interaction as the flow created will assist in the social interactions and a positive impact on brand image can even be expected.

Cognitive flow is an important component of understanding technology interactions as and therefore an antecedent to understanding attitudes towards technologies and, in the digital age, brands (Argarwal & Karahanna, 2000; Drenger, Gaus, & Jahn, 2008). The immersion created by cognitive flow allows for positive experiences which influence learning and attitudes (Na, Eschenbrenner, Y DeWester, 2014). In their 2014 study, Na, Eschenbrenner, & DeWester found that telepresence positively influences both enjoyment and brand equity. Nah, et al. (2010) also found that the flow experience has a direct influence on perceptions of brand equity in a branding virtual world site. This in turn increased participant perceptions of the brand, and increased the

likelihood that they would use the brand associated with the site (Nah, et al., 2010). This is interesting to consider when looking at the proposed theoretical model, because while Huang's 2014 study found that virtual businesses can expect to see increased purchase behaviors when cognitive involvement and flow experiences increase and enhanced the better the social features are, Nah et al.'s 2010 study found that an increase in flow, while it does show an increase in brand equity, it does not show an increase in purchase intention. These two contradictory positions warrant further study which is provided in the proposed research model.

PURCHASE INTENT

Abundant evidence exists in the consumer research literature that the more positive the brand attitude, the higher the consumers' purchase intention (Chang & Liu, 2009; Park, et al., 2010). Purchase intention here refers to the behavioral inclination of consumers to plan to purchase a certain product or service in the future (See Table 1; Dodds et al., 1991; Schiffman and Kanuk, 2007). Positive purchase intention, in turn, is viewed as an important antecedent to actual purchase action (Fishbein and Ajzen, 1975; Schiffman and Kanuk, 2007).

Attitudes examine a person's evaluations while intentions look at a person's motivations to carry out an effort or a behavior, thus making sense that intentions and attitudes are two distinct measures (Irshad, 2012). Fishbein and Ajzen's Theory of Reasoned Action (1975) uses attitudes and personal behavior norms to determine intentions. Because intention has wider implications and often a positive impact on an individual's actions (Hung, et al., 2011), this study focuses on purchase intentions and therefore a customer's willingness to buy a brand (Irshad, 2012).

However, asking purchase intent questions has been shown to prime purchase processing decisions in favorable ways toward the brand. In a 1993 study by Morwitz, Johnson, and Schmittlein, purchasing rates increased by 84% for armature personal computer shoppers just by measuring their purchase intent. A 1996 study by Fitsimons and Morwitz found that simply asking

intent questions caused purchase rates to increase for brands that already had high market shares. Consumers in the late states of the decision-making process are more likely to have already formed attitudes and purchase intention thus prompting retrieval of preexisting cognitions toward the brand when asked about purchase intent (Fitzsimons and Morwitz, 1993). To combat this, Dodds, Monroe, & Grewal's 1991 study shows that as brand name or store name information is provided to a participant, the negative effect on price perception is decreased. Thus a brand with increasing brand equity has a higher ability to control the perception of the brand and possibly moderate any purchase intention decrease caused by question priming.

Positive, or high, brand equity is a precursor for customer activities such as recommending the brand to others as well as making repeat purchases (Chung, Lee, and Heath, 2013). This is consistent with brand equity being an asset to the business and thus leading to higher future-term financial performances (Chang & Liu, 2009; Aaker and Jacobson, 2001; Faircloth, Capella, and Alford, 2001). Therefore, the following hypothesis is proposed:

H2: The more positive the consumer brand equity, the greater the consumer's brand purchase intention.

However, another factor in the proposed model and in today's social shopping society is the online social influence and how this affects purchase intentions. Huang's 2011 study showed that when participants use a social networking site, their cognitive involvement increases as they are exposed to site features such as the timeline, updates, and other activities. This increased involvement by the online platform could affect the response of participants to adopt products that their network has also adopted (Hung, et al., 2011; Huang, 2011). Huang's 2011 study also showed that online involvement has a moderating effect on purchase intent. In fact, their study found that cognitive involvement and flow experiences are improved and even enhanced when participants were exposed to high quality social and interactive online features (Hung, et al., 2011). So now the question becomes how purchase intent relates to social media engagement intention.

SOCIAL MEDIA ENGAGEMENT INTENTION

Consumers do not forward or participate in content unless there is something for them to build on their own profile or strengthen their personal brand image (Wasko and Faraj, 2005; Hosea, 2011). In addition to the link between brand attitude and purchase intention, this research proposes that brand equity will positively affect consumers' intentions to engage with a brand's social touch points. Such engagement may take the form of Liking, Commenting, or Sharing a brand's profile (e.g., Facebook Page). If a brand creates engaging content resulting in positive impressions about and attitudes toward the brand, it is anticipated that consumers will be more likely to continue visiting the brands' social media platforms and continue to interact with posts generated by the brand. For the purposes of this study, the variable of Brand Social Media Engagement Intent is defined as the degree to which a consumer considers engaging with a brand's social media touch point (see Table 1; Coursaris, et al., 2014a).

As Figure 1 below demonstrates, sometimes there are disconnects between consumer engagement needs and what the brand/company thinks the consumer needs (Baird & Parasnis, 2011). When asked why they visit social media sites, only 23% of those surveyed indicated visiting social platforms was to interact with a brand, versus 70% choosing to connect with their personal network (Baird & Parasnis, 2011). This is interesting when it is considered that before Web 2.0 existed, the networking, social component of now being specified as so important to social network users, was not (Gummerus, et al., 2013). Prior to the dawn of Web 2.0, consumers were found to primarily experience trust and time saving benefits from their online interactions (Gummerus, et al., 2013). Perhaps this helps to explain some of the disconnect between the consumer need to visit brands on online and brand understanding of these consumer needs. The same study by Baird & Parasnis (2011) found that 33% of their participants did not think interacting with a business through social media would make them more loyal to the business, and only 49% of participants believed engaging with the brand would lead to future purchases. As a result, it is advised that before even considering entering a social media space, a firm should

make sure that it has a strong grasp on its branding and that it has the capability to deliver branding and meet consumer needs through all social touchpoints (Gensler, et al., 2013; Gummerus, et al., 2013).

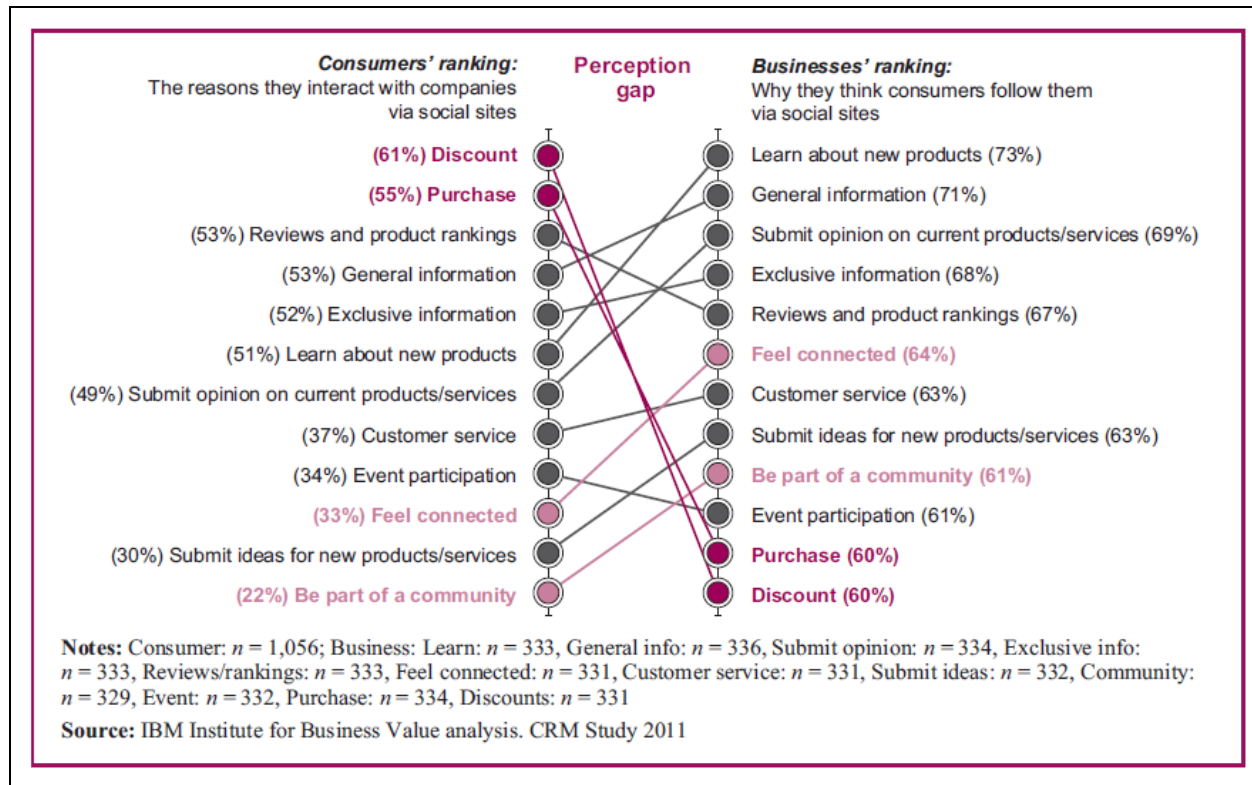


Figure 1. Companies Have Some Misperceptions Regarding Why Consumers Interact With Them Via Social Sites

Building engagement intention requires a shift from marketer led brand messaging to include the consumer in the messaging creation strategy and establishing a co-creation of meaning (Davis, Piven, and Breazeale, 2014; Hollebeek, Glynn, and Brodie, 2014). Using the symbolic aspect of brands and communities built by social media, consumers are able to build their social identities and increase their self-confidence from other consumer “Likes” and interactions with their posts (Davis, Piven, and Breazeale, 2014). Such interaction increases brand tangibility and could result in repeat consumption of the brand as well as interaction with the social media community established by the brand (Davis, Piven, and Breazeale, 2014; Hollebeek, Glynn, and Brodie, 2014). Still, understanding of both approaches to measurement and

assessments is still lacking as to whether or not social media message consumption actually increases purchase intention and/or further social media-based engagement intention. Thus, the following hypothesis is proposed:

H3: The more positive the brand equity, the greater the brand social media engagement intention.

POPULARITY & COMMUNITY ENGAGEMENT

Brand communities are not a new concept. Online brand communities, on the other hand, are working through the initial stages of development and understanding.

As mentioned earlier, brands take on more of a peer role in brand communities (Wang, Yu, & Wei, 2012). Online brand communities are composed of people who have some level of loyalty to the entity that has organized the page (Laroche, Habibi & Richard, 2013; Erdogmus & Cicek, 2012). Because of this new and unique relationship among strangers uniting for a common interest, consumers and brands are able to create a dialog back and forth. Suddenly we're not just looking at e-word of mouth, but brands actively facilitating an electronic exchange in a controlled marketing environment of the social media world (Erdogmus & Cicek, 2012; Alhabash, et al., 2013). Therefore, it makes sense that perhaps we could borrow from peer theories such as consumer socialization theory and that community relations would have an effect on consumer attitudes towards the brand and the community.

On one side it can be argued that consumers who follow a brand on social media have increased loyalty to that brand (Laroche, Habibi & Richard, 2013; Wirtz, et al., 2013). On the other, consumers following the brand already have loyalty to that brand, and therefore have no need to further interact on their social platform (Baird & Parasnis, 2011). An antecedent of loyalty is trust (Laroche, Habibi & Richard, 2013). In fact, the 2013 study by Laroche, Habibi & Richard shows that brand trust is a mediator in assisting brand communities, which translates into brand loyalty. Brand loyalty is an antecedent to brand image, which is an antecedent to brand equity

(Bondesson, 2012; Chang & Liu, 2009). Because current customers can add so much value to a purchase decision discussion (Sashi, 2012), it therefore makes sense to try and connect the brand equity and engagement with community effects.

Social media facilitates consumer socialization theory by providing the communication tools to make the socialization and learning process easy for users (Wang, Yu & Wei, 2012). The consumer socialization theory is the process in which consumers learn skills and behaviors by communicating with others, which in turn helps them function as a consumer (Wang, Yu, & Wei, 2012). While conventional socialization occurs among people who generally know one another, online social media enables the learning pool of educators for socialization purposes to open up to include strangers who also follow a brand (Wang, Yu & Wei, 2012). This idea of strangers facilitating consumer socialization in an online environment needs and deserves further study.

Consumers have become increasingly more active participants in interactive feedback loops which provide mostly immediate communication response with other members (Brodie, et al, 2013). For this study, brand communities are defined as a specialized, non-geographically bound community based people created around brand admirers. These brand communities foster social relations (Laroche, et al., 2012), as indicated by the number of Likes, Comments, and Shares a post receives, which for the purposes of this study, shall be referred to as Post Popularity from here on out (see Table 1). Consumers interact in brand communities when they can identify themselves with the brand and believe that the value of contributing outweighs any perceived risks of contributing (Brodie, et al., 2013; Laroche, et al., 2012). Such interaction builds the popularity of the post within the post exposure to the brand follower's as determined by EdgeRank, the algorithm used by Facebook to determine what should appear in a person's news feed. Even Facebook, itself, is now experimenting with showing users the number of views a post has next to its engagement levels – in addition to showing the active interaction engagement with the post, so as to show how popular the video is among the followers in the group. Brodie, et al. (2013) also showed that consumer engagement increases when consumers perceive that the

brand's governing authority and value added to the conversation exceeds the level of effort put forward by the consumer. Laroche, et al (2012) proposes that brand community practices may not have evolved enough to obtain conclusive results of their effects. This adds to the need for more research in the area, and thus the following hypotheses were proposed:

H4a: The higher the post popularity, the greater the consumer brand equity.

H4b: The higher the post popularity, the greater the consumer purchase intent.

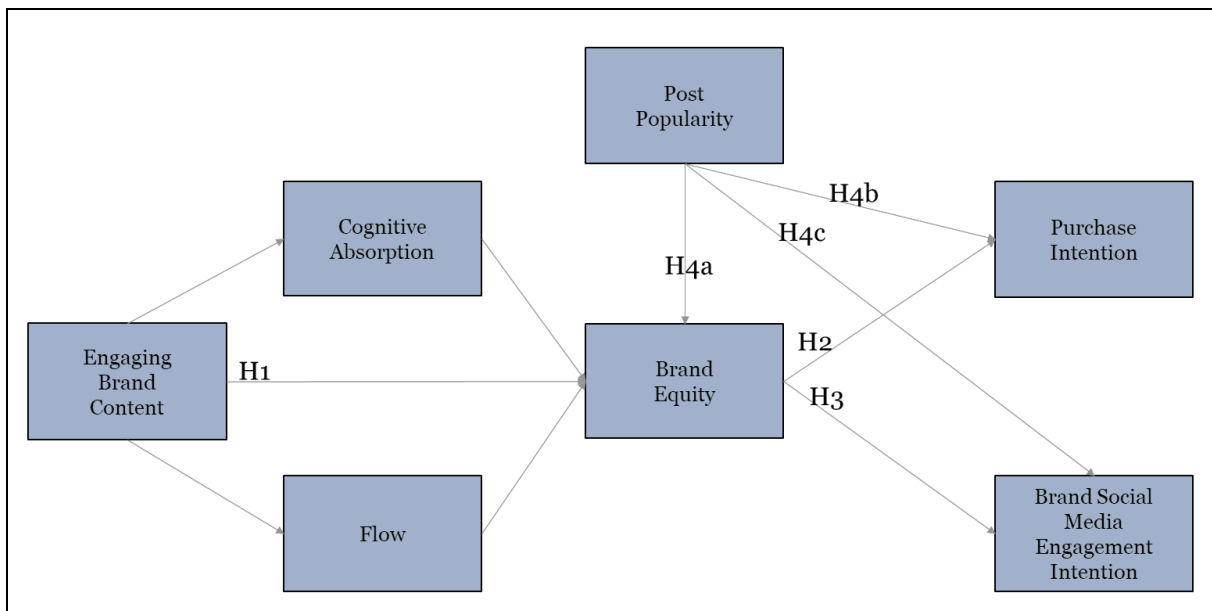
H4c: The higher the post popularity, the greater the consumer brand social media engagement intention.

Table 1. Constructs and Definitions

Constructs	Definition	Reference
Cognitive Absorption	The extent to which a user is absorbed when using the system.	Burton-Jones & Straub, 2006
Flow	The perceived sense of intrinsic enjoyment obtained from interacting with the virtual environment.	Animesh, et al., 2011
Brand Equity	The added attractiveness to the customer that a brand name confers on a product or service.	Chang & Liu, 2009
Post Popularity	The amount of Likes, Comments, Shares a post receives on Facebook	Documented via Facebook
Purchase Intention	The degree to which a consumer considers purchasing a product.	Dodds et al., 1991
Brand Social Media Engagement Intention	The degree to which a consumer considers engaging with a brand's social media touch point.	Defined and developed for this study

PROPOSED THEORETICAL MODEL

Based on the above discussion of the six constructs comprising this study, Figure 2 summarizes the proposed research model that will be tested.

**Figure 2. Proposed Research Model**

CHAPTER 3

METHODOLOGY

MANIPULATION

To explore the effect of consumer engagement with brand Facebook Page posts on Brand Equity, Purchase Intention, and intentions to engage with a brand's social media presence, actual posts were selected from two brands, Delta Airlines and McDonald's. These two brands were used to allow for the most diverse category selection possible. These brands were chosen for three reasons. First, they are both among the top 110 Fortune companies ranked by gross revenue, enjoy strong Brand Equity, and maintain a considerable social media presence. Second, these brands represent opposite levels of purchase-decision involvement, as follows: low involvement as found for McDonald's and other fast-moving consumer goods (FMCGs), and, high purchase-decision involvement found in Delta Airlines and other expensive and greater risk-bearing goods and services. Third, the purchase cycle was one additional consideration in the case selection process resulting in a selection of brands representing both consumables and durables (Sullivan and Sheffrin, 2003). Purchase cycle – consumables versus durables – is a key factor in brand messaging when considering purchase-decision frequency and the need for tailored messaging.

Selection of actual Facebook Page posts by the above two brands was then performed by referring to the messaging typology proposed by Coursaris et al. (2013) and controlling for the content of posts. Gensler, et al.'s 2013 study emphasizes the importance of order selection as the sequence of exposure can affect consumer evaluation of brands. Therefore, three content categories—Brand Awareness, (Product) Promotional, and Engagement—were identified as being most closely aligned with the four stages of the Buying Behavior Model: Consider, Search, Choose, and Buy (Coursaris, et al., 2013; Wind, 1978); with Promotional corresponding to both Search and Choose, and therefore used, in that sequence, for this study. For each of these categories, two brand Facebook Page posts were selected that were significantly different in the level of elicited

engagement, so as to serve as the manipulation in either the low or high engagement condition. For an overview of the brand's post content and corresponding engagement, please see Appendix A.

To calculate the level of elicited engagement, the raw number of Likes, Comments, and Shares associated with each post was summed to determine an absolute engagement score for an individual brand Facebook Page post. Hence, six actual brand posts were selected from the official Facebook Page of Delta Airlines and of McDonald's ($n=12$), three that elicited a low level of engagement from each page and three that elicited a high level of engagement from each page. These twelve posts were deliberately selected not only on the basis of their engagement scores, but also to ensure internal consistency with respect to all characteristics of the post, namely the post's content category and subcategory as well as media type (e.g. does the post include text only or a URL, photo, or embedded video) between the two engagement groups.

To illustrate, if a highly engaging Brand Awareness (subcategory: Operations) Facebook Page post from Delta Airlines that included a photo was selected, another post with the exact same message characteristics (content = Brand Awareness, Operations; richness = photo) was selected that displayed a low engagement score. As a manipulation check, one-tailed t-test analysis of the 12 brand posts (6 in the low engagement condition vs. 6 in the high engagement condition) was performed to determine if the brand Facebook Page posts in the two conditions were indeed significantly different in the extent to which they generated engagement with the post in the form of Likes, Comments, and/or Shares. The result ($p=0.038$) offers support for the significantly different levels of engagement evoked between the low and high engagement conditions.

Participants visiting the survey URL were randomly assigned to one of six surveys to take. Two of the surveys featured the six posts with no engagement metrics shown. Two of the surveys showed six posts with the original engagement metrics as collected in Coursaris, et al. (2013) and shown in Appendix A. Finally, two of the surveys showed the six posts with the engagement metrics switch; for example, an established high engagement post would show low engagement

metrics, and vice versa. These last two surveys were established to investigate whether or not the message content is indeed what causes community engagement statistics to begin with.

ENVIRONMENT

Posts were displayed in a simulated Facebook environment in an attempt to preserve ecological validity with how they would normally see these posts (see example in Appendix B). Participants were given a notice that this environment was in no way connected to their actual Facebook profile, as well as given the option to actually Like, Comment, or Share the posts. Upon clicking the Continue Survey button, participants were then presented with Brand Equity, Purchase Intention, and Engagement Intention questions. Engagement Intention questions were asked in follow-up as a self-reported measure to stand as backup to the simulated environment.

ENGAGEMENT METRICS PRETEST & MANIPULATION

The concern was raised that participants might not have any context as to whether or not engagement metrics were actually high or low. For example, if a post is showing with 9,000 Likes, is this actually a low engagement post? When considering the matching, established high engagement post has 20,000 Likes (Coursaris, et al., 2013), it does; but perhaps to a participant that does not know the full range of the brand's normal engagement scores, 9,000 might look like a very high number. In the event that consumers do not perceive the engagement metrics to be in their corresponding high or low categories, altered metrics should be displayed during the study to enhance the test of community effects by ensuring participants know they are looking at a large population engagement.

Therefore, a pretest was run to check engagement levels before displaying them in the official survey. Fourteen upper-division undergraduates were asked to mark ten engagement metrics as high or low and to provide estimates on what they thought was a high or low

engagement metrics for personal and company brand pages. While all but one student indicated they thought there was a difference between personal and company Facebook accounts for high and low acceptable levels of engagement, the only two metrics marked correctly were the two that had been inflated to look high, with five digits, and to look low, with less than three digits. Furthermore, participants indicated that an acceptable amount of high engagement would be in the six to seven digits for a company brand Facebook post. Therefore, it was decided that the engagement metrics would be adapted for this study. This also served as a way to normalize the data between industries since both McDonald's and Delta posts use two different distribution scales for low and high engagement.

For the purposes of this study, participants viewed inflated or deflated metrics depending on the survey manipulation they were assigned to. For the surveys showing established high engagement posts with high engagement metrics, the number of actual likes was multiplied by a factor of ten, and Random.org was used to create a new ones place digit for the metric. For example, the McDonald's Brand Awareness high engagement post had an actual metric of 7,904 Likes. This was displayed in the survey as 79,048, with the eight being supplied by Random.org. Because the pretest participants correctly marked five digit engagement metrics as high, to preserve some of the original integrity of the metrics, only five digits were used in the manipulation. All of the Comments and Shares metrics were three digits, and therefore were kept the same. Therefore, the same McDonald's Brand Awareness post which had 616 Comments and 267 Shares was displayed in this study's survey as such.

For established low engagement posts, the first two digits from the number of Likes were used for the deflated Like metric. Comments and Shares used only the first digit of the actual engagement metric. If no metric existed, the post was displayed with a zero. For example, the McDonald's Brand Awareness post with established low engagement had 2,108 Likes, 181 Comments, and 41 Shares. This post displayed in the survey environment as having 21 Likes, 1 Comment, and 4 Shares.

PARTICIPANTS

One thousand, two hundred participants were recruited from Amazon's Mechanical Turk to participate in this study. This was to cover at least 100 participants for each of the twelve exposure types – two engagement tracks (high vs low), for two brands (McDonalds and Delta), for three content categories (Brand Awareness, Promotional, and Engagement), resulting in twelve posts/exposures, or six exposures per participant – while allowing for some dropout. The only selection criteria specified was that people be in the United States, and be at least 18 years old, and have a Facebook account. The survey thanked people for their time but dismissed them if they did not have a Facebook account. Originally, 1,361 people were able to start the survey. Participant head count after the initial selection criteria was applied was 1,185. Any concerns for using Amazon Mechanical Turk works for this study should be minimized. Per Paolacci, Chandler, & Ipeirotis' 2010 study and analysis of different sample methods, using Mechanical Turk workers can actually be less risky than tradition research collection methods (see Table 2).

Table 2. Tradeoffs of Different Recruiting Methods

Tradeoff	Laboratory	Traditional web study	Web study with purpose built website	Mechanical Turk
Susceptibility to coverage error	High	Moderate	Moderate	Low
Heterogeneity of samples across labs	Moderate	High	High	Low
Non-response error	Low	High	High	Moderate
Subject Motivation	Moderate/High	Low	Low	Low
Risk of multiple responses by one person	None	Moderate	Moderate	Low
Risk of contaminated subject pool	Moderate	High	Moderate	Low
Risk of dishonest responses	Moderate	Low	Low	Low
Risk of experimenter effects	Low	None	None	None

(Paolacci, Chandler, & Ipeirotis, 2010)

In general, Amazon Mechanical Turk workers are slightly younger than the primary internet user demographic, slightly more educated, slightly lower income, and more knowledgeable about internet technologies and algorithms (Paolacci, Chandler, & Ipeirotis, 2010; Rader & Gray, 2015). A major advantage to using these workers though is the ability to decrease the risk of validity issues via experimenter cross talk and reactance since the participants complete experiments without interacting with other participants and sometimes do not even know that they are in an experiment to begin with (Paolacci, Chandler, & Ipeirotis, 2010).

Several participants indicated at the end of the survey in the demographic questions that they were not in the United States, therefore they were removed from the final response pool.

Similarly, participants who did not finish the survey were also removed. A potential issue with using Amazon Mechanical Turk workers is how feasible it is for them to not complete the Human Interaction Task (HIT) that they signed up for, thus naturally causing higher attrition rates than some studies (Rand, 2011). Finally, the standard deviation for all participant responses in similar construct categories (Cognitive Absorption, Flow, Brand Equity, Purchase Intention, and Brand Social Media Engagement Intention) was checked for variance to ensure participant engagement. All participants with standard deviations under five percent were analyzed, and in the end only participants with a standard deviation below two percent were removed per data screening recommendations (Kerlinger & Lee, 2000; Gaskin, 2013). Final participant count was 858 across all conditions and manipulations.

Table 3. Participant Count

Condition	Manipulation	Original Total	Final Total
High Engagement Posts	No Metrics Shown	191	148
	Matching Metrics Shown	210	145
	Metrics Switched (shown Low Engagement Metrics)	187	144
Low Engagement Posts	No Metrics Shown	189	137
	Matching Metrics Shown	199	140
	Metrics Switched (shown High Engagement Metrics)	209	144

Participants were asked to complete baseline survey questions to establish demographics; social media usage in terms of purposeful interaction, such as Liking, Commenting, or Sharing a brand Facebook Page post; as well as previous brand Facebook Page visits. In addition, cognitive absorption was measured using Burton-Jones & Straub's (2006) scale, flow was measured using the Animesh, et al.'s (2011) scale, Brand Equity was measured after each post exposure using Nah, Eschenbrenner, & DeWester's (2001) Brand Equity scale, and purchase intention was measured using Chandran, Sucharita, & Morwitz's (2005) scale. Survey items can be viewed in Appendix I.

Participants were randomly assigned into either the low or high Facebook Page post engagement treatment group, and then within that group, randomly assigned to the different post popularity statistic viewing levels.

Brand Facebook Page posts were presented in order to match the Buying Behavior Model (Wind, 1978). Brand presentation order was randomly decided to avoid response bias. Participants were asked to interact with the posts as if they were on their own Facebook profile by Liking, Commenting, or Sharing the post. Following this interaction, they were asked to indicate the likelihood of their interaction on a seven point Likert scale developed for this study to measure Brand Social Media Engagement Intention. Such a set up will allow us to also measure the accuracy of self-report between their interaction and their engagement intention responses. Conclusion of this survey resulted in payment to the participant.

INSTRUMENT VALIDATION

The questionnaire used in this study consists of scales measuring the constructs from the research model, as summarized in Table 4. Three formative constructs were used – Cognitive Absorption, Flow, and Post Popularity; while the reflective constructs – Brand Equity, Purchase Intention, and Brand Social Media Engagement Intention – had significant factor loadings greater than 0.5 to ensure construct validity (Shimp and Sharma 1987; Carmines and Zeller 1979; Hulland 1999) and were further validated by adequate item-to-total correlations at above the 0.35 threshold as suggested by Saxe and Weitz (1982).

With respect to the dimension of Cognitive Absorption, it was adapted from the scale used by Burton-Jones & Straub (2006). This scale captures respondents' immersion with the brand's posts using a seven-point Likert scale ranging from Strongly Disagree to Strongly Agree. For the dimension of flow, the same seven point Likert scale was used with an adapted scale from Animesh, et al. (2011) to measure respondents' enjoyment of interacting with the brand's Facebook posts. Both dimensions used seven-point a Likert scale anchored as "Strongly

Disagree,” “Disagree,” Somewhat Disagree,” “Neither Disagree Nor Agree,” “Somewhat Agree,” “Agree,” and “Strongly Agree.”

In regards to the construct of Brand Equity, measurements were adapted from the scale used by Nah, Eschenbrenner, & DeWester (2001). This scale captures respondents’ perceptions about the added value of a brand along seven-point Likert scale anchored as “Strongly Disagree,” “Disagree,” Somewhat Disagree,” “Neither Disagree Nor Agree,” “Somewhat Agree,” “Agree,” and “Strongly Agree.”

The Purchase Intention construct was adapted from Chandran, Sucharita, & Morwitz (2005) and measured along seven-point Likert scale. The first three items used the anchors of “Very Low,” “Low,” “Possibly Low,” “Neither Low Nor High,” “Possibly High,” “High,” and “Very High.” The last two items were anchored as “Strongly Disagree,” “Disagree,” Somewhat Disagree,” “Neither Disagree Nor Agree,” “Somewhat Agree,” “Agree,” and “Strongly Agree.”

Brand Social Media Engagement Intention was defined in this study by considering the entire set of a user’s potential interaction behavior with a brand Facebook page post, and creating a corresponding scale item, for a total of five items. These items were measured along seven-point scales anchored as “Highly Unlikely,” “Unlikely,” “Somewhat Unlikely,” “Neither Likely Nor Unlikely,” “Somewhat Likely,” “Likely,” and “Highly Likely.”

Tests for nonresponse and common method biases were not significant, revealing that no such biases existed. The factor loadings for the items used in this study are summarized in Table 4. As an additional validation check, Appendix C contains the Factor Loadings for each of the individual manipulation conditions to make sure they fall within acceptable ranges as well.

Table 4. Factor Loadings

Resources	Items	Loadings
Cognitive Absorption	<i>When I was reading the post, I was able to block out all other Distractions.</i>	Formative
	<i>When I was reading the post, I felt totally immersed in the post.</i>	Formative
	<i>When I was reading the post, I felt completely absorbed in the post.</i>	Formative
	<i>When I was reading the post, my attention did not get diverted very easily.</i>	Formative
Flow	<i>My imagination is aroused when I interact with the post.</i>	Formative
	<i>I feel curious when interacting with the post.</i>	Formative
	<i>The interaction with the post is interesting.</i>	Formative
	<i>I am absorbed in the interaction in the post.</i>	Formative
	<i>It's fun to interact with the post.</i>	Formative
Brand Equity	<i>Even if another [food service/airline] offers the same quality of services as [McDonald's/Delta Airlines], I would prefer to use the services of [McDonald's/Delta Airlines].</i>	0.975
	<i>If there is another [food service/airline] as good as [McDonald's/Delta Airlines], I prefer to go to [McDonald's/Delta Airlines].</i>	0.978
	<i>It makes sense to use the services of [McDonald's/Delta Airlines] instead of services of any other [food service/airline] even if they are the same.</i>	0.964
Purchase Intent	<i>The likelihood that I would purchase from [McDonald's/Delta Airlines]</i>	0.962
	<i>The probability that I would consider buying from [McDonald's/Delta Airlines]</i>	0.961
	<i>My willingness to buy from [McDonald's/Delta Airlines]</i>	0.960
	<i>For this particular type of purchase, I would use [McDonald's/Delta Airlines]</i>	0.947
	<i>My intention would be to purchase from [McDonald's/Delta Airlines]</i>	0.961
Brand Social Media Engagement Intention	<i>Considering this [McDonald's/Delta Airlines] Facebook Page post, how likely are you to do each of the following?</i>	
	Like this post	0.854
	Comment on this post	0.851
	Share this post on my wall	0.910
	Share this post on a friend's wall	0.875
	Like the [McDonald's/Delta Airlines] Facebook Page	0.884

The quality of measures was tested with the partial least squares (PLS) approach to structural equation modeling via SmartPLS 3.0. The results of the tests for convergent validity (Bagozzi, 1981), discriminant validity (Bagozzi, 1981; Fornell & Larcker, 1981), construct means, and Cronbach's α can be found in Table 5, which shows that all constructs had adequate Cronbach's α (i.e. > 0.80), reliability (i.e. above 0.7 threshold according to Nunnally, 1978; Carmines & Zeller, 1979), and convergent validity (i.e. AVE above the 0.5 benchmark according to Fornell & Larcker, 1981). See Appendix D for Construct Statistics for each of the individual manipulation conditions.

Table 5. Construct Statistics

Construct	Mean	Cronbach's Alpha (α)	Composite Reliability	Convergent Validity (AVE)	Discriminant Validity ($\sqrt{\text{AVE}}$)
Cognitive Absorption	4.754	Formative	Formative	Formative	Formative
Flow	3.935	Formative	Formative	Formative	Formative
Brand Equity	3.803	0.971	0.981	0.945	0.972
Purchase Intention	4.218	0.978	0.982	0.918	0.958
Brand Social Media Engagement Intention	2.719	0.924	0.942	0.766	0.875

As shown in the last column of the table above, discriminant validity was supported by confirming that the square root of the variance shared between a construct and its items was greater than the correlations between the construct and any other construct in the model (Fornell and Larcker 1981).

Table 6. Latent Variable Correlations

Construct	Cognitive Absorption	Flow	Brand Equity	Purchase Intention	Brand Social Media Engagement Intention
Cognitive Absorption	n/a <i>(formative)</i>				
Flow	0.688	n/a <i>(formative)</i>			
Brand Equity	0.404	0.562	1.00		
Purchase Intention	0.419	0.535	0.812	1.00	
Brand Social Media Engagement Intention	0.478	0.688	0.580	0.528	1.00

Discriminant validity was further supported by verifying that all items loaded highly on their corresponding factors while loading lower on other factors (see Table 6). Although the correlation between flow and cognitive absorption was quite high (i.e., 0.688), it was not found to be higher than the 0.85 threshold proposed by Kline (1998), offering further support for the discriminant validity of the two constructs. All under construct relations were found under this threshold.

Table 7. Matrix of Loadings and Cross-Loadings

Construct		Cognitive Absorption (formative)	Flow (formative)	Brand Equity (reflective)	Purchase Intention (reflective)	Brand Social Media Engagement Intention (reflective)
Cognitive Absorption	1	0.793	0.433	0.248	0.276	0.264
	2	0.943	0.699	0.417	0.418	0.502
	3	0.938	0.703	0.424	0.418	0.512
	4	0.862	0.531	0.290	0.339	0.342
Flow	1	0.607	0.917	0.510	0.479	0.610
	2	0.588	0.914	0.480	0.464	0.584
	3	0.638	0.946	0.531	0.512	0.646
	4	0.716	0.922	0.523	0.488	0.642
	5	0.625	0.919	0.547	0.525	0.687
Brand Equity	1	0.399	0.556	0.975	0.801	0.572
	2	0.391	0.543	0.978	0.799	0.558
	3	0.388	0.540	0.964	0.767	0.564
Purchase Intent	1	0.391	0.493	0.763	0.962	0.484
	2	0.386	0.488	0.751	0.961	0.468
	3	0.395	0.502	0.762	0.960	0.481
	4	0.419	0.543	0.794	0.947	0.538
	5	0.415	0.535	0.816	0.961	0.551
Brand Social Media Engagement Intention	1	0.532	0.679	0.532	0.520	0.854
	2	0.434	0.569	0.434	0.357	0.851
	3	0.498	0.583	0.498	0.433	0.910
	4	0.484	0.530	0.484	0.403	0.875
	5	0.572	0.633	0.572	0.564	0.884

Additionally, participants were asked what they thought the study was about as a validation check. A few participants mentioned the research was about how they interacted with brands, but they did not mention anything specific. No one was able to guess the post popularity manipulation intent, since they did not know what manipulation group they were in or that others were being exposed to different manipulations. Thus, we will consider the results of this survey not compromised by participants guessing the intent of the research.

CHAPTER 4

RESULTS

DEMOGRAPHICS

Of the 858 participants, 480 (55.9%) were female, 378 (44.1%) male. A criterion to complete the study, no participants were under age the age of 18. However, 118 participants (13.8%) were between the ages of 18 and 23, 202 (23.5%) between 24-29 years old, 190 (22.1%) between 30-35 years old, 174 (20.3%) between 36-45 years old, 105 (12.2%) between 46-55 years old, 60 (7%) between 56-65 years old, and 9 (1%) participants were over 66 years old. Only two participants did not have regular access to the Internet via a computer, tablet, or smartphone throughout the day. And, participants were also asked to complete a cultural scale to gage their individual versus collective society traits, as well as an introverted versus extroverted scale to gage their acceptance of social situations. Distributions of these results are below in Figures 3 and 4.

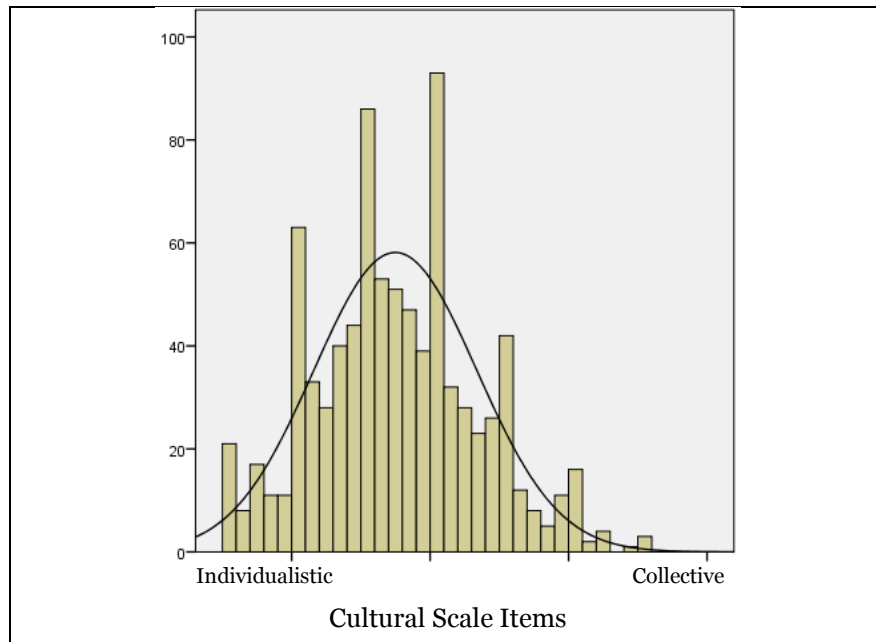


Figure 3. Cultural Scale Distribution of Participants

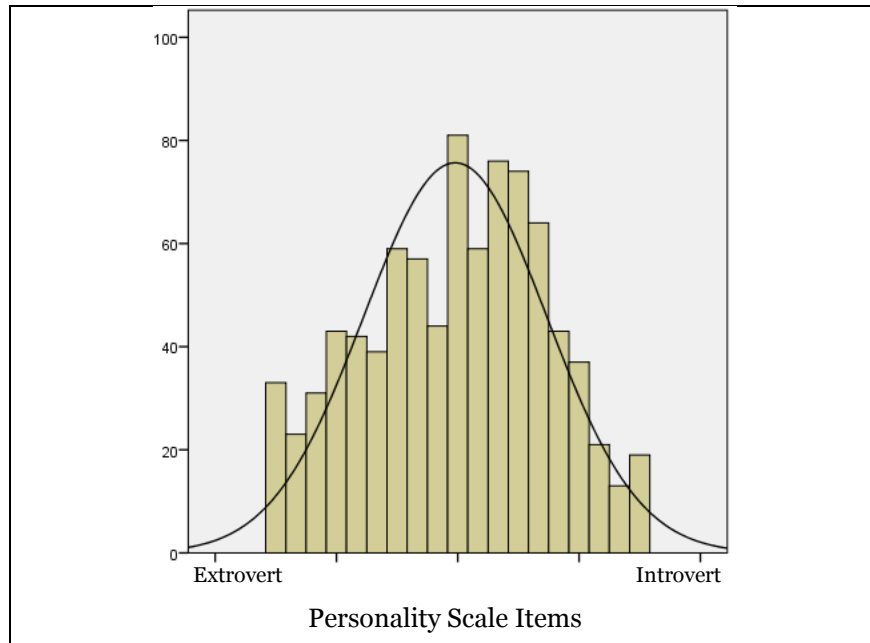


Figure 4. Personality Scale Distribution of Participants

Average participant spends 63.49 minutes a day on Facebook, with answers ranging from 1 minute to 720 minutes (12 hours), and the most popular response being 60 minutes. There is a wide, positively skewed distribution, but the wording of the question does not specify how long one actively participates/engages on Facebook in a day, thus leading to openness for answers creating the steady distribution toward such a strange answer as 12 hours. Perhaps several people leave their browser open to Facebook all day and therefore answered accordingly. The top 25% of respondents indicated that they spend an hour and a half or more a day on Facebook.

Additionally, the question “Do you currently Like the McDonald’s Facebook Page?” was used as a pre-exposure question to consider participants prior interactions with the McDonald’s brand. The question was recoded, with the answers “I don’t think so” and “No” were put into a group for “No;” while the answers “I think so” and “Yes” were put into a group for “Yes.” As a comparison, the last question from the Brand Social Media Engagement Intention questions, after the first post exposure, “Considering this McDonald’s Facebook Page post, how likely are you to do each of the following?... Like the McDonald’s Facebook Page” was used to see if behavior intent had possibly changed over the course of the study. This question was recoded with “Very

Unlikely,” “Unlikely,” “Somewhat Unlikely” and “Neither Unlikely Nor Likely” being categorized as “No;” while “Somewhat Likely,” “Likely,” and “Very Likely” being categorized as “Yes.” Using an ANOVA, these two before and after question areas can be found to have significant mean differences ($F = 26.312, p < 0.001$). Similar analysis was conducted on the first Delta Airlines post, in which significant difference between initial previous brand interactions and post exposure brand interaction can also be observed ($F = 17.877, p < 0.001$).

SOCIAL NETWORKING SITES USAGE

Of the 858 participants, 93.8% indicated that they had used a social network site within the past week. An additional 12 people (1.4%) indicated they do regularly participate in social media activities but did not during the week prior to completing the survey. Participants averaged visiting two to three social media sites in the past week with the total application engagement ranging between zero and six applications.

Table 8. Participant Social Media Activities

Activity	Count	Percentage
Social Network Sites	805	93.8
Content Communities (i.e. YouTube)	577	67.2
Collaborative Projects (i.e. Wikipedia)	295	34.4
Blogs	285	33.2
Virtual Game Worlds (i.e. World of Warcraft)	142	16.6
Virtual Social Worlds (i.e. Second Life)	33	3.8
I do not regularly participate in any of these activities	20	2.3

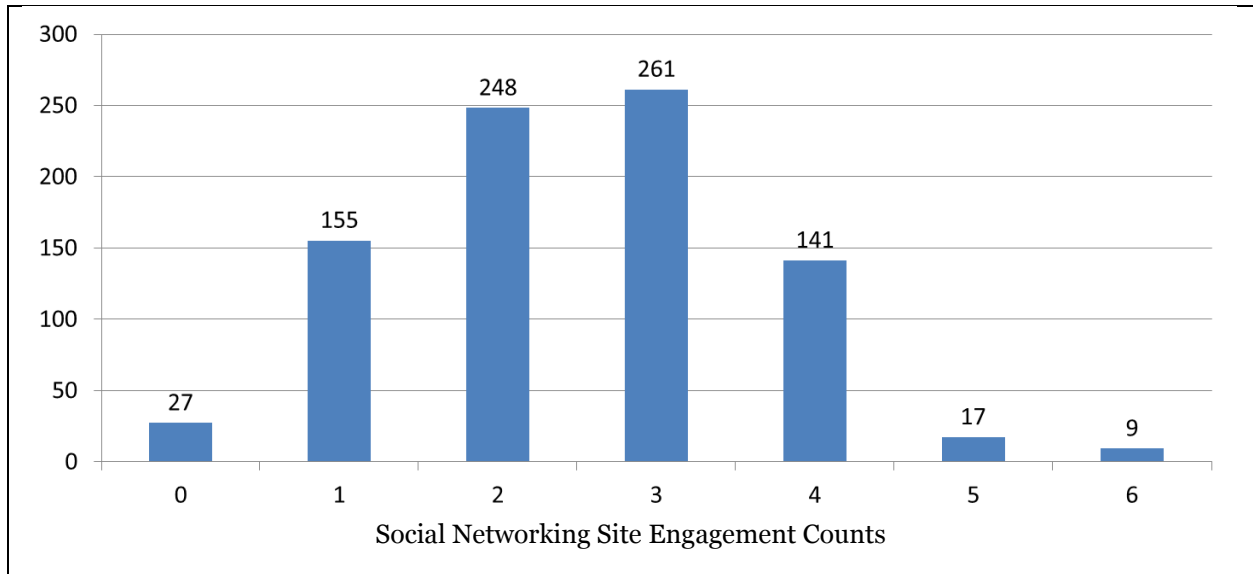
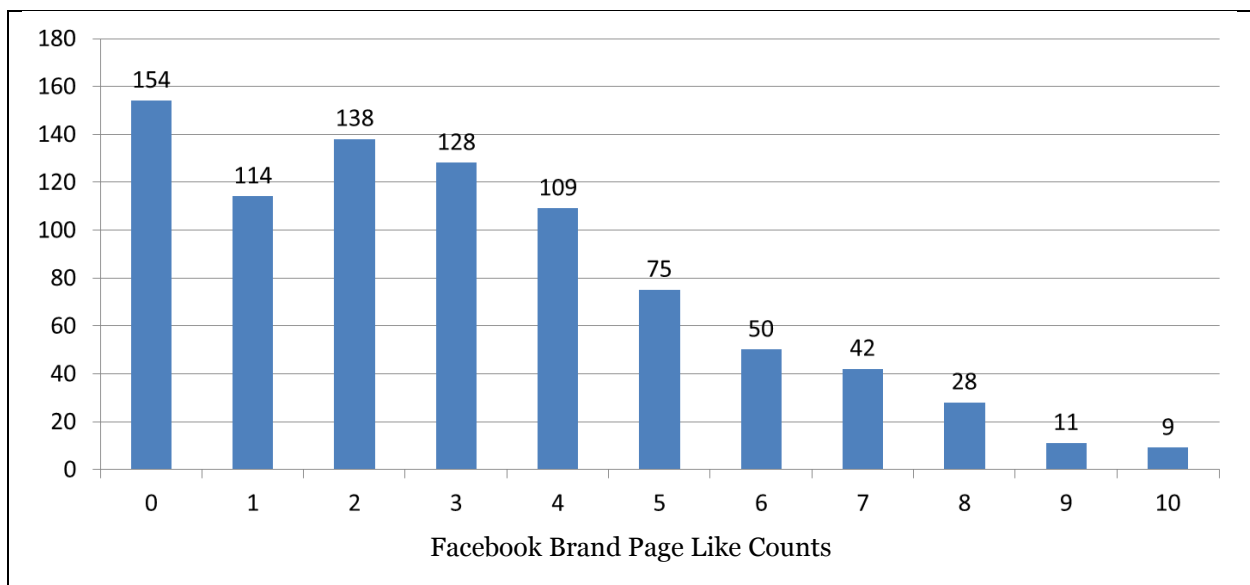


Figure 5. Participant Social Networking Site Activities

When further prodded into their Facebook usage, 153 participants (17.8%) indicated that they thought they had liked a brand's Facebook page, while 525 participants (61.2%) were positive they had. Table 9 breaks down the types of brand pages liked by participants. The average number of liked pages by participants was just over three pages (3.02). Specific to this study, 83 participants (9.7%) thought they did currently Like the McDonald's Facebook Page and 91 participants (10.6%) were sure that they had Liked the Page. For Delta's Facebook Page, 58 participants (6.8%) thought that they did currently like the Delta Page and 64 participants (7.5%) were sure they had.

Table 9. Participant Types of Liked Brand Pages

Page Type	Count	Percentage
Media/television actors (i.e., Marvin Zindler, Paul Harvey, Mel Gibson, Jack Nicholson, etc)	375	43.7
Television networks/channels (i.e., local news station)	334	38.9
Sports teams (i.e., Greenbay Packers, Chicago Bulls, Detroit Red Wings, etc)	300	35
Big Box retailers (i.e., Walmart, Target, etc)	284	33.1
Creation/Manufacturing (i.e., artist, Etsy, guitar picks, etc)	279	32.5
Consumer products (i.e., linens, kitchen supplies, bathroom supplies, etc)	238	27.7
Fast food (i.e., McDonalds, Arby's, Taco Bell, etc)	232	27
Consumer foods (i.e., milk, ice cream, bananas, etc)	230	26.8
Services (i.e., insurance, car repair, contractors, etc)	204	23.8
Airlines (i.e., Delta, Southwest, United, etc)	116	13.5
Other	81	9.4
I do not Like brand Facebook Pages	135	15.7

**Figure 6. Participant Facebook Brand Page Likes**

Finally, to glimpse into participant brand Page activity, participants were asked what types of brand Facebook Pages they had visited in the past week. The average number of pages visited by participants was more than one (1.31). Specifically for this study, 26 participants (3%) thought they had visited the McDonald's Facebook Page within the last week and 55 participants (6.4%) were sure that they had. For Delta's Facebook Page, 33 participants (3.8%) thought that they had visited the Facebook Page within the last week and 46 participants (5.4%) were sure that they had. Table 10 breaks down the types of brand pages visited by participants. Additionally, 224 people (26.1%) indicated they do regularly visit brand Facebook pages but did not this past week.

Table 10. Participant Facebook Brand Page Visits

Page Type	Count	Percentage
Television networks/channels (i.e., local news station)	172	20
Media/television actors (i.e., Marvin Zindler, Paul Harvey, Mel Gibson, Jack Nicholson, etc)	151	17.6
Big Box retailers (i.e., Walmart, Target, etc)	125	14.6
Fast food (i.e., McDonald's, Arby's, Taco Bell, etc)	116	13.5
Sports teams (i.e., Greenbay Packers, Chicago Bulls, Detroit Red Wings, etc)	114	13.3
Creation/Manufacturing (i.e., artist, Etsy, guitar picks, etc)	106	12.4
Consumer products (i.e., linens, kitchen supplies, bathroom supplies, etc)	101	11.8
Services (i.e., insurance, car repair, contractors, etc)	89	10.4
Consumer foods (i.e., milk, ice cream, bananas, etc)	86	10
Airlines (i.e., Delta, Southwest, United, etc)	62	7.2
Other	49	5.7
I do not visit brand Pages on Facebook	127	14.8

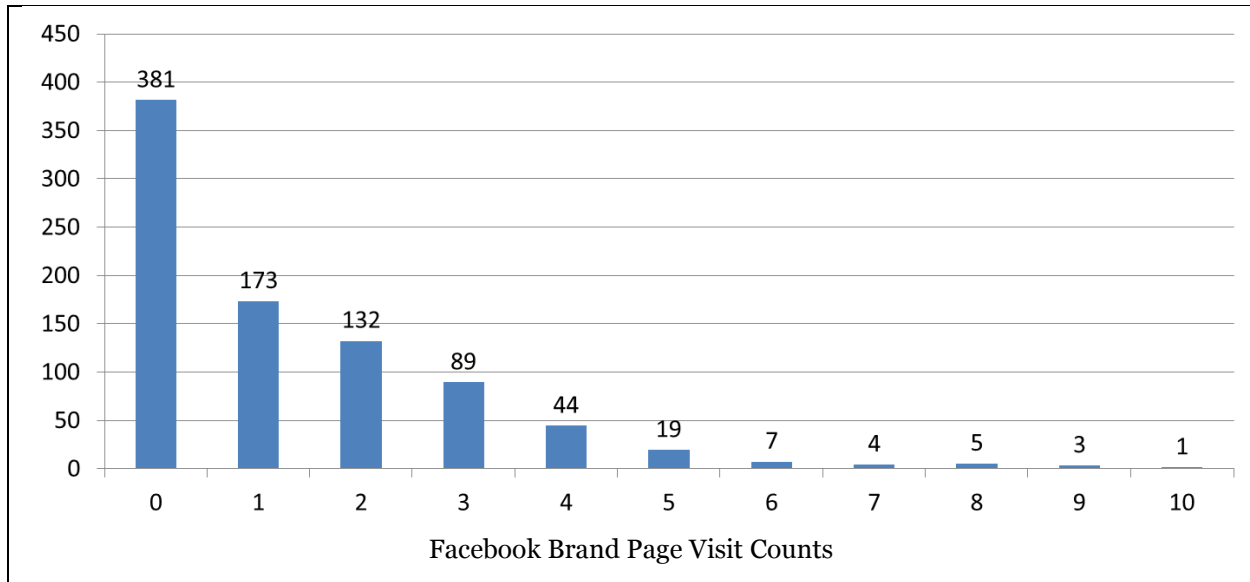


Figure 7. Participant Facebook Brand Page Visits

HYPOTHESIS TESTING

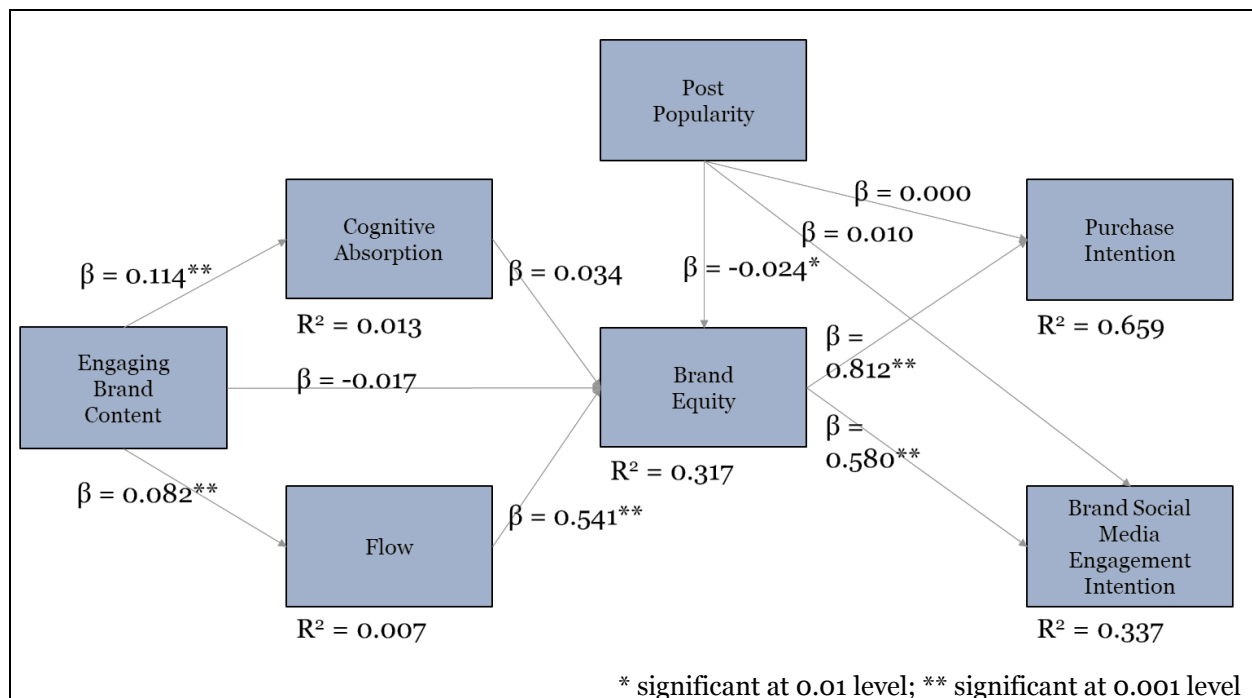
The research model shown in Figure 2 was tested using the variance-based PLS method. PLS allowed specifying the relationships between the various endogenous and exogenous constructs in the model (structural model), as well as with their underlying items (measurement model). Thus, data analysis provided support for both how well the items measured each construct, and how well the hypothesized relationships between constructs supported the proposed theory.

The bootstrapping re-sampling method with 5,125 cases and 500 re-samples was used for structural model estimation. Based on the results of the model estimation, only hypotheses 2, 3, and 4a were supported (see Table 11). The results of the structural model estimations, including R^2 values, are presented in Figure 8.

Table 11. Hypothesis Testing

Hypothesis	From	To	Path Coefficient	t-Value	Status
1	Engaging Brand Content	Brand Equity	-0.017	1.448	Rejected
2	Brand Equity	Purchase Intention	0.812	118.759*	Supported
3	Brand Equity	Brand Social Media Engagement Intention	0.580	64.312**	Supported
4a	Post Popularity	Brand Equity	-0.024	2.157*	Supported
4b	Post Popularity	Purchase Intention	0.000	0.013	Rejected
4c	Post Popularity	Brand Social Media Engagement Intention	0.010	0.884	Rejected

* significant at 0.01 level; ** significant at 0.001 level

**Figure 8. PLS Model**

To further analyze the model, participant responses were broken out into their manipulation areas. By viewing the model this way, significance can be seen on almost all paths. The exceptions are the path connecting Cognitive Absorption to Brand Equity ($\beta = 0.014$, $p = 0.644$) as well as the path connecting Engaging Brand Content to Brand Equity ($\beta = 0.030$, $p =$

0.132) when real post popularity metrics were shown. Similarly, no significance was observed for the same two paths, from Cognitive Absorption to Brand Equity ($\beta = 0.001$, $p = 0.973$) and Engaging Brand Content to Brand Equity ($\beta = 0.013$, $p = 0.537$) when post popularity metrics were shown to the participants switched (established high engagement posts shown with low engagement metrics and vice versa). For factor loadings, construct statistics, and latent variable correlations for these manipulations, please see Appendices C, D, and E, respectively.

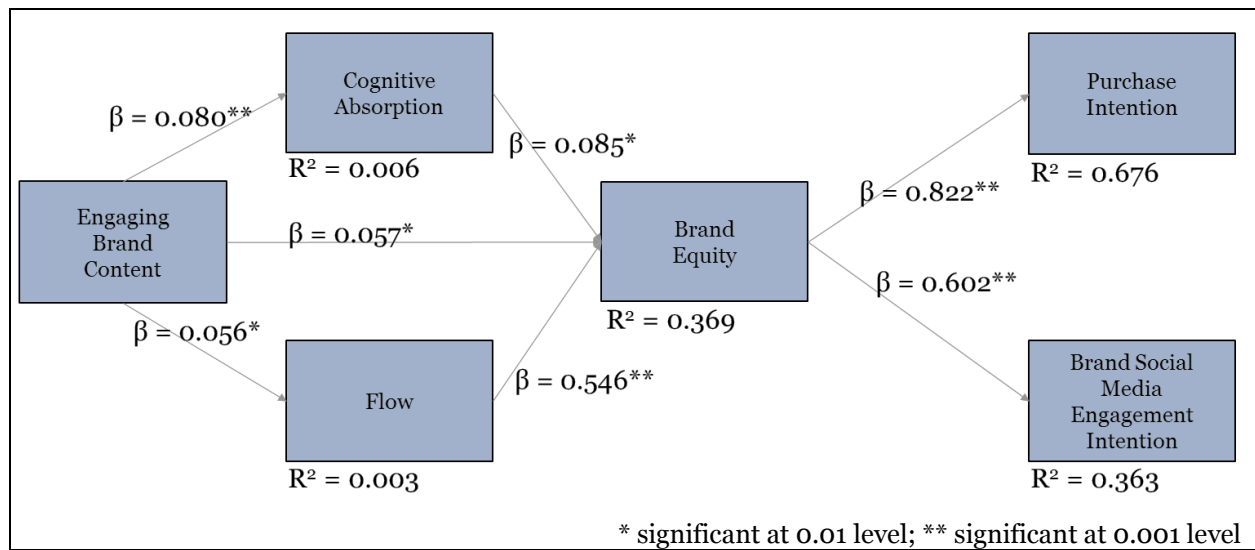


Figure 9. PLS Model with No Post Popularity Metrics Shown

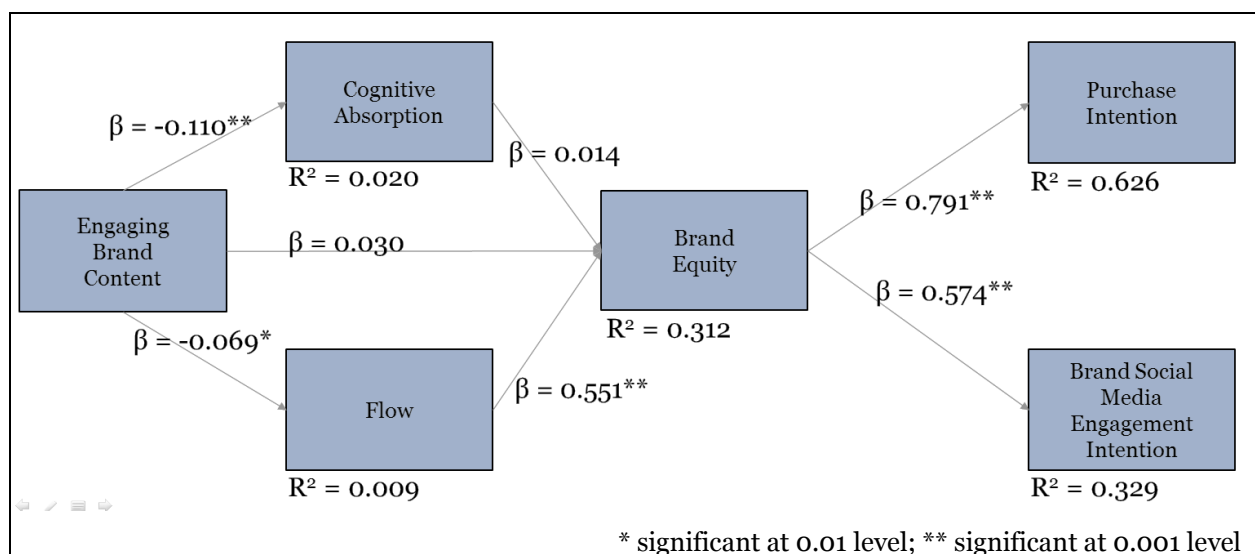


Figure 10. PLS Model with Post Popularity Metrics Matching Brand Content

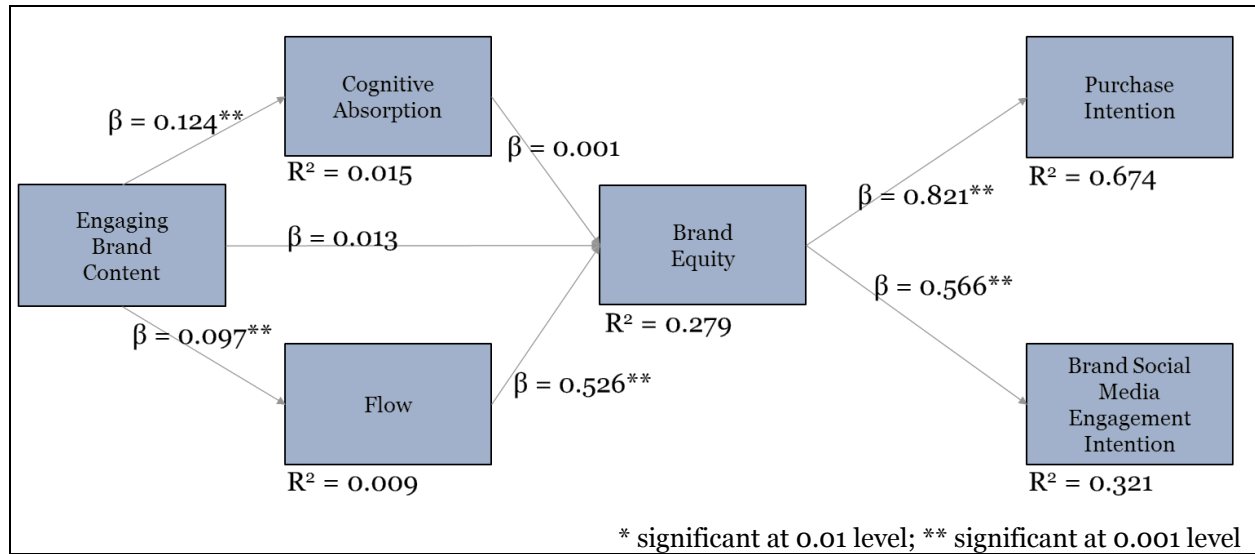


Figure 11. PLS Model with Post Popularity Metrics Opposite Brand Content

Additionally, due to the significance of both Cognitive Absorption and Flow as antecedents of brand equity in the model in which participants were not shown any post popularity metrics what so ever (Figure 9 above), to look at the amount of unique variance explained by each predictor, a stepwise hierarchical regression was conducted using the latent variable loadings from the PLS output to ensure model consistency (see Table 13). In the first approach, determinants were listed in the theoretical order as specified by the structural model, that is, Cognitive Absorption followed by Engaging Brand Content and then followed by Flow. As a result, this model, referred to in Table 13 as the theoretical model, attributes the (majority of the) covariance between determinants to the first and third variables in the model, that is, Cognitive Absorption and Flow. The R^2 change for both steps in the model was significant ($p < 0.001$).

In the second approach, the variables were added in the order of the statistical significance of the predictors: Engaging Brand Content, Flow, and then Cognitive Absorption. As a result, this model, refer to in Table 13 as Empirical Model 1, attributes the (majority of the) covariance between determinants to Flow with significant R^2 change ($p < 0.001$). And finally in

the third approach completing the steps, the variables were added in the last combination order: Flow, Cognitive Absorption, and then Engaging Brand Content. This model, refer to in Table 13 as Empirical Model 2, again attributes the (majority of the) covariance between determinants to Flow with significant R^2 change ($p < 0.001$).

Comparison between the three methods as well as an average across the models is provided in Table 12 below. The average variance reflects the unique variance of each antecedent relative to the total explained variance of 0.367. This implies that the shared variance or covariance between the Cognitive Absorption, Engaging Brand Content, and Flow dimensions is over 56% (0.564).

Table 12. Stepwise Linear Regression for R^2 Partitioning

Dependent Variable: Brand Equity				
Antecedent	Theoretical Approach	Empirical Approach 1	Empirical Approach 2	Average (Unique Variance)
Cognitive Absorption	0.200**	0.004*	0.003*	0.069
Engaging Brand Content	0.003*	0.001	0.003*	0.002
Flow	0.164**	0.364**	0.361**	0.296**

* significant at 0.01 level; ** significant at 0.001 level

Following the result presented in Table 13 above, we can conclude that the explained variance of the integrated model aggregating the Cognitive Absorption, Engaging Brand Content, and Flow dimensions is 36.7% (adjusted R^2 is 36.6%). Even though the explained variance of the unified model may not appear much higher than the Flow Empirical Approach 1 model alone (R^2 is 36.4%) or the Cognitive Absorption Theoretical model alone (R^2 is 20.0%), the results from the stepwise regression analysis in Table 13 show that the difference in explained variance (ΔR^2) as a result of amalgamating the two types of performance is highly significant for Flow as a contributing antecedent to Brand Equity ($p < .001$).

To double check the lack of significance between Post Popularity Metric manipulations, ANOVAs were run between the means of each manipulation, factoring by the results of the exposure with no manipulation as well as the results of the switched metric manipulation. See these results in Table 13.

Table 13. ANOVAs for Post Popularity Metric Exposure Differences Compared with True Metrics Being Shown

Construct	Manipulation	F Score	P-Value	Status
Cognitive Absorption	No Metrics	0.596	0.939	Not Significant
	Switched Metrics	0.688	0.868	Not Significant
Flow	No Metrics	1.129	0.288	Not Significant
	Switched Metrics	1.417	0.067	Not Significant
Brand Equity	No Metrics	1.549	0.065	Not Significant
	Switched Metrics	0.662	0.851	Not Significant
Purchase Intention	No Metrics	1.324	0.113	Not Significant
	Switched Metrics	1.890	0.003	Significant
Brand Social Media Engagement Intention	No Metrics	0.904	0.617	Not Significant
	Switched Metrics	1.000	0.466	Not Significant

With the lack of support for Hypothesis 4 and any community engagement metric effects at the granular variable level, the model was run again, this time looking at interaction effects for this construct. Using this model, significance was found ($p = 0.010$) if considering the manipulation of post popularity metrics as a moderating variable on the relationship between Engaging Brand Content and Brand Equity.

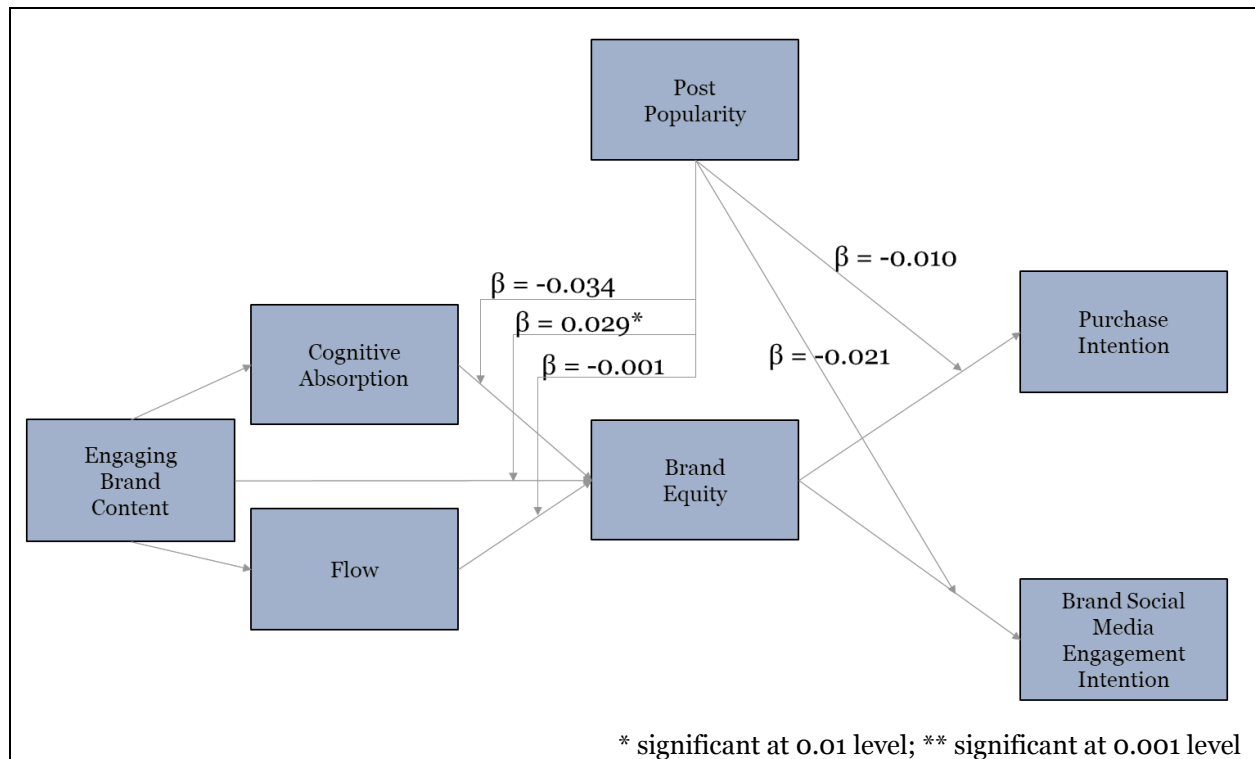


Figure 12. PLS Model with Post Popularity as a Moderator

Finally, with the lack of support for all of Hypothesis 4 and post popularity metric effects at the granular variable level for neither Purchase Intention nor Brand Social Media Engagement Intention, the model was run once again; this time looking at only the metrics from the first two posts shown to participants, to capture any effects with initial responses for one Brand Awareness post for each brand.

This did not help establish post popularity metrics as an effect in the model. By viewing the model this way, significance was only found on the same three paths for both brands. For McDonald's first Brand Awareness Post: Brand Equity to Purchase Intention ($\beta = 0.765$, $p = 0.000$), Brand Equity to Brand Social Media Engagement Intention ($\beta = 0.610$, $p = 0.000$), and Flow to Brand Equity ($\beta = 0.606$, $p = 0.000$). For Delta Airline's first Brand Awareness Post: Brand Equity to Purchase Intention ($\beta = 0.753$, $p = 0.000$), Brand Equity to Brand Social Media Engagement Intention ($\beta = 0.571$, $p = 0.000$), and Flow to Brand Equity ($\beta = 0.502$, $p = 0.000$).

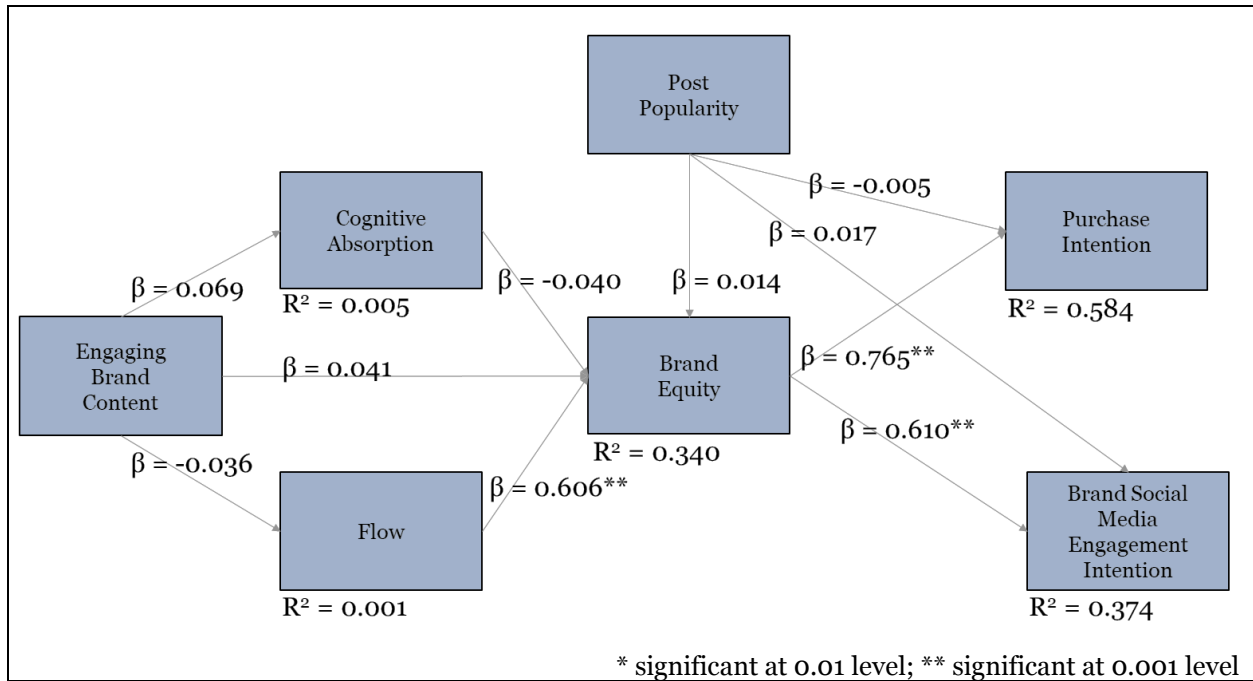


Figure 13. PLS Model, Brand Awareness McDonald's Post

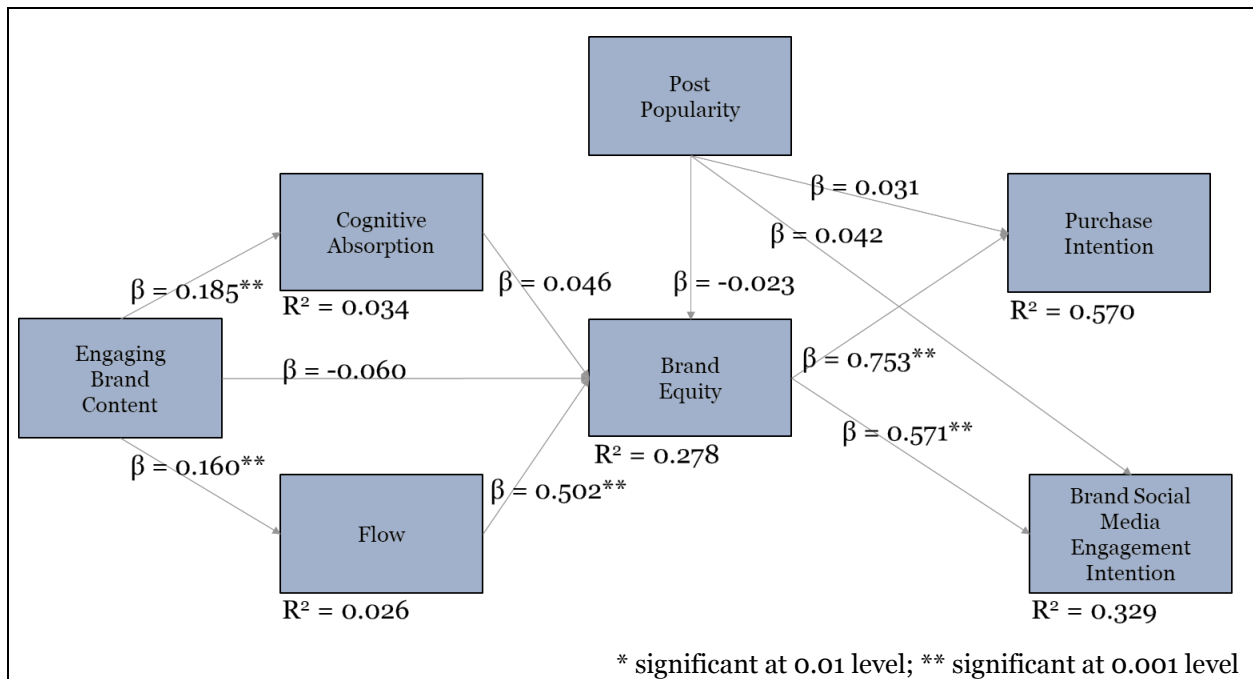


Figure 14. PLS Model, Brand Awareness Delta Airlines Post

With the one present significant effect of Post Popularity as a an interaction construct on Engaging Brand Content and Brand Equity, one final model test was run to see if perhaps the Post Popularity Manipulation causes an effect on Brand Equity antecedents, Cognitive Absorption and Flow. Using the Brand Awareness posts for both brands, there was a significant effect found on the relationship from Post Popularity to Flow for McDonald's ($\beta = 0.084$, $p = 0.017$) and Delta ($\beta = 0.085$, $p = 0.009$).

And finally, the idea was entertained that perhaps the Post Popularity manipulation could have an effect on only high engagement posts or only low engagement posts. But alas, neither of these isolations showed any significant effects for a Post Popularity relationship.

POST-HOC TEST FOR BRAND EQUITY, PURCHASE INTENTION, AND BRAND SOCIAL MEDIA ENGAGEMENT INTENTION EFFECTS

Since the model was built, the Brand Social Media Engagement and Purchase Intention variables were tested for effects. While no literature pointed to either of these effects being a possibility due to the introduction of Brand Social Media Engagement Intention as a relatively new construct, one could reason that an effect is possible. A consumer could be trying to reinforce their purchase decision by commenting on it in social media or the reverse direction, social media interaction could spawn purchase intent. Using the main model with community engagement as a reflective variable, it can be seen that Brand Social Media Engagement Intention does have an effect on Purchase Intention ($t = 8.743$, $p = 0.000$). Further research and discovery is needed to fully understand why these relationships exist and to understand the full impact on Brand Social Media Engagement Intention on brand and purchasing constructs.

FURTHER EXPLORATORY INQUIRES

Due to the lack of significance for most of the original hypotheses, further inquiries were conducted using and modifying the proposed theoretical model. Using the Multi-Group Analysis

(MGA) feature in Smart PLS, the following investigations were conducted with recoded manipulations to see if this could show some sort of Post Popularity manipulation affect. For this new coding, manipulation categories were no Post Popularity metrics shown, low metrics shown, and high metrics shown. With this new idea, the point of the manipulation recoding was to see if Post Popularity metrics had anything to do with the engagement, or if it was the content that caused people to interact and show higher Brand Equity and Purchase Intent towards the brand. Therefore, showing low or high metrics now includes the posts that had the metrics switched. So the low category would represent the original low engagement post (as previously categorized as “real” metrics showing) as well as the high engagement post (which would have previously been categorized as “switched” metrics showing).

First, using all posts, Post Popularity data groups were created and run on a clean model, with no interactors or moderators just to see where the groups would lead. For exploratory purposes, for this model, only 15% of the data was used for this Smart PLS multi-group analysis. For this manipulation, no significance could be seen between the groups. Overall bootstrapping with all of the data showed significance except for the post engagement level path to cognitive flow ($p = 0.109$). Using the multi-group analysis function in Smart PLS, the R^2 means and path coefficients can be seen in Table 14 and Figure 15. Significance between the groups can only be seen between the group that was shown no metrics versus the group that was shown low metrics ($p = 0.003$), or the group the was shown high metrics ($p = 0.044$), both for the path from Brand Equity to Brand Social Media Engagement Intention (See Table 14 & Figure 15).

Table 14. All Posts, Post Popularity Groups, MGA Community Metric R² Means

Construct	Metrics Shown		
	None	Low	High
Cognitive Absorption	0.011	0.031	0.022
Flow	0.005	0.021	0.004
Brand Equity	0.409**	0.282**	0.295**
Purchase Intention	0.624**	0.710**	0.685**
Brand Social Media Engagement Intention	0.405**	0.239**	0.291**

* significant at 0.01 level; ** significant at 0.001 level

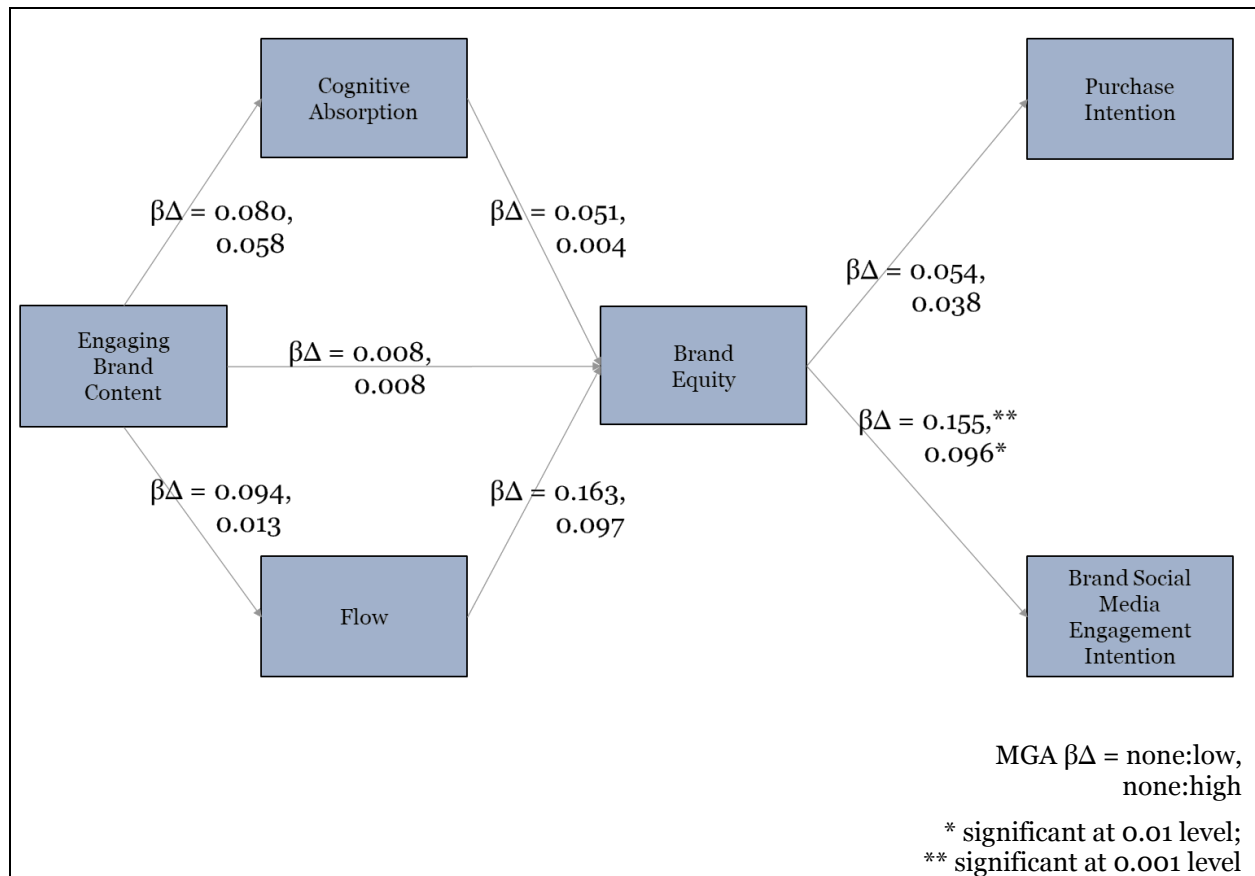


Figure 15. All Posts, MGA Post Popularity Metric Path Differences

For the second idea, Post Popularity data groups were again used, but this time it was also included as an independent variable affecting Cognitive Absorption, Flow, and Brand Equity.

Additionally, while the model was built, Post Popularity as a moderator on the relationship between Cognitive Absorption and Brand Equity and Flow and Brand Equity were considered again with only 15% of the data. While this idea showed significance in the clean model but not along any paths that involved Post Popularity, the findings were replicated here, and no significant effects were found surrounding the Post Popularity metrics as either an independent variable or as a moderating effect. And ultimately, overall, this did not work as it caused a single matrix error and could not run the group comparisons.

For the next idea, the previous idea was replicated using engagement data groups. For this metric, the question “Do you currently Like the McDonald’s Facebook Page?” was recoded. The answers “I don’t think so” and “No” were put into a group for “No,” while the answers “I think so” and “Yes” were put into a group for “Yes.” Again, Post Popularity was included as an independent variable affecting Cognitive Absorption, Flow, and Brand Equity; and Post Popularity was used as a moderator between Cognitive Absorption and Brand Equity and Flow and Brand Equity, and only 15% of the data was used (See Table 15 & Figure 16). This idea leads to the conclusion that Post Popularity is not a moderator and does not impact Brand Equity, Cognitive Absorption, or Flow whether a post is showing low or high Post Popularity metrics.

Table 15. All Posts, Engagement Groups, MGA R² Means

Construct	McDonald’s Page Liked	
	No	Yes
Cognitive Absorption	0.003	0.005
Flow	0.005	0.003
Brand Equity	0.335**	0.333**
Purchase Intention	0.671**	0.666**
Brand Social Media Engagement Intention	0.330**	0.304**

* significant at 0.01 level; ** significant at 0.001 level

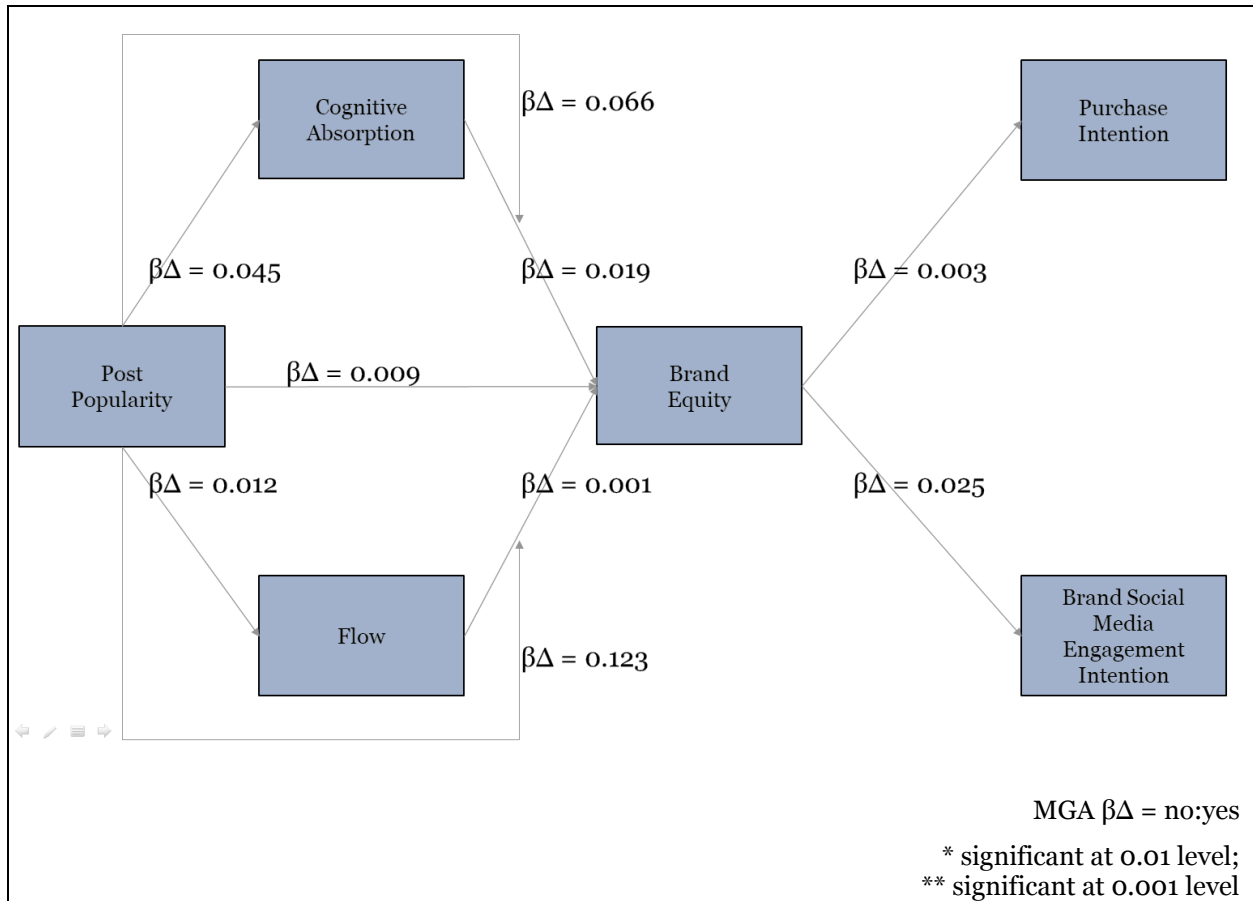


Figure 16. All Posts, Engagement Groups, MGA Path Differences

Then the idea was entertained that perhaps the purchase decision was too great for Delta Airlines posts to be accurately incorporated into the model, so why not take these posts out and just considers the very first Brand Awareness post from McDonald's. Since the Culture scale was included and the results already showed a normal distribution, this was used as a grouping factor and Post Popularity as a moderator again for Cognitive Absorption, Flow, and Brand Equity. Again, this idea does not produce significant relationships, and therefore leads to the conclusion that Post Popularity is not a moderator impacting the relationship from engagement to Cognitive Absorption, Flow, or Brand Equity, and there are no significant differences between participants who were more individualistic or collectivist in their group interaction preferences.

Table 16. McDonald's Brand Awareness Post, Culture Groups, MGA R² Means

Construct	Culture Groups	
	Individualist	Collectivist
Cognitive Absorption	0.015	0.013
Flow	0.015	0.015
Brand Equity	0.311**	0.343**
Purchase Intention	0.528**	0.608**
Brand Social Media Engagement Intention	0.286**	0.385**

* significant at 0.01 level; ** significant at 0.001 level

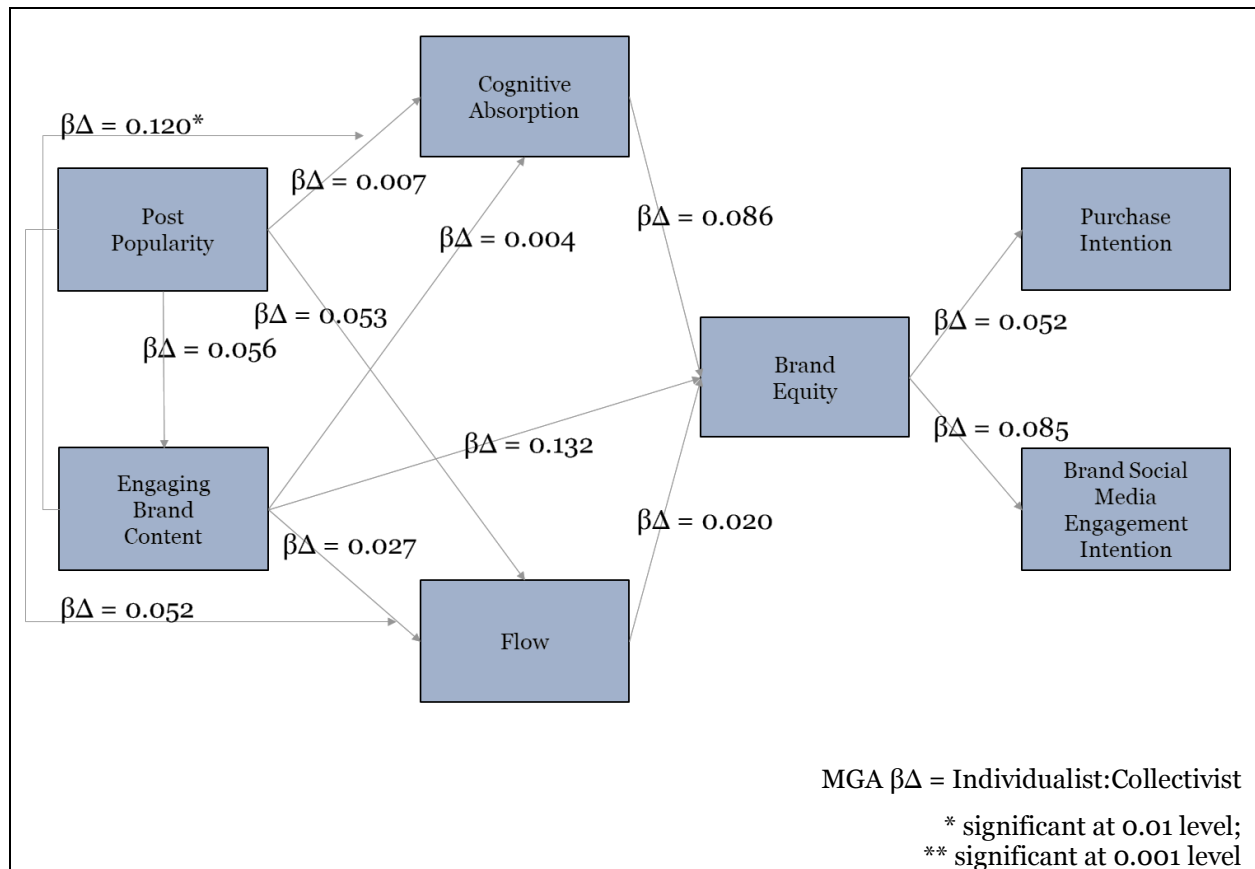


Figure 17. McDonald's Brand Awareness Post, Culture Groups, MGA Path Differences

Finally, the idea was entertained, since all of the elements were present, to consider engagement groups, and let Culture be a moderator, and Post Popularity an independent variable, on only the McDonald's first Brand Awareness posts.

Table 17. McDonald's Brand Awareness Post, Engagement Groups, MGA R² Means

Construct	McDonald's Page Liked	
	No	Yes
Cognitive Absorption	0.002	0.002
Flow	0.003	0.003
Brand Equity	0.234**	0.439**
Purchase Intention	0.529**	0.608**
Brand Social Media Engagement Intention	0.329**	0.392**

* significant at 0.01 level; ** significant at 0.001 level

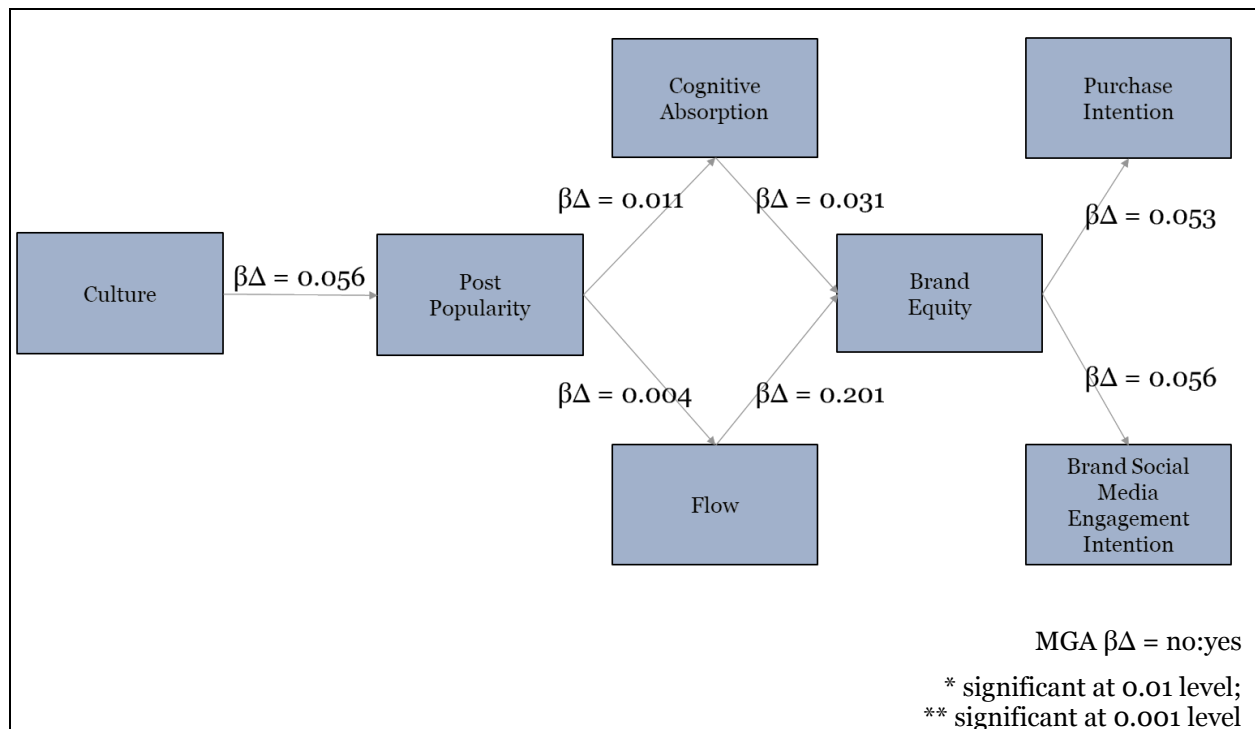


Figure 18. McDonald's Brand Awareness Post, Engagement Groups, MGA Path Differences

This led to the conclusion that Culture is not a moderator, and Post Popularity does not have a significant effect on Brand Equity or its antecedent variables considered in this study.

SIMPLIFIED MODEL

When all else fails, perhaps the model should have been backed up and looked at piece by piece to begin with. For one final idea and attempt to finding something, the Culture variable was set aside. The model was broken into two simpler models: one for just the Brand Equity and its antecedents, and one for engagement levels of the posts, Brand Equity, and Purchase Intent and Brand Social Media Engagement Intent. This latter model is similar to the prelim study model, with the exception of Brand Attitude being exchanged for Brand Equity.

Because the idea was entertained earlier that perhaps flight purchases were too high of a purchase decision to expect any change of brand engagement based on one post, only the McDonald's three posts were used for the simplified model. Sample size remains the same ($n = 858$), but the number of exposures is now three per person as opposed to six. To double check that there is significance between initial interactions with McDonald's brand and after all of the post exposures, another ANOVA test was run to compare the means between these two groups. Again significance was found ($F = 213.316$, $p < 0.001$).

For the first simplified model, there was a significant relationship between Engaging Brand Content and Brand Equity when low ($p = 0.015$) or high ($p = 0.049$) metrics were shown to participants. When looking at these two groups together (the third set for $\Delta\beta$ in Figure 19 below), when participants were shown low Community metrics there was a stronger path coefficient (0.081), but when shown high metrics, there was a negative relationship (path coefficient = -0.066). Additionally, for the relationships from Brand Equity to Purchase Intention and from Brand Equity to Brand Social Media Engagement Intention, the paths are significant across all groups ($p < 0.001$).

Table 18. McDonald's Posts, Post Popularity Groups, MGA Community Metric R² Means for Simplified Model

Construct	Metrics Shown		
	None	Low	High
Brand Equity	0.003	0.007	0.005
Purchase Intention	0.684**	0.681**	0.642**
Brand Social Media Engagement Intention	0.383**	0.359**	0.369**

* significant at 0.01 level; ** significant at 0.001 level

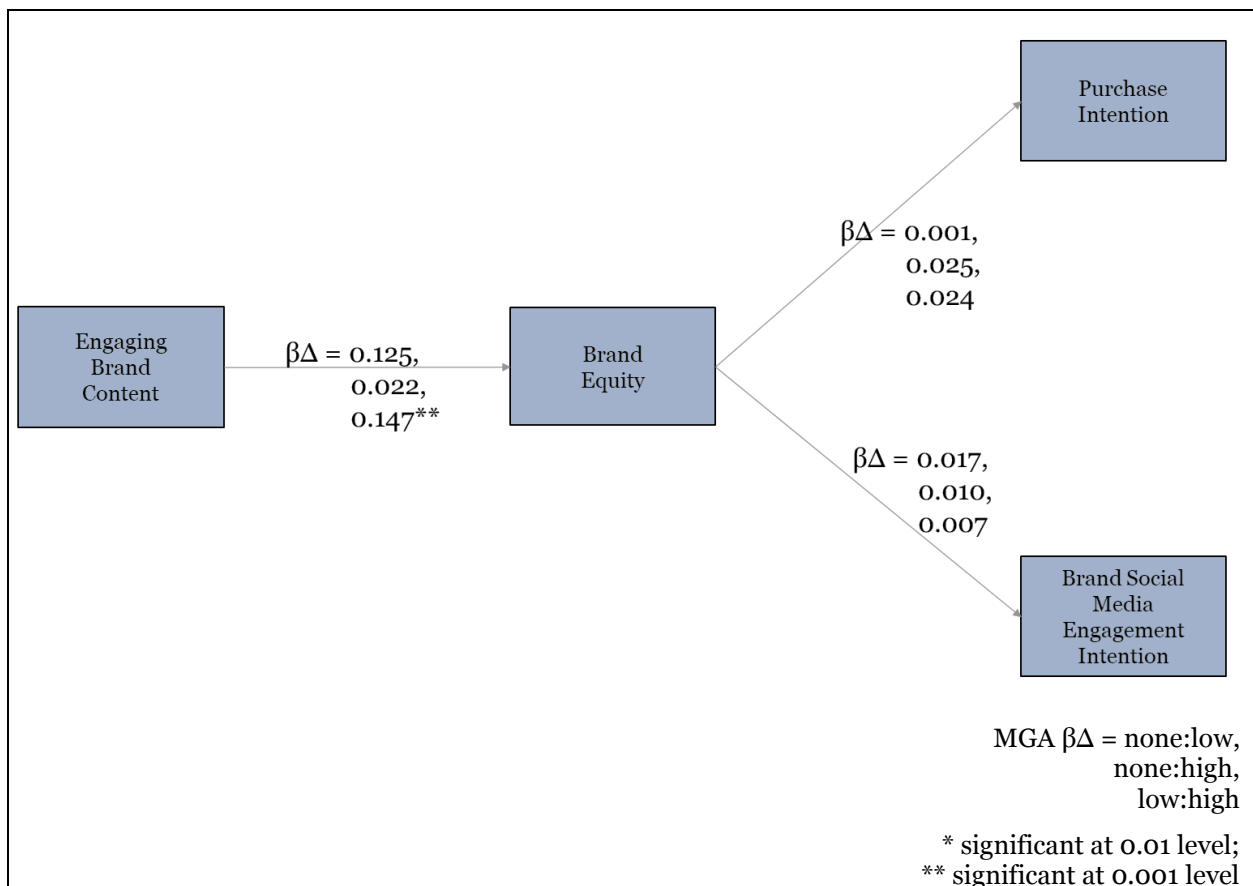


Figure 19. McDonald's Posts, MGA Post Popularity Metric Path Differences for Simplified Model

For the second simplified model (see Table 19 & Figure 20 below), no significant relationships were found from Engaging Brand Content to Brand Equity. When no Post Popularity metrics were shown versus low Post Popularity metrics being shown to participants, there is

significant positive relationship between Cognitive Absorption and Brand Equity. When looking at these two groups together (the third set for $\Delta\beta$ in Figure 20 below), when participants were shown no Community metrics there was a stronger path coefficient (0.075), but when shown low Community metrics, there was again a negative relationship (path coefficient = -0.053). Although not significant, this positive to negative relationship also holds true when considering no Post Popularity metrics being showed compared to high Post Popularity metrics being show (path coefficient = -0.003). Paths from Engaging Brand Content to Cognitive Absorption and from Engaging Brand Content to Flow show significance when low Post Popularity metrics were shown to participants ($p = 0.002$ and $p = 0.044$, respectively). Additionally, the path from Cognitive Absorption to Brand Equity is significant when no Post Popularity metrics are shown ($p = 0.034$). Interestingly, all paths from Flow to Brand Equity show significance ($p < 0.001$ for all). Alas, the results are all over the place and confusing, and little can be found in relation to the Post Popularity metrics and participant reactions to them, which leaves one to wonder why they are included on Facebook posts to begin with.

Table 19. McDonald's Posts, Post Popularity Groups, MGA Community Metric R^2 Means for Brand Equity Antecedents

Construct	Metrics Shown		
	None	Low	High
Cognitive Absorption	0.002	0.012	0.005
Flow	0.003	0.006	0.003
Brand Equity	0.445**	0.288**	0.342**

* significant at 0.01 level; ** significant at 0.001 level

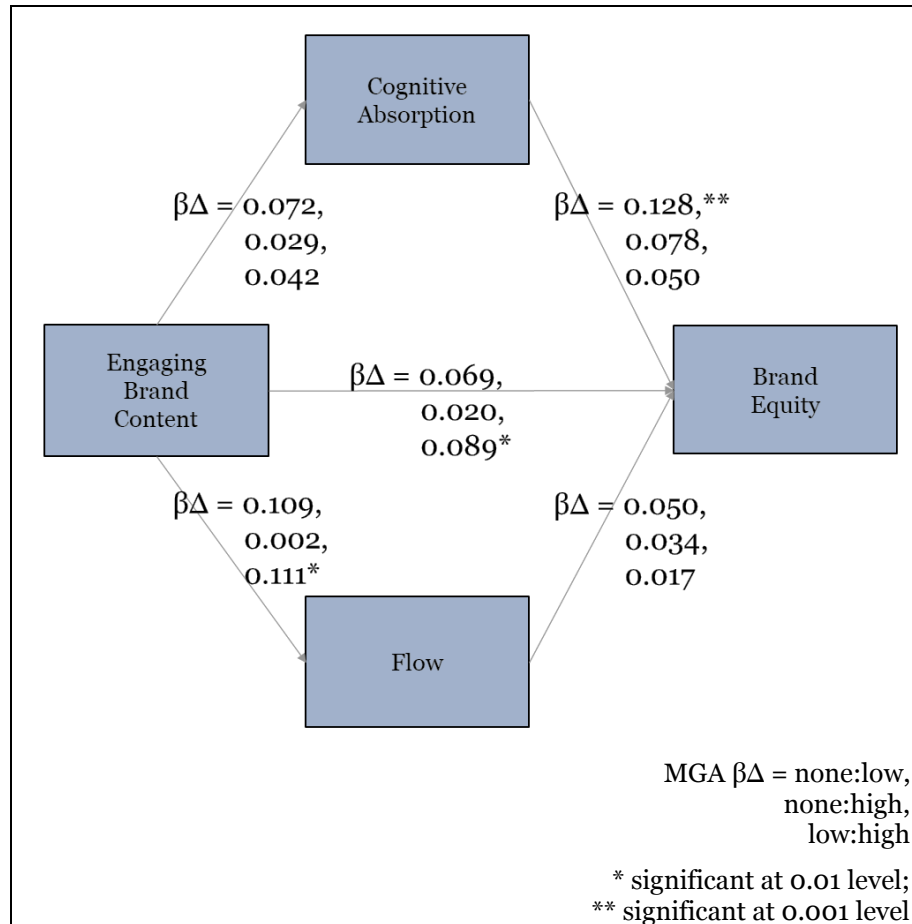


Figure 20. McDonald's Posts, MGA Post Popularity Metric Path Differences for Brand Equity Antecedents

Additionally, it is interesting to note that if isolating the groups that initially showed no engagement with the McDonald's Brand from those that had previously Liked the McDonald's brand page, there is a significant difference, as mentioned earlier. However, it is also interesting to note that when considering the first simplified model (see Figure 19), there is a significant difference between these two groups from Brand Equity to Purchase Intent ($p < 0.001$), with the initially no interaction with the brand Facebook Page having a stronger path coefficient 0.080 higher than those who had previously Liked the McDonald's Brand Page on Facebook.

SUMMARY

After considering the different models investigated, only the simplified model in Figure 19. McDonald's Posts, MGA Post Popularity Metric Path Differences for Simplified Model, which matches the comparison research in Coursaris, et al, 2014a, is able to show an adequate Standardized Root Mean Square Residuals value (SRMR = 0.065). Hu & Bentler's 1999 study recommends a threshold of 0.10 or of 0.08 to be considered a good fit. All other models had SRMR values over 0.196. The rest of the Goodness of Fit metrics can be seen in Appendix H.

CHAPTER 5

DISCUSSION

Industry continually strives to quantify their work. A company's return on investment is a vital output for understanding the perplexities of investing in employee work tasks to generate consumer interaction with the brand, on a virtually free platform at that, and show if there is any value to the work being done to begin with. Building on previous research, this study used a simulated Facebook environment combined with survey response to further develop understanding of Facebook engagement metrics, consumer interactions, and the branding effects of social media. Current industry emphasis on qualifying the value proposition of social media activities and quantifying the return on investment in such activities provided the motivation for this study.

In terms of significant findings, these were only found when considering the relationship between Brand Equity and Purchase Intent ($t = 118.759$, $p < 0.01$), as well as Brand Equity and Brand Social Media Engagement Intent ($t = 64.312$, $p < 0.001$). Now validated on a general population sample, these results were initially also found in the Coursaris, et al. 2014a study. Due to the length of the experimental survey, analyses were also run on only the first Brand Awareness posts for both brands in an attempt to see if there was any significance before any participant fatigue, if there was any, could be present. These findings held true both for the full study observations, as well as when only the first two posts were examined.

In terms of the research question of what mechanisms account for the link between brand equity and engaging content, flow was established as a significant predictor of brand equity ($\beta = 0.541$, $p < 0.001$). These findings also held true when only the first two posts were analyzed.

When the model is broken down and each component analyzed by its manipulation group, all paths in the model can be observed as significant with the exception of the cognitive absorption dimension and its impact on brand equity. Cognitive absorption was only found to have statistical

significance in the relationship with brand equity in the treatment group that was shown no Post Popularity engagement metrics. Interestingly, only when no Post Popularity engagement metrics are shown to participants is there also a significant relationship from Engaging Brand Content to Brand Equity.

Similarly, Post Popularity metric manipulations cause no statistically significant effects on either of the dependent variables as a moderator for Brand Equity on Purchase Intention ($t = 0.013$) or Brand Equity on Brand Social Media Engagement Intention ($t = 0.884$). However, Post Popularity metrics do act as an interaction construct on Engaging Brand Content and Brand Equity ($\beta = 0.029$, $p < 0.01$). So while community does not appear to have an effect on the possibly tangible outcomes of consumer interaction and purchase intentions, it does possibly affect whether or not engaging brand content has an effect on brand equity. Since community/ Post Popularity determines what is engaging brand content, this interaction essentially makes sense. From here, a final test was run to find that Post Popularity metrics have a statistically significant effect on flow directly for both McDonald's ($\beta = 0.084$, $p = 0.017$) and Delta ($\beta = 0.085$, $p = 0.009$) when looking at just the first two Brand Awareness posts across all manipulation groups. Clearly Flow is a significant construct and variable when looking at social media influences and behaviors which warrants further research and discussion.

Because it is a relatively new metric, no research exists as to why a relationship between Brand Social Media Engagement Intention and Purchase Intention exists ($t = 8.743$, $p = 0.000$) and vice versa ($t = 9.808$, $p = 0.000$). Huang's 2011 study showed that online involvement has a moderating effect on purchase intent, but this is not enough to explain intention in a way that could lead to understanding the return on investment for social media. Additionally, it was already established that Brand Equity has a statistically significant effect on Brand Social Media Engagement Intention ($t = 64.312$, $p < 0.001$), it turns out this vice versa relationship is also significant ($t = 25.000$, $p = 0.000$). So clearly, there are other factors impacting this Social Media

Engagement Intention metric which are outside the scope of this study but would be fascinating to learn more about what is going on and impacting this measure.

While brands increasingly rely on Facebook provided metrics – such as post Likes, Comments, Shares, the number of Fans, the number of Followers, etc. – such metrics have yet to be effectively validated. This study actually tested the effectiveness of these metrics by manipulating the participant's exposure to certain engagement metrics and posts, while observing their interaction with the posts and engagement intent. To follow is a discussion of the study results and setup, as well as possible future research areas to enhance future environment simulations and studies in this area.

LIMITATIONS

While it is disappointing that this study was not able to establish Post Popularity metrics being exposed or not exposed as a significant factor in consumer brand relations, several updates to the study parameters might help future research to try and understand what is really going on in the social media world and, therefore, this mode. Limitations can be found in the demographics area, including the participants, namely, Mechanical Turk workers; the dimensions used for surveying participants on the cognitive absorption construct; as well as the selected brands and their relevance to participants. The discussion of these areas is to follow.

Given the length of the experimental survey, future research could either break the study into smaller sections, perhaps testing just one piece of the Buying Behavior Model (Consider, Search, Choose, and Buy) at a time and ensuring full understanding of consumer effects, or building a longitudinal study to break the responses up over time (Wind, 1978). As it currently stands, perhaps the results from Coursaris, et al. 2014 were a stronger representation of consumer brand effects. That study was able to establish that prolonged exposure to high engagement brand posts does show an increase in brand attitude (Coursaris, et al., 2014).

DEMOGRAPHICS & PARTICIPANTS

Having no baseline measurements for Brand Equity or Purchase Intent creates an area that cannot be analyzed with these results. With no established baseline in these variable areas, there is no way to tell if participant Brand Equity and/or Purchase Intent changed during the course of the experiment, after multiple post exposures for each brand. This decreases some of the replicability to allow this study to be compared to the Coursaris, et al., 2014 results which were able to establish prolonged exposure to brand messaging as an indicator of increased brand attitude and purchase intention. This leaves an opportunity for a future study.

This research was originally proposed with a collective versus individualistic cultural component as part of the analysis, which is why these scales were included in the survey questionnaire. Using this scale, since there was a normal distribution of these individuals throughout the 858 participants data used, initial analyses were run to see if perhaps there was such a individualistic versus collective society effect, while incorporating the Post Popularity manipulations. Much to the researcher's surprise, at least for this United States data from Amazon Mechanical Turk workers, there is not a significant difference between these two cultural groups. As soon as the Italian data is available for analysis, the comparisons will begin between the two countries to see if perhaps a more collective society is a stronger reflection of cultural differences as well as to see if they are more susceptible to Post Popularity metric exposures.

However, while there appeared to be a normal distribution in the cultural and personality scale areas for all participants, this turns out to not be necessarily true when looking at these scales by manipulation group. The same can unfortunately also be said for the overall participant age distributions in each manipulation group. Demographic distribution break downs by age in each of these areas can be seen in Appendix G. Significant differences can be found between the group that was shown no Post Popularity Metrics and the group that was shown true Post Popularity Metrics (high values for high elicited engagement posts, low values for low elicited engagement posts).

While it was exciting to use a general population sample for this research, one thing that might be considered a down fall of using Mechanical Turk participants is that they could be looked at as completing the survey just for the money. But in fact, in a 2010 study by Paolacci, Chandler, & Ipeirotis, only 13.8% of United States based workers report Mechanical Turk as their primary source of income, 61.4% said that earning additional income was an important driver for participation, and 69.6% of respondents consider Mechanical Turk a fruitful way to spend their extra time. Still, as mentioned earlier, attrition can be higher for Mechanical Turk studies, and researchers must be careful to compensate correctly to value participants time (Rand, 2011). Ultimately, it is a “bang for your buck” type system. Participants want to complete the most Human Intelligence Tasks (HIT), in the shortest amount of time, in an attempt to make the most money.

Consequently, this could have contributed two reasons that there might have been a possible “fatigue” in this study. First, perhaps participants did not think they were getting adequately compensated. To this point, participants were compensated \$1.10 for participation, which at the time, was considered more than fair. Second, perhaps participants could have been looking to move on to the next HIT sooner rather than later, in which case they were breezing through the study, not giving the questions the time they deserved. Rader & Gray’s 2015 study mentions that Amazon Mechanical Turk workers might be more attentive toward things in their News Feed. Maybe participants just knew they would not proliferate the content put before them in this study. Without further metrics and/or interviews to investigate, conclusions cannot be made at this time.

COGNITIVE ABSORPTION & BRAND EQUITY

Additionally, cognitive engagement was not measured in this study. With several Facebook engagement metrics already built into this research to validate Coursaris, et al’s (2016) Weighted Engagement formula, an additional one was not added. However, by omitting cognitive

engagement as a specific measure included in the survey, this research lacks measuring the enjoyment aspect of the cognitive absorption construct. While the state of playfulness is considered identical to the flow experience according to Agarwal & Karahanna's 2000 study, Webster & Ho's 1997 study emphasized the enjoyment aspect of cognitive engagement as the flow experience minus the control aspect. It could basically be considered more free form participation/enjoyment. Engagement is also considered multidimensional and to encompass the intrinsic interest, curiosity, and focus in the five dimension conceptualization of the cognitive absorption construct (Agarwal & Karahanna, 2000). In Agarwal & Karahanna's 2000 study, cognitive engagement was positively affected by perceived media richness, interactivity of teaching style, and classmates' attitudes towards the technology being used. Essentially, not including cognitive engagement scales in this research was an oversight, which will be corrected in future research to increase validation of the new metrics and strengthen the investigation into the Cognitive Absorption construct.

Also it is important to note, that upon further consideration of the Chang & Liu (2009) Brand Equity scale, perhaps this wasn't the best choice. The scale was chosen as a shorter, reliable way to investigate brand equity. However, while the questions touch on the areas that comprise brand equity, they do not fully encompass the scale items that are traditionally used to measure brand equity. Therefore, for this study, brand equity cannot measure all of the different facets that traditionally make up brand equity (i.e. brand attitude, brand image; Faircloth, Capella, and Alford, 2001). This therefore hinders this study's ability to further investigate what might be going on with the lack of significance areas since there is an inability to breakdown the components from brand equity, which is usually treated as a second order construct.

SELECTED BRAND RELEVANCE & SIMULATED ENVIRONMENT

Additional explanation of possible variance for the constructs can be attributed to environmental factors outside of the focus of this study. This study concentrated on proactive,

brand initiated communications and posts selected for the engaging brand content stimulus condition of this study were hand-picked to be positive in nature, thus essentially sanitizing the data against negative response. Should a participant have a preexisting negative attitude towards a brand, this was not accommodated for. This study did not look at increasing loyalty or spending over time, but if it had, consumers who are shown to have already engaged with a brand might show an kinship towards that brand and therefore no change would be observed, and vice versa (Baird & Parasnis, 2011).

Similarly, while the brands picked for this study were done so to provide the largest variety of purchase making decisions possible for analysis, this study did not consider all of the possible factors that the realism of the brands could cause. For example, one participant voluntarily submitted email feedback after completing the survey, in which she indicated that her “sole decision maker when I fly is the cost:”

I wish there had been places to comment why I answered some of the questions the way I did. For example, I fly often, but my decision maker on what airline I use is price and only price. Therefore while I would be happy to use Delta, if United had a better price, I am not going to think twice about using Delta.

– Michelle

Michelle also indicated that her responses to the survey were based on the Delta brand in front of her. Therefore her results would align with the intent of the study. But while a great idea, and using pre-tested posts for engagement positioning, perhaps the specific brands should have been disguised under dummy brands. This would have allowed the study to maintain the purchase decision making objectives of looking at consumer engagement intents of low purchase involvement fast moving consumer goods versus airline tickets which generally require more investment in high purchase involvement decisions, have regional considerations, and could have travel frequency implications on the results. However, the definition of brand equity as the brand name’s added attractiveness to the consumer for the product or services, as defined by Chang & Liu (2009) was used for this study (see Table 1). This definition possibly removes the ability to use a dummy brand name since so much emphasis was potentially put on the brand name in this

research to impact brand equity. Ultimately, perhaps there are just too many external factors that cannot be controlled for to effectively use airlines posts in conjunction with fast moving consumer goods posts. Ultimately, similar posts were used to compare results to previous research, but this small tweak of the brand and industry selection might be something to consider for future research.

Additionally, in the sanitization of the data, while the metrics were kept on the brand posts in the manipulations that were shown these numbers, all comments were removed from the post. In doing this, the posts were neutralized to one aspect of the user-generated content that might cause participants to want to interact with the post. As referenced earlier, Bruhn, Schoenmueller, & Schafer's 2012 study also showed that user-generated content on social media platforms has a greater influence on brand awareness and brand image in the tourist industry. While the removal of these comments would help participants conclude for themselves if they would like to interact with the post without peer influence, something for another study, the lack of including them could have affected the results in testing overall brand equity.

It was also considered, that perhaps the single exposure setting of this study was not as conducive to analyzing large purchase decision products, such as Delta. For such an investment in time and money for people to consider making, three post exposures in one sitting isn't going to change a purchase decision right then and there; especially when there is established feedback that cost is too important of a factor when making these types of decisions. Perhaps a longitudinal study, and/or spaced out exposure to brand posts like in the Coursaris, et al. 2014a study could provide better results in this area.

Also interesting to note, are the types of social networking sites and usages the participants indicated. Only 3.8% and 16.6% of participants engage in Virtual Social Worlds (i.e. Second Life) and Virtual Game Worlds (i.e. World of Warcraft), respectfully. Considering that these are possibly areas with higher cognitive absorption and/or flow possibilities, one has to wonder if perhaps this research should have worked harder to target participants in these areas to see what

kinds of effects that group produces. Similarly, this research looked at posts from the Fast Food and Airlines Facebook Page categories, of which the sample population had only 27% and 13.5%, respectively, of participants indicating that they had Liked these pages. Due to the time of year the study was conducted, in the summer, not during any type of sport season start, such as baseball, it could be suggested that sports were not a “top of mind” consideration for people to be thinking of, yet 35% of participants indicated that they had Liked a sports team page, making it the third highest preference indicated. However, looking at these results, perhaps this research should have looked at Media/Television Actors or posts from Television network pages. This would have referenced 82.6% of respondents and perhaps would have been more immediately relatable when talking about community effects. Not to mention, when discussing a community of people-type environment with participants who are people, this would have been posts by a brand that were also about a realm of people. Just an idea; it is not sure if this disconnect had anything to do with the results.

Considering these results, which are summarized earlier in Table 9, future research could test this research model on media/television actor, television networks/channel, sports teams, and/or big box retailers Page posts to see if conclusive results for post popularity metric manipulations could be observed. Ironically, Facebook Page Posts by Walmart were part of the original analysis for comparison with this study, but they were removed with the idea that keeping purchasing decision extremes (McDonald’s and Delta Airlines) would produce better results. Ideally, an adaptive environment would have suited this type of study better. By asking participants what pages they have previously liked on Facebook, the survey questions could adapt what brands are displayed to the participants. This would increase the relevancy to them, and possibly generate more interaction and/or Engagement Intent with the posts displayed before them.

On seventeen posts, fifteen participants clicked Like and then Unlike. While not statistically significant by any means, it was interesting to see that apparently two participants are

either forgetful or tend to change their mind, and nine of the seventeen posts were ones with the metrics switched (five high engagement posts showing low engagement metrics, four low engagement posts showing high engagement metrics). Five of these answer changed received comments, which are best summarized by one of the participants who received the switched metric manipulation: “Yeah, no.”

That being said, perhaps environmental updates could have enhanced the experience with this experimental survey platform for participants. One suggestion would be to create an adaptive environment that asks more upfront questions to the participants. Using their response, the simulated page would update to their preferences. This would allow areas of the simulation to be more relevant to them, and possibly increase interaction with the created Facebook Page. Included in these questions could be to name a few of their friends which would then allow for displayed posts to not only show Post Popularity metrics, but to also incorporate friend names to help build the immediacy of the peer interaction with the posts.

Another update to the experiment would be to create a lab experiment in which participants were invited to more of a usability study environment, and a researcher would walk them through using the simulated environment. This would allow for an in person confirmation that their interactions with the tested posts absolutely do not connect to their personal Facebook account, and therefore can be interacted with freely; if that concern was part of the problem. The environment itself was not usability studied for this research project; perhaps there is something in the interface that could have been updated to facilitate more self-interaction with the posts by participants. All considerations for future studies!

THEORETICAL IMPACT

Interestingly, this study was not able to establish engaging brand content as having an effect on brand equity. Coursaris, et al. (2014) was able to establish a relationship from engaging brand content to brand attitude, an antecedent of brand equity. This study was, however, able to establish

engaging brand content as affecting the proposed antecedents of brand equity, cognitive absorption and flow. This would be great, except for the fact that only flow was a significant predecessor for brand equity ($\beta = 0.541$, $p < 0.001$) based on the original model from these study results.

SELF-REPORT VS SIMULATION

In terms of evaluating self-report metrics against a simulated environment, this research is not able to do that. If it is considered that each participant was exposed to six brand Facebook posts, and each post had six possible interactions in the simulation, that's 36 possible clicks per participant. Times 858 participants, is 30,888 possible interactions. Seven posts had hyperlinks, so seven times 858 participants plus 30,888 is equal to 36,894 total possible interactions in the simulated environment. Through the entire study, for 858 participants, only 634 interactions were performed, resulting in a 1.72% response rate. Granted, the whole point of the simulation/study posts was to ask if participants would interact with the posts. But when it is considered that in the self-report metrics, the results can cover 634 interaction intentions within the first two posts, these measurements are not comparable. While participants do have a tendency to incorrectly measure their own self actions (Bailenson, et al., 2004), it is doubted that less than two percent completion rate could be anything comparable as a threshold of self-report versus behavior accuracy. In actuality, this probably could have been predicted. Gummerus, et al.'s 2013 study found that only a small portion of customers actively interact with social media content and other member's commentary. Most people just use brand pages as information sources for consumption, not for contributing too (Gummerus, et al., 2013).

One explanation for the lack of interaction with the simulated environment could be different uses and thought processes for interacting with social media. When scrolling through news feeds, a participant could read something, make a mental note that they like it, and in their mind – that's it! They have interacted with the post, even though they failed to leave the physical breadcrumb of that thought on the post for the rest of the world to see. This could fall under Online Disinhibition Effect, in which face to face social customs are no longer considered necessary by

some people on the internet, such as acknowledging understanding/reading something and therefore engaging online (Suler, 2004). As Baird & Parasnis (2011) put it, despite the rapid growth of social media adoption, few consumers regularly engage by responding to posts and interacting with the media. Some people could be more interested in not spreading their digital thumbprint and therefore do not leave interactions on pages so that their profile is not associated with that digital trail. All of these ideas require further investigation into psychological processes and mental models that are being used while people interact with social media in general and/or Facebook. But they would make an exciting future study!

Another explanation of this lack of consistency between the simulation and self-report areas comes from Berkowitz's 1989 studies in experimental social psychology. He proposes that attitudes people find easy to explain, are therefore easier to self-report on because they should be unaffected by any reasons. While it would make sense that whether or not a Facebook post should be shared or interacted with should be a gut decision, perhaps there are additional social pressure/awareness issues that should be further analyzed and looked at which were not the scope of this research. Or, at the very least, the scales for gauging brand attitude used in Coursaris, et al. (2014) could have provided some insight into this area of social psychology in a social media platform. This is a very long way of saying that for this project, sorry, but the simulation did not work and was therefore not further analyzed.

POST POPULARITY/COMMUNITY METRICS

It is surprising to find very limited significant relationships within the manipulation to display Post Popularity metrics. Consumers are able to provide 22 times the persuasive effect than marketers can on other consumers (Goh, Heng, & Lin, 2013). Why is it then that no effects were observed from this manipulation as either a reflexive variable or as a moderating effect?

Perhaps the purest test of some type of effect as to whether or not Post Popularity should be visible to Facebook users, is the fact that when isolating the manipulation group that was shown

no metrics, the model can be validated for significant relationships among all of the paths. Looking at the isolated model this way, the various Coursaris, et al. papers findings using student samples can be validated on a general population sample, which was one of the desired objectives of this research. But it leaves one to wonder what the point of showing these Post Popularity is for. Could they be there to show return on investment by letting people as well as brands know how far their interactions have reached? While this works conceptually for a competitive analysis, these engagement measures are not the true impressions and reach metrics only shown to the actual Page owner. Is there something more to the psychological aspect of showing these metrics that this study was just not able to capture? There is definitely more to be looked into here to validate that showing these metrics is not a complete waste of coder time and bogging down user cognitive resources in the social media environment.

Several ideas are entertained as to why this lack of effect might have happened. First, perhaps brand posts alone do not provide enough of a problem solving aspect for information seeking to attract consumer need to process information (Davis, Piven, & Brazeale, 2014; Hennig-Thurau, et al., 2010). Facebook Page posts put forward more informative information and appear, or not, depending on the Facebook algorithm, in a user's News Feed. Perhaps this passive strategy for unobtrusively consuming brand information, given that most users see brand pages as a source of information only (Gummerus, et al., 2013), is not sufficient to create strong enough information processing for common social pressures to take effect. However, the cognitive flow model asserts that higher rates of interaction with a technology can increase the number of user challenges which might then allow information processing, thus confusing the matter once again (Cheng, Chieng, & Chieng, 2014; Oh & Sundar, 2015). Huang (2011) asserts that involvement is a key antecedent of flow, which would explain why flow always has a significant effect on brand equity. And thus, we are stuck in circular logic.

Second, perhaps the follower base for the brand pages was too large to have an immediate effect on Post Popularity to participants. While the brands and posts selected were attempting to

accommodate all possible purchase situations (high involvement, infrequent purchasing with Delta; low involvement, frequent purchasing of fast-moving consumer goods with McDonald's), since this was the first look into community effects on consumers in a social media environment, no attempt was made to vary the online brand community structure. Since it is millions of strangers engaging in these posts, perhaps this did not create enough relevancies to affect the participants. Or, both brands have to stay relevant to a large number of people. Maybe this makes it harder for individuals to feel connected to the brand since they do not market to their specific interests directly. Both Pages are administered by McDonald's and Delta Airlines themselves, allow for user feedback and posting to the Page, and maintain a follower base of more than one million. Additionally, Wirtz, et al. (2013) proposed a framework for categorizing brands by funding and governance structures based on the community or the brand/firm controlling these entities (see Figure 21). To the best of our knowledge, McDonald's and Delta Airlines are administered and controlled by the brand in both the areas of funding and governance, thus putting them in the top right corner of the quadrants. Perhaps if a brand on the other side of the Funding/Governance quadrants, towards more community management and funding and farther away from Brand/Firm management had been analyzed, a community effect might have been observed.

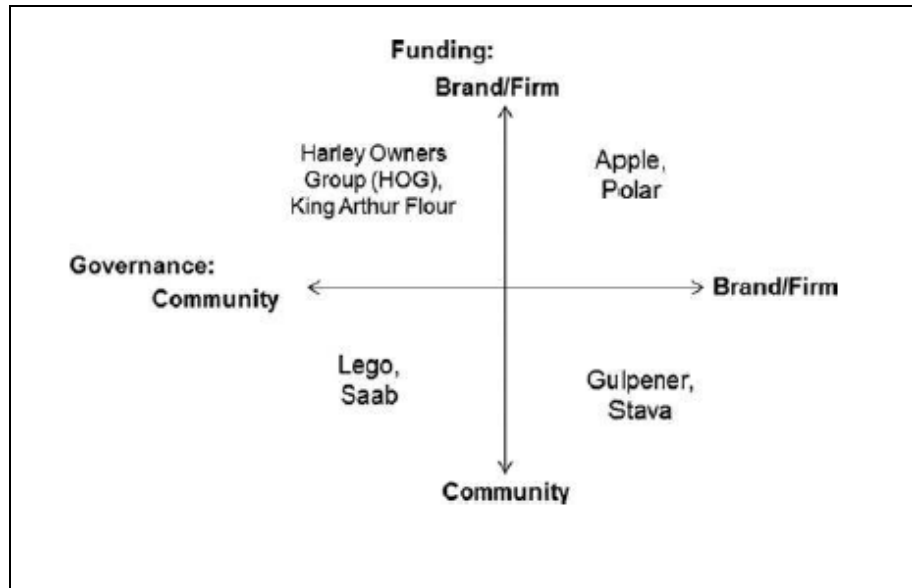


Figure 21. Funding and Governance Combinations of Online Brand Communities

The issue with brand community size could, however, also work with Dunbar's 1998 idea of weak versus strong ties idea. Robin Dunbar (1998) calculated that humans can handle a social group size of 150 people (with a confidence interval of 95-230 people) and maintain stable, strong relationships with these people. This would suggest that users can better handle smaller communities, and that perhaps a community effect might have been observed in the low metric manipulations. So can engagement metrics translate to community size? Perhaps, but maybe not. Engagement metrics are also a factor of the entire Facebook reach for a post. But it does bring into question the community size – which this study did not vary so that an overall effect could first be tested. But then, if we look at a more recent counter argument to Dunbar's research and apply the idea that weak ties are more important in a social media, modern world, where large networks are king, then the present research again does not make sense that there is no effect of displaying Post Popularity metrics on brand communication posts (Dunbar, 1998; Morgan, 2010).

Another idea could be the difference between online asynchronous activities, and bonding synchronous activities. Online activities are asynchronous and therefore do not fulfill the same bonding and social needs. Because of the lack of physical proximity of participants in an online

dialog, it is difficult to test for this effect and to design an experiment that can accurately gauge if this is somehow causing a validity issue. One can only wonder if the LOL acronym or other forms of written humor have become acceptable, psychological replacements for the act of laughing, and if the two cause similar or different brain wave activities and bonding.

Along a similar line, in 2010, Krienen, Tu, and Buckner found that the medial prefrontal cortex (MPFC) of the human brain activates and reacts differently to people we know and that we pass judgement on people based on how similar they are to us. Huang (2011) shows the same relationship with organizations that people identify with brand characteristics they can easily relate to. Although his credibility has been questioned in recent years, Lehrer proposed in 2010 that perhaps Krienen, Tu, and Buckner's results are the reason why some people check their Facebook page so regularly: we care about people we know, and perhaps it activates our MPFC as well. While just questions at this point, it would be interesting to see if in fact social media can cause the same neurological and psychological responses as synchronous, in person bonding activities.

Further, to tie these last few points together, Animesh, Yang, and Oh conducted a study in 2011 in which they observed that regular communication with other participants in a virtual reality environment made it easier to spontaneously have conversations and overcome any difficulties in the formation of social ties. This, in turn, they noticed had an impact on decreasing any inhibitors of cognitive flow, the sense of intrinsic enjoyment from interacting with a technology (Animesh, Yang, & Oh, 2011; Animesh, et al., 2011). Conversely, infrequent participants had stronger barriers to create social ties and decreased sense of flow. So basically, this establishes flow as related to social presence (Animesh, Yang, & Oh, 2011). While flow was considered in this study as a predecessor to brand equity, it might be interesting to see what relations Post Popularity metrics have on flow as a dependent variable, and if these effects and influences hold true in a social media environment. The results of this research already establish

flow as a statistically significant antecedent to brand equity thus forming the basis of cognitive flow research in the social media realm.

However, ultimately it is possible that perhaps Post Popularity was operationalized correctly, but conceptually misguided. The definition of community engagement, specified in Table 1, as “the amount of Likes, Comments, Shares a post receives on Facebook” still makes sense for what was being tested in this study. However, perhaps more emphasis should have been placed on the use of the word engagement as opposed to community. In retrospect, page 8 of this dissertation references “The extent to which a social media message is engaging—i.e., resulting in consumer engagement in the form of Likes, Comments, or Shares...” Perhaps the correct phrasing was in the introduction all along. Community implies that there is a presence of people and perhaps they are interacting and communicating together. This is how most of the brand community literature reads (Wang, Yu, & Wei, 2012; Erdogmus & Cicek, 2012; Alhabash, et al., 2013). Pletikosa Cvijikj & Michahelles (2013) describe Likes, Comments, and Shares in terms of “engagement and participation,” construct to describe participant interactions with posts. Ultimately, the term “popularity” was selected to represent the amount of Likes, Comments, and Shares collectively on a post. However, this word still does not seem accurate when considering how Facebook creates exposure of the post by based on its current algorithm settings, because the reach can vary so much. However, it was used in this study to represent the preliminary analysis into community interactions, and further researcher should investigate how to term these metrics as they appear on Facebook Posts.

COGNITIVE ABSORPTION

The overall structure of cognitive absorption as a construct needs further consideration. A relatively new construct to communications and technology use, part of what made initial literature discovery confusing was that the name cognitive absorption is both an overarching construct, as well as a dimension itself in the construct, along with flow and cognitive engagement.

Even Agarwal & Karahanna, who did a lot of the initial research in this area, acknowledged this when they questioned whether flow and engagement are the same dimensions conceptually and/or are empirically distinct in their paper from 2000. Fifteen years later, Oh and Sundar (2015) draw a comparison between cognitive absorption in both the persuasion and human-computer interaction areas. In human-computer interaction discussions, cognitive absorption is the term used. In persuasion studies, the same construct is called elaboration or cognitive involvement (Oh & Sundar, 2015). However, elaboration is described as a divergent process of building issue and experience related arguments, while absorption is described as a convergent process to focus on a single point for the discussion (Oh & Sundar, 2015).

To make matters worse, occasionally cognitive arousal is used interchangeably with cognitive absorption. While cognitive arousal is defined by thinking and mental stimulation to facilitate learning, cognitive absorption is a deep state of involvement or giving complete and absolute attention, specifically with technology. This study looked at cognitive absorption, which makes sense someone could give their complete and uninterrupted attention to highly engaging brand Facebook posts. Whereas, if this study had been looking to see if messages were educating consumers to enhance brand equity, perhaps it should have used a cognitive arousal scale instead.

As mentioned earlier, it is a shame that cognitive engagement dimension questions were not included to measure the cognitive absorption dimension with participants. Considering that the cognitive engagement area encompasses the enjoyment aspect of cognitive absorption (Agarwal & Karahanna, 2000), this study possibly missed a key area the social media experience.

Further consideration should also be given to the area of environment interaction. Oh and Sundar (2015) mention that a consequence of interacting with a site can be that the user pays more attention to the browsing task than what is being requested of them. Therefore, what enhances cognitive absorption can be blurred into the environment, lost in whichever element the consumer is focusing on. Eye tracking software and heat maps would be needed to further analyze this phenomenon. Or, more elaborate browsing capabilities, both through interaction as well as

the ability to scroll through the News Feed of the Facebook environment might be needed. Therefore, while the environment in this research was carefully analyzed for any validity issues and to make sure a true Facebook user experience was being replicated, since the research was on the Page's post and not any of the peripheral area, this area was not coded for interaction capabilities. Therefore, unfortunately, there could still be a problem with ecological validity in this study.

PRACTICAL IMPACT

Practical implications from these results are as follows. Social marketing is an area to communicate on a deeper level with a brand's audience (Hosea, 2011). With the amount of social network uses expected to almost double from 1.7 billion people in 2013 to 2.55 billion people in 2017, it is with due cause that firms learn the ins and outs of their effects of using this type of communication with their consumers (Davis, Piven, and Breazeale, 2014; Mitchell and Olson, 1981; Faircloth, Capella, and Alford, 2001). Stronger Brand Equity, Purchase Intent, and Brand Social Media Engagement Intent results are produced when no Post Popularity metrics are shown. While the Post Popularity metrics serve as a way for companies to conduct competitive analyses, further research is necessary to conclusively decide if these metrics are in fact impacting consumer brand relations. Perhaps it is more pertinent for an organization to focus on their reach and how well they are doing to satisfy Facebook's EdgeRank so that posts can make it into their audience's news feed. Or, interaction with a post is more heavily based on peer connections than this study was able to test for.

This study confirms that engaging content has an effect on consumer Brand Equity, Purchase Intent, and Brand Social Media Engagement Intent within the general public, and not just a student sample as used in Coursairs, et al., 2014a. therefore, practitioners should concentrate their efforts on creating engaging content to attract Facebook users to stop just scrolling through their news feed, and also interact with posts. These results were highlighted in

the significance of Flow, and future research should look into how to break into a cognitive flow cycle enough to encourage this interaction. Ultimately, this study was able to find that if that initial Brand Equity can be built, there is a relationship that this will influence Purchase Intention and Engagement Intention thus possibly creating a cycle of positive consumer engagement, purchase, and ultimately brand loyalty.

CONCLUSIONS

The brands chosen for analysis in this study were based on previous research in the area, in an attempt to validate findings in a general population sample with comparable data. Previous Coursaris, et al., studies have used a student population which, while an excellent starting point, can be construed as an educated, younger demographic, not representative of the general population. That being said, it might be interesting to identify brands to analyze with the consumer base before setting up the experiment as Broyles, Schumann, and Leingpibul (2009) did. Such a set up would increase relevancy to the participants, and ensure they already have an interest in the brands being discussed (Baird & Parasnis, 2011). Building in such a selection bias could allow for an even more neutral sample to allow for testing effects of antecedents of brand equity as well as brand social media engagement intention and community exposure metric effects. Once it is known if such relationships truly exist, then taking that model back to the general public would be a better starting place.

The fact that little can be found in terms of the relationship of Post Popularity metrics to consumer perceptions towards brand posts and brand relationships is puzzling, and leads to so much more interesting research to expand upon this study with. Considering there is a stronger relationship between Brand Equity and Brand Social Media Engagement Intention when no metrics are shown to the participant, why are these metrics even there? Has Facebook included them strictly so that other companies can do competitive analyses among industry brands? How nice of them! It just doesn't make sense; Facebook could just shut down a development area and

save on the overhead costs for implementing these metrics on the page visible to the user. There has to be a reason as to why they are included and further research into consumer cognitive overload and cognitive enjoyment should be done.

This research provides several key findings to marketing practitioners and scholars. First, it validates Coursaris, et al.'s 2014a study results on a general population sample, as opposed to the student sample used in the original study. Second, this study began investigation into understanding antecedents of brand equity. While cognitive absorption could not be confirmed as a statistically significant influencer, several reasons were stated as to why this area needs further deciphering and research to begin with. Cognitive flow was established as a highly likely predictor of brand equity. In a technological environment like Facebook, it makes sense that users would be so lost in the enjoyment of use and thus cognitive flow, that they would develop higher brand equity and, in turn, brand loyalty (something also for a future test!). Third, surprisingly, the presence of community metrics, whether true metrics or switched, was not established as a significant relationship in the model. This leads to the conclusion that perhaps interactions with a post are purely content driven, with limited, if any, environmental factors influencing consumer engagement in the Facebook environment. Fourth, active interaction was not established as an equivocal reflection of self-report metrics for engagement intention.

Brown, Broderick, and Lee (2007) mention that perhaps traditional, offline marketing theories cannot be used to appropriately study online word of mouth communications. The brand takes on too much of a friend role, thus creating a peer scenario instead of a persuasive, higher entity (Wang, Yu, & Wei, 2012). The relationship between brand and computer is multifaceted (Brown, Broderick, & Lee, 2007), and this was more than the current research structure could accommodate. But it made for a wide range of excellent future research ideas!

Further understanding of the Facebook environment is still needed. For while this study was not able to establish community/Post Popularity as a significant indicator of brand social media engagement intention, several companies have actually started pulling away from

Facebook advertising as being “too targeted” and therefore ineffective (Terlep & Seetharaman, 2016; Pan, 2012). If social media’s community engagement metrics are not effective, and consumers and advertisers start pulling away, what does this lead Web 3.0 towards?

APPENDICES

APPENDIX A. MANIPULATION - BRAND FACEBOOK PAGE POST SELECTIONS' ENGAGEMENT METRICS

Table 20. Manipulation - Brand Facebook Page Post Selections' Engagement Metrics

McDonalds	Engagement Condition	Likes	Comments	Shares	Elicited Engagement*
Brand Awareness	Low	2,108	181	41	2,330
	High	7,904	616	267	8,787
Product Awareness	Low	17,856	344	343	18,543
	High	34,181	2,181	828	37,190
Engagement	Low	9,932	497	366	10,795
	High	20,499	571	581	21,651
Delta Airlines	Engagement Condition	Likes	Comments	Shares	Elicited Engagement
Brand Awareness	Low	390	0	26	416
	High	1,844	101	269	2,214
Product Awareness	Low	524	1	38	563
	High	1,949	135	195	2,279
Engagement	Low	160	0	2	162
	High	2,723	314	715	3,752

* Sum of raw number of Likes, Comments, and Shares

APPENDIX B. SIMULATED FACEBOOK ENVIRONMENT

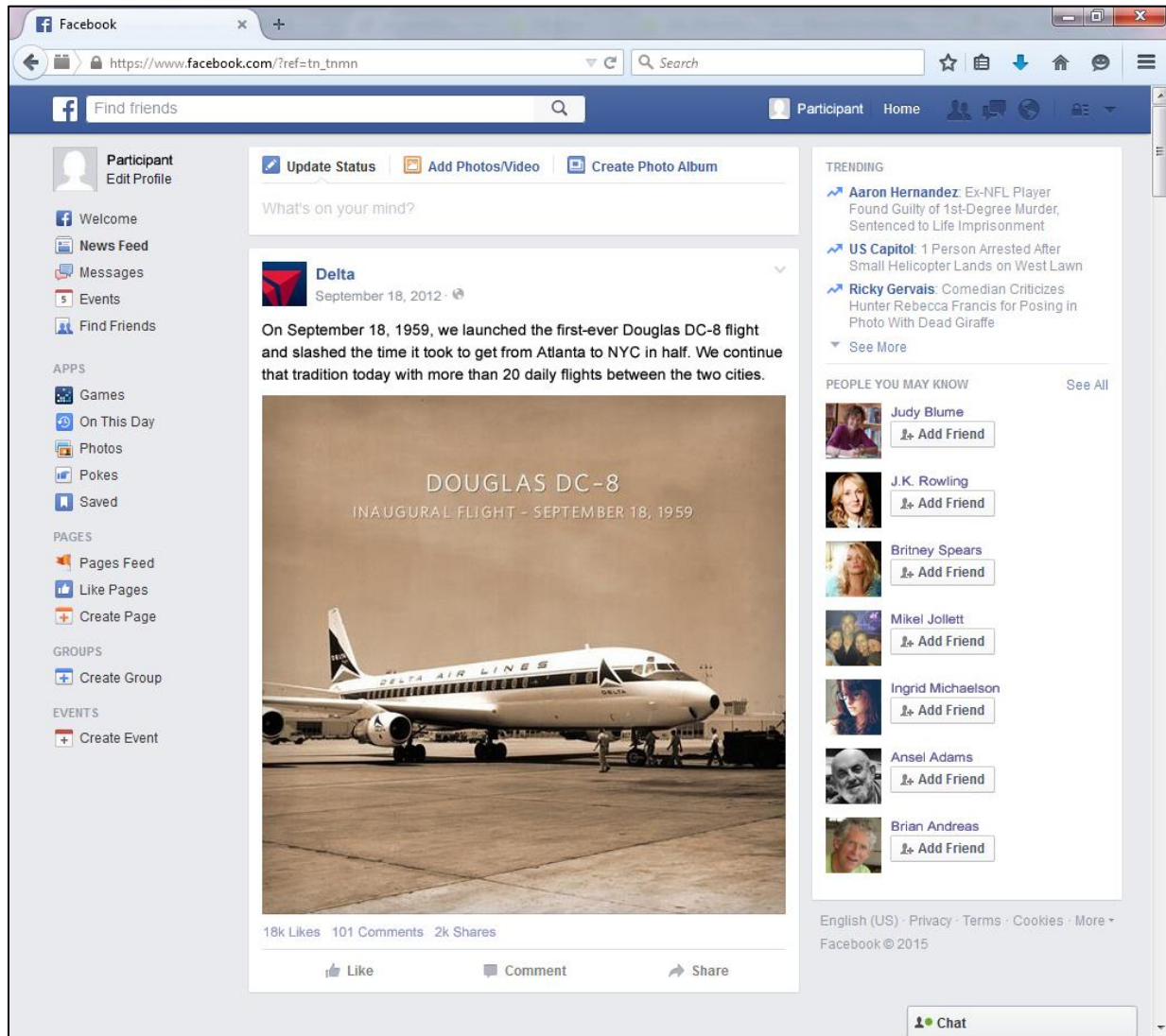


Figure 22. Example of Simulated Facebook Environment

APPENDIX C. FACTOR LOADINGS

Table 21. Factor Loadings

Resources	Items	Loadings		
		No Manipulation	No Post Popularity Metrics Shown	Metrics Switched
Cognitive Absorption	<i>When I was reading the post, I was able to block out all other Distractions.</i>	Formative	Formative	Formative
	<i>When I was reading the post, I felt totally immersed in the post.</i>	Formative	Formative	Formative
	<i>When I was reading the post, I felt completely absorbed in the post.</i>	Formative	Formative	Formative
	<i>When I was reading the post, my attention did not get diverted very easily.</i>	Formative	Formative	Formative
Flow	<i>My imagination is aroused when I interact with the post.</i>	Formative	Formative	Formative
	<i>I feel curious when interacting with the post.</i>	Formative	Formative	Formative
	<i>The interaction with the post is interesting.</i>	Formative	Formative	Formative
	<i>I am absorbed in the interaction in the post.</i>	Formative	Formative	Formative
	<i>It's fun to interact with the post.</i>	Formative	Formative	Formative
Brand Equity	<i>Even if another [food service/airline] offers the same quality of services as [McDonald's/Delta Airlines], I would prefer to use the services of [McDonald's/Delta Airlines].</i>	0.973	0.975	0.976
	<i>If there is another [food service/airline] as good as [McDonald's/Delta Airlines], I prefer to go to [McDonald's/Delta Airlines].</i>	0.976	0.978	0.980
	<i>It makes sense to use the services of [McDonald's/Delta Airlines] instead of services of any other [food service/airline] even if they are the same.</i>	0.959	0.966	0.965
Purchase Intent	<i>The likelihood that I would purchase from [McDonald's/Delta Airlines]</i>	0.957	0.965	0.963
	<i>The probability that I would consider buying from [McDonald's/Delta Airlines]</i>	0.956	0.967	0.961
	<i>My willingness to buy from [McDonald's/Delta Airlines]</i>	0.955	0.967	0.957
	<i>For this particular type of purchase, I would use [McDonald's/Delta Airlines]</i>	0.940	0.951	0.950

Table 21. Continued

Resources	Items	No Manipulation	No Post Popularity Metrics Shown	Metrics Switched
Purchase Intent	<i>My intention would be to purchase from [McDonald's/Delta Airlines]</i>	0.956	0.964	0.963
Brand Social Media Engagement Intention	<i>Considering this [McDonald's/Delta Airlines] Facebook Page post, how likely are you to do each of the following?</i>			
	Like this post	0.849	0.863	0.850
	Comment on this post	0.849	0.861	0.843
	Share this post on my wall	0.914	0.910	0.909
	Share this post on a friend's wall	0.881	0.875	0.871
	Like the [McDonald's/Delta Airlines] Facebook Page	0.877	0.902	0.873

APPENDIX D. CONSTRUCT STATISTICS

Table 22. Construct Statistics: No Manipulation

Construct	Mean	Cronbach's Alpha (α)	Composite Reliability	Convergent Validity (AVE)	Discriminant Validity (\sqrt{AVE})
Cognitive Absorption	4.808	Formative	Formative	Formative	Formative
Flow	3.989	Formative	Formative	Formative	Formative
Brand Equity	3.784	0.968	0.979	0.940	0.970
Purchase Intention	4.221	0.975	0.980	0.908	0.953
Brand Social Media Engagement Intention	2.751	0.923	0.942	0.765	0.875

Table 23. Construct Statistics: No Post Popularity Metrics Shown

Construct	Mean	Cronbach's Alpha (α)	Composite Reliability	Convergent Validity (AVE)	Discriminant Validity (\sqrt{AVE})
Cognitive Absorption	4.681	Formative	Formative	Formative	Formative
Flow	3.817	Formative	Formative	Formative	Formative
Brand Equity	3.808	0.972	0.982	0.947	0.973
Purchase Intention	4.214	0.980	0.984	0.927	0.963
Brand Social Media Engagement Intention	2.685	0.929	0.946	0.778	0.882

Table 24. Construct Statistics: Metrics Switched

Construct	Mean	Cronbach's Alpha (α)	Composite Reliability	Convergent Validity (AVE)	Discriminant Validity (\sqrt{AVE})
Cognitive Absorption	4.779	Formative	Formative	Formative	Formative
Flow	3.988	Formative	Formative	Formative	Formative
Brand Equity	3.807	0.973	0.982	0.948	0.974
Purchase Intention	4.213	0.978	0.983	0.919	0.956
Brand Social Media Engagement Intention	2.726	0.919	0.939	0.756	0.869

APPENDIX E. LATENT VARIABLE CORRELATIONS

Table 25. Latent Variable Correlations: No Manipulation

Construct	Cognitive Absorption	Flow	Brand Equity	Purchase Intention	Brand Social Media Engagement Intention
Cognitive Absorption	n/a (formative)				
Flow	0.675	n/a (formative)			
Brand Equity	0.383	.559	1.00		
Purchase Intention	0.407	.550	.791	1.00	
Brand Social Media Engagement Intention	0.453	.666	.574	.530	1.00

Table 26. Latent Variable Correlations: No Post Popularity Metrics Shown

Construct	Cognitive Absorption	Flow	Brand Equity	Purchase Intention	Brand Social Media Engagement Intention
Cognitive Absorption	n/a (formative)				
Flow	0.686	n/a (formative)			
Brand Equity	0.455	0.601	1.00		
Purchase Intention	0.450	0.551	0.822	1.00	
Brand Social Media Engagement Intention	0.508	0.718	.602	0.548	1.00

Table 27. Latent Variable Correlations: Metrics Switched

Construct	Cognitive Absorption	Flow	Brand Equity	Purchase Intention	Brand Social Media Engagement Intention
Cognitive Absorption	n/a (formative)				
Flow	0.704	n/a (formative)			
Brand Equity	0.373	0.528	1.00		
Purchase Intention	0.399	0.507	0.821	1.00	
Brand Social Media Engagement Intention	0.471	0.678	0.566	0.504	1.00

APPENDIX F. MATRIX OF LOADINGS AND CROSS-LOADINGS

Table 28. Matrix of Loadings and Cross-Loadings: No Manipulation

Construct		Cognitive Absorption (formative)	Flow (formative)	Brand Equity (reflective)	Purchase Intention (reflective)	Brand Social Media Engagement Intention (reflective)
Cognitive Absorption	1	0.764	0.401	0.214	0.247	0.244
	2	0.944	0.685	0.403	0.410	0.479
	3	0.939	0.684	0.402	0.401	0.478
	4	0.847	0.512	0.257	0.329	0.322
Flow	1	0.597	0.916	0.506	0.489	0.590
	2	0.568	0.908	0.460	0.473	0.550
	3	0.617	0.945	0.525	0.525	0.625
	4	0.710	0.913	0.517	0.490	0.629
	5	0.605	0.917	0.553	0.546	0.659
Brand Equity	1	0.376	0.557	0.973	0.780	0.569
	2	0.371	0.541	0.976	0.780	0.552
	3	0.367	0.527	0.959	0.742	0.547
Purchase Intent	1	0.377	0.507	0.735	0.957	0.484
	2	0.363	0.498	0.721	0.956	0.465
	3	0.378	0.508	0.734	0.955	0.447
	4	0.410	0.554	0.776	0.940	0.538
	5	0.408	0.549	0.798	0.956	0.551
Brand Social Media Engagement Intention	1	0.453	0.651	0.528	0.525	0.849
	2	0.395	0.547	0.441	0.358	0.849
	3	0.389	0.577	0.495	0.440	0.914
	4	0.340	0.527	0.482	0.414	0.881
	5	0.397	0.599	0.548	0.551	0.877

Table 29. Matrix of Loadings and Cross-Loadings: No Post Popularity Metrics Shown

Construct		Cognitive Absorption (formative)	Flow (formative)	Brand Equity (reflective)	Purchase Intention (reflective)	Brand Social Media Engagement Intention (reflective)
Cognitive Absorption	1	0.814	0.457	0.299	0.321	0.305
	2	0.940	0.688	0.460	0.447	0.526
	3	0.935	0.709	0.476	0.447	0.546
	4	0.877	0.540	0.350	0.366	0.377
Flow	1	0.602	0.919	0.546	0.496	0.640
	2	0.594	0.920	0.546	0.493	0.627
	3	0.643	0.950	0.566	0.522	0.669
	4	0.707	0.928	0.557	0.510	0.663
	5	0.635	0.921	0.574	0.532	0.727
Brand Equity	1	0.454	0.595	0.975	0.815	0.591
	2	0.436	0.575	0.978	0.808	0.574
	3	0.593	0.585	0.966	0.777	0.593
Purchase Intent	1	0.422	0.510	0.779	0.965	0.513
	2	0.425	0.508	0.770	0.967	0.493
	3	0.419	0.515	0.780	0.967	0.504
	4	0.450	0.565	0.803	0.951	0.557
	5	0.449	0.550	0.824	0.964	0.570
Brand Social Media Engagement Intention	1	0.481	0.701	0.551	0.534	0.863
	2	0.449	0.606	0.442	0.383	0.861
	3	0.431	0.611	0.511	0.442	0.910
	4	0.390	0.555	0.495	0.418	0.875
	5	0.480	0.675	0.625	0.599	0.902

Table 30. Matrix of Loadings and Cross-Loadings: Metrics Switched

Construct		Cognitive Absorption (formative)	Flow (formative)	Brand Equity (reflective)	Purchase Intention (reflective)	Brand Social Media Engagement Intention (reflective)
Cognitive Absorption	1	0.796	0.434	0.228	0.258	0.257
	2	0.946	0.724	0.387	0.397	0.499
	3	0.941	0.717	0.393	0.404	0.509
	4	0.858	0.537	0.261	0.319	0.322
Flow	1	0.620	0.915	0.478	0.452	0.599
	2	0.601	0.912	0.435	0.426	0.572
	3	0.653	0.943	0.502	0.489	0.644
	4	0.732	0.925	0.497	0.464	0.632
	5	0.632	0.917	0.516	0.500	0.672
Brand Equity	1	0.367	0.520	0.976	0.807	0.555
	2	0.365	0.514	0.980	0.809	0.547
	3	0.357	0.509	0.965	0.783	0.552
Purchase Intent	1	0.370	0.463	0.774	0.963	0.452
	2	0.386	0.458	0.761	0.961	0.445
	3	0.389	0.485	0.770	0.957	0.462
	4	0.396	0.513	0.803	0.950	0.520
	5	0.390	0.508	0.825	0.963	0.530
Brand Social Media Engagement Intention	1	0.489	0.683	0.517	0.500	0.850
	2	0.406	0.555	0.420	0.327	0.843
	3	0.377	0.560	0.488	0.415	0.909
	4	0.326	0.509	0.477	0.375	0.871
	5	0.440	0.624	0.543	0.540	0.873

APPENDIX G. DEMOGRAPHICS

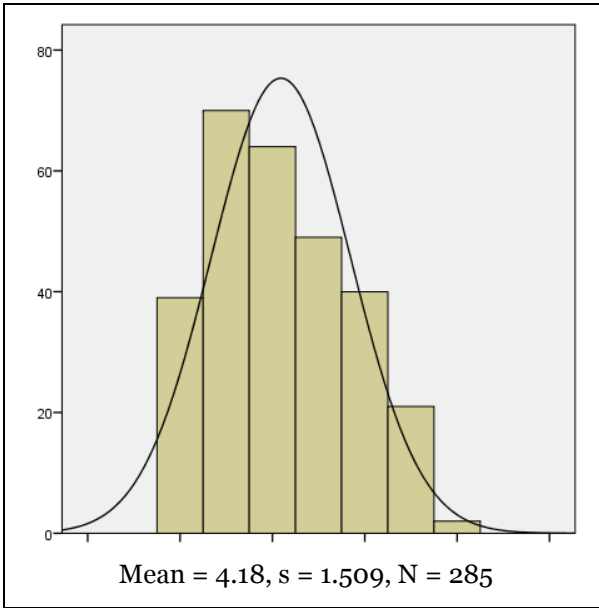


Figure 23. Age Demographics: No Post Popularity Metrics Shown

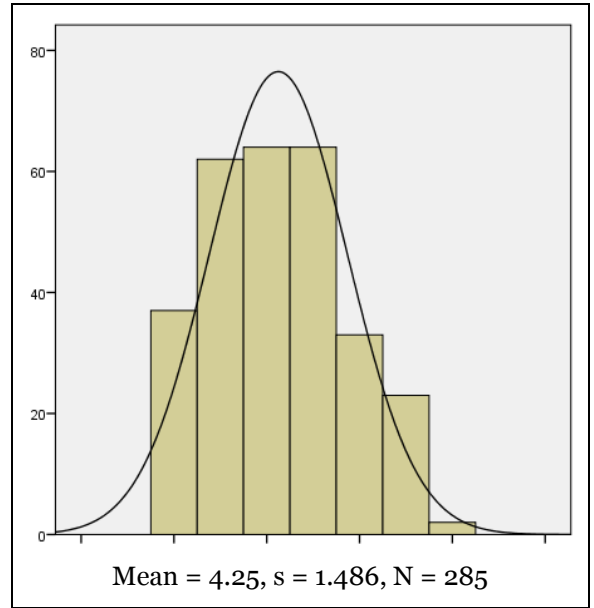


Figure 24. Age Demographics: No Manipulation

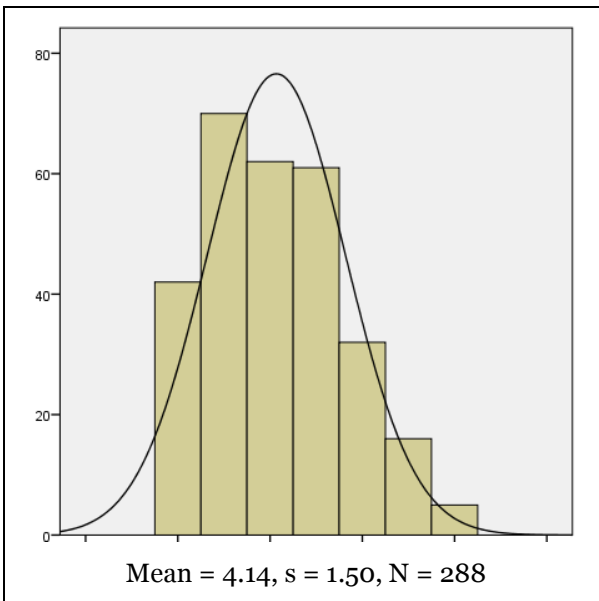


Figure 25. Age Demographics: Metrics Switched

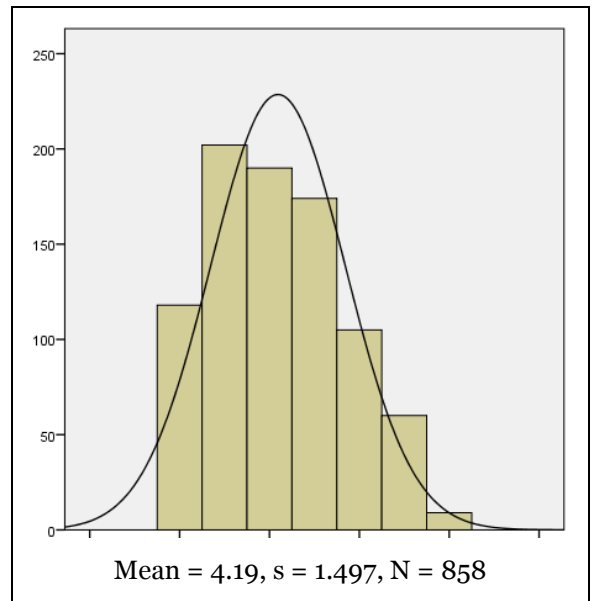


Figure 26. Age Demographics: All Manipulation Groups

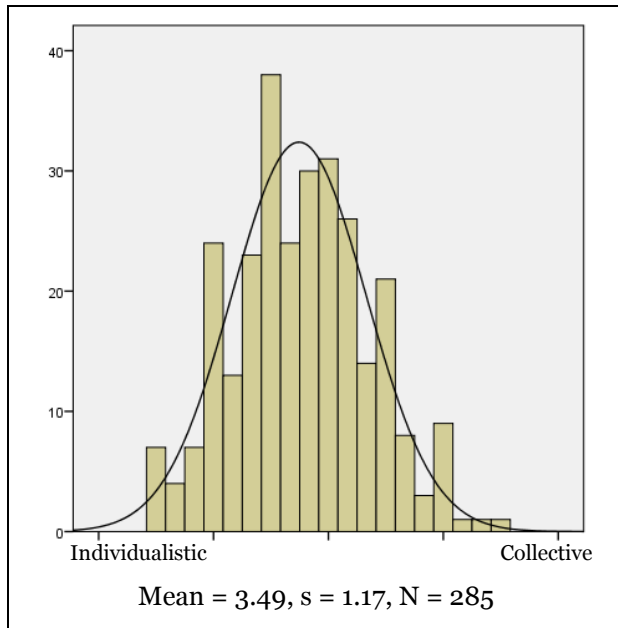


Figure 27. Culture Demographics: No Post Popularity Metrics Shown

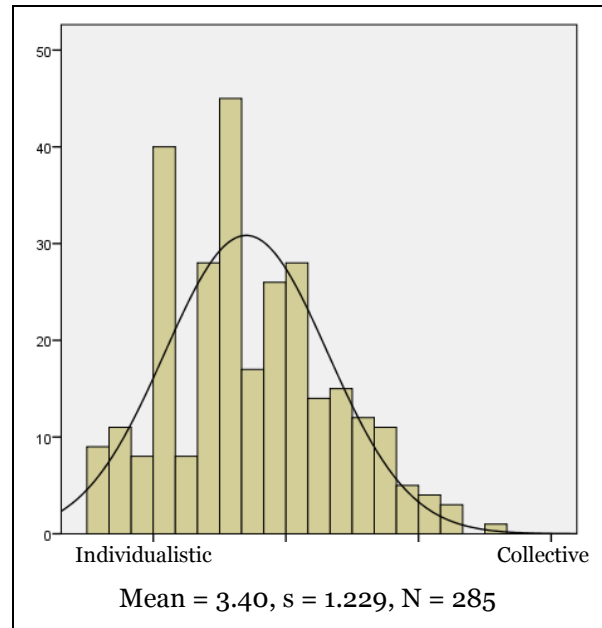


Figure 28. Culture Demographics: No Manipulation

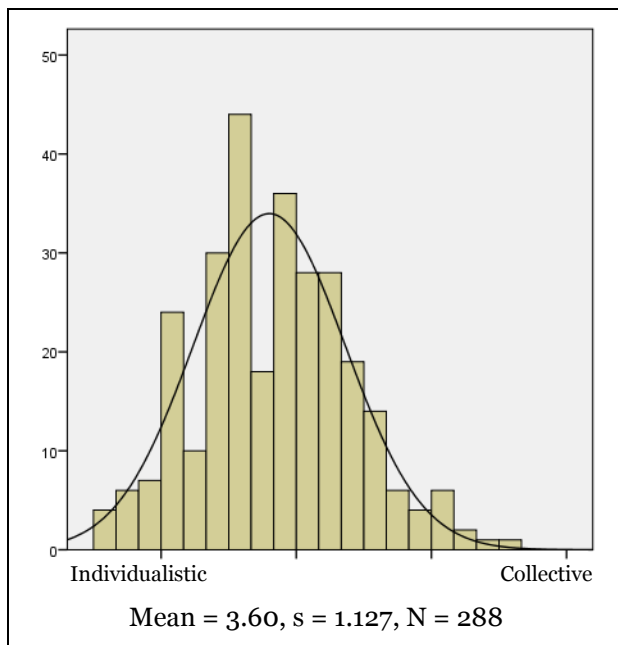


Figure 29. Culture Demographics: Metrics Switched

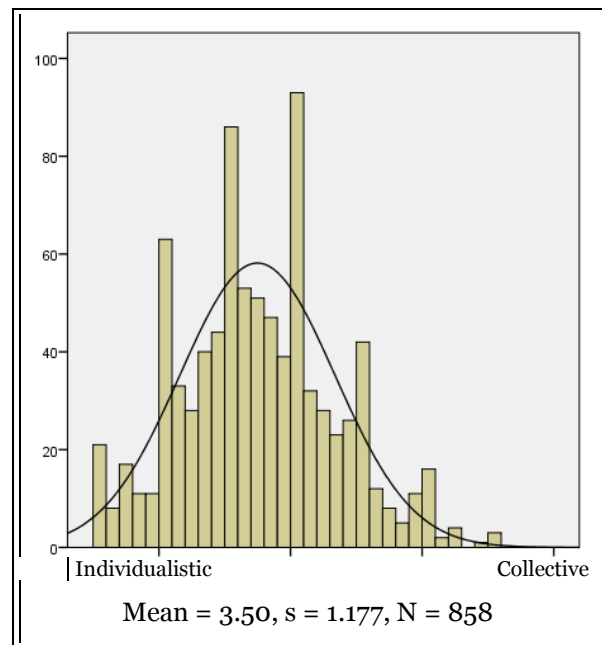
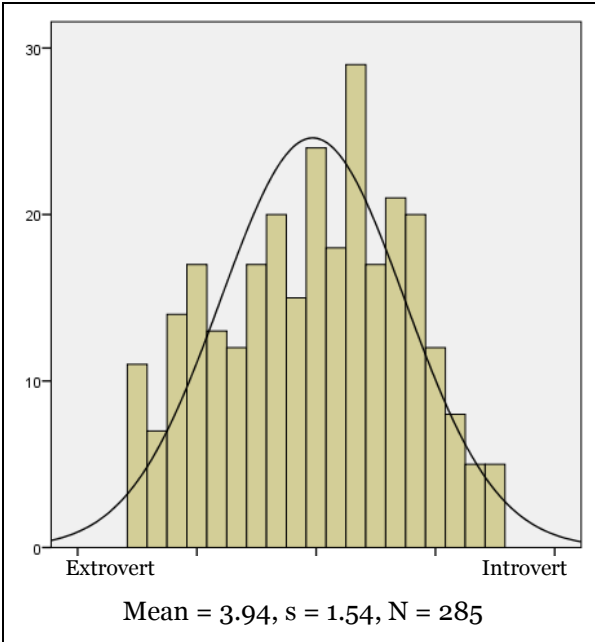
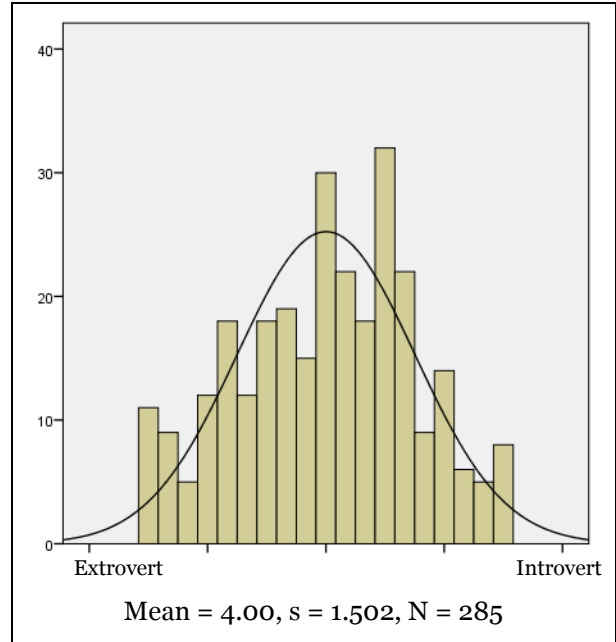


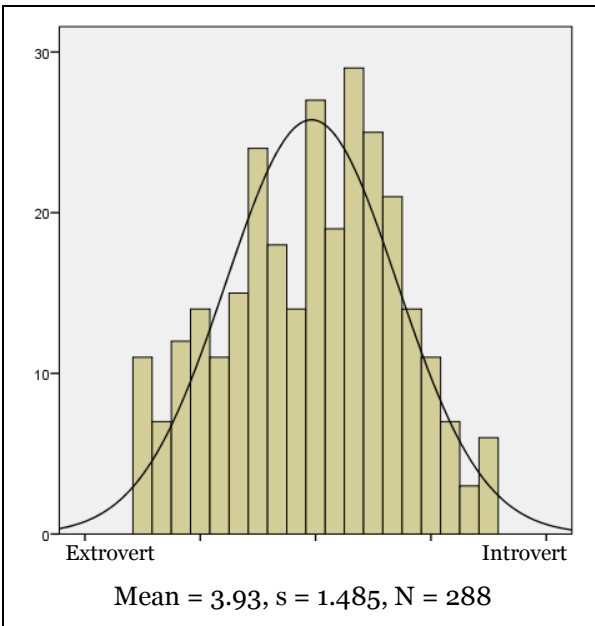
Figure 30. Culture Demographics: All Manipulation Groups



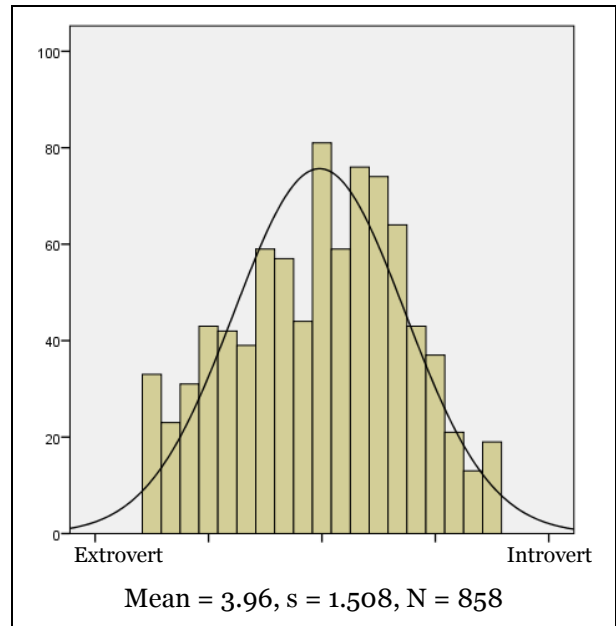
**Figure 31. Personality Demographics:
No Post Popularity Metrics Shown**



**Figure 32. Personality Demographics:
No Manipulation**



**Figure 33. Personality Demographics:
Metrics Switched**



**Figure 34. Personality Demographics:
All Manipulation Groups**

Table 31. ANOVAs for Post Popularity Metric Exposure Differences Compared with True Post Popularity Metrics Being Shown

Demographic	Manipulation	F Score	P-Value	Status
Age	No Metrics	3.026	0.007	Significant
	Switched Metrics	0.551	0.769	Not Significant
Gender	No Metrics	0.394	0.531	Not Significant
	Switched Metrics	0.166	0.684	Not Significant
Culture	No Metrics	1.445	0.060	Not Significant
	Switched Metrics	1.033	0.424	Not Significant
Personality	No Metrics	0.780	0.724	Not Significant
	Switched Metrics	0.808	0.691	Not Significant

APPENDIX H. MODEL FIT COMPARISONS

Table 32. Standardized Root Mean Square Residuals (SRMR) for Different Models Considered

Figure	Model	SRMR	Status
8	PLS Model	0.222	Not Significant
9	PLS Model with No Post Popularity Metrics Shown	0.238	Not Significant
10	PLS Model with Post Popularity Metrics Matching Brand Content	0.223	Not Significant
11	PLS Model with Post Popularity Metrics Opposite Brand Content	0.233	Not Significant
12	PLS Model with Post Popularity as a Moderator	0.232	Not Significant
16	All Posts, Engagement Groups, MGA Path Differences	0.232	Not Significant
17	McDonald's Brand Awareness Post, Culture Groups, MGA Path Differences	0.196	Not Significant
18	McDonald's Brand Awareness Post, Engagement Groups, MGA Path Differences	0.200	Not Significant
19	McDonald's Posts, MGA Post Popularity Metric Path Differences for Simplified Model	0.065	Significant
20	McDonald's Posts, MGA Post Popularity Metric Path Differences for Brand Equity Antecedents	0.280	Not Significant

APPENDIX I. SURVEY

Please note, this survey is optimized for use with Safari, Firefox, and Internet Explorer (note that use of Chrome is not advised).

Week 1 Survey

1. Consent
 - a. I Consent
 - b. I Decline

During this survey, you will be presented with Facebook Page posts from various brands. The following information is used to enhance your interaction experience as if you were on your personal Facebook Newsfeed. This is a separate platform and no interactions with the post(s) will actually affect your personal Facebook profile.

First Name:

- c. FREE RESPONSE TEXT BOX

NEW PAGE -----

2. Do you have regular access to the Internet via a computer, tablet, or smartphone throughout the day?
 - a. Yes
 - b. No
3. Do you have a Facebook account?
 - a. Yes
 - b. No

NEW PAGE -----

4. If you have a Facebook profile, how much time (in minutes) do you spend on average each day on Facebook? Please provide your best estimate in minutes. (For example, if you spend one hour and a half each day on Facebook, you would enter 90)
 - a. FREE RESPONSE TEXT BOX
5. During the past week, which of the following social media activities did you participate in? (Please select all that apply.)
 - a. Blogs
 - b. Social Networking Sites (e.g., Facebook, Twitter, etc)
 - c. Virtual social worlds (e.g., Second Life)
 - d. Collaborative projects (e.g., Wikipedia)
 - e. Content communities (e.g., YouTube)
 - f. Virtual game worlds (e.g., World of Warcraft)
 - g. I do not regularly participate in any of these activities
 - h. I regularly participate in social media activities but did not this past week

NEW PAGE -----

6. Have you Liked any brand's Facebook Page?
 - a. I don't think so
 - b. No
 - c. I think so
 - d. Yes

7. What types of brand Pages have you Liked on Facebook? (Please select all that apply.)
 - a. Airlines (Delta, Southwest, United, etc)
 - b. Fast food (McDonalds, Arby's, Taco Bell, etc)
 - c. Consumer foods (milk, ice cream, bananas, etc)
 - d. Consumer products (linens, kitchen supplies, bathroom supplies, etc)
 - e. Big Box retailers (Walmart, Target, etc)
 - f. Services (insurance, car repair, contractors, etc)
 - g. Creation/Manufacturing (artist, Etsy, guitar picks, etc)
 - h. Media/television actors (i.e. Marvin Zindler, Paul Harvey, Mel Gibson, Jack Nicholson, etc)
 - i. Television networks/channels (i.e. local news station)
 - j. Sports teams (i.e. Greenbay Packers, Chicago Bulls, Detroit Red Wings, Houston Texans, etc)
 - k. I do not Like brand Facebook Pages
 - l. Other

8. If Other selected, please specify:
 - a. FREE RESPONSE TEXT BOX

NEW PAGE -----

9. Do you currently Like the McDonald's Facebook Page?
 - a. I don't think so
 - b. No
 - c. I think so
 - d. Yes

10. Do you currently Like the Delta Airlines Facebook Page?
 - a. I don't think so
 - b. No
 - c. I think so
 - d. Yes

11. In the past week, did you visit any brand's Facebook Page?
 - a. I don't think so
 - b. No
 - c. I think so
 - d. Yes

12. What types of brand Pages have you visited in the past week?
- a. Airlines (Delta, Southwest, United, etc)
 - b. Fast food (McDonalds, Arby's, Taco Bell, etc)
 - c. Consumer foods (milk, ice cream, bananas, etc)
 - d. Consumer products (linens, kitchen supplies, bathroom supplies, etc)
 - e. Big Box retailers (Walmart, Target, etc)
 - f. Services (insurance, car repair, contractors, etc)
 - g. Creation/Manufacturing (artist, Etsy, guitar picks, etc)
 - h. Media/television actors (i.e. Marvin Zindler, Paul Harvey, Mel Gibson, Jack Nicholson, etc)
 - i. Television networks/channels (i.e. local news station)
 - j. Sports teams (i.e. Greenbay Packers, Chicago Bulls, Detroit Red Wings, Houston Texans, etc)
 - k. I do not visit brand Pages on Facebook
 - l. I do visit brand Pages on Facebook but did not this past week
 - m. Other

13. If Other selected, please specify:
- a. FREE RESPONSE TEXT BOX

NEW PAGE -----

14. In the past week, did you visit the McDonald's Facebook Page?
- a. I don't think so
 - b. No
 - c. I think so
 - d. Yes
15. In the past week, did you visit the Delta Airlines Facebook Page?
- a. I don't think so
 - b. No
 - c. I think so
 - d. Yes

NEW PAGE -----

Please indicate your level of agreement with the following statements, on a scale of Strongly Disagree to Strongly Agree.



16. Being accepted as a member of a group is more important than having autonomy and independence. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree

17. Being accepted as a member of a group is more important than being independent. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- Strongly Disagree
 - Disagree
 - Somewhat Disagree
 - Neither Disagree Nor Agree
 - Somewhat Agree
 - Agree
 - Strongly Agree
18. Group success is more important than individual success. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- Strongly Disagree
 - Disagree
 - Somewhat Disagree
 - Neither Disagree Nor Agree
 - Somewhat Agree
 - Agree
 - Strongly Agree
19. Being loyal to a group is more important than individual gain. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- Strongly Disagree
 - Disagree
 - Somewhat Disagree
 - Neither Disagree Nor Agree
 - Somewhat Agree
 - Agree
 - Strongly Agree
20. Individual rewards are not as important as group welfare. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- Strongly Disagree
 - Disagree
 - Somewhat Disagree
 - Neither Disagree Nor Agree
 - Somewhat Agree
 - Agree
 - Strongly Agree
21. It is more important for a manager to encourage loyalty and a sense of duty in subordinates than it is to encourage individual initiative. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- Strongly Disagree
 - Disagree
 - Somewhat Disagree
 - Neither Disagree Nor Agree
 - Somewhat Agree
 - Agree
 - Strongly Agree

INSERT STATUS BAR: 12% then continue to next page
 NEW PAGE -----

You will be presented with several brand Facebook Page posts. Interact with each post as if you were on your personal Facebook News Feed, by Liking, Commenting and/or Sharing the post.

Keep in mind that this is a separate platform and no interactions with the post will actually affect your personal Facebook profile (i.e., they will not be shown to your friends or be associated with your profile).

<div> <div>Post_1</div> <div>   </div> <div>or</div> </div>	22. PostHyperLinkClicked
	23. PostLikeClicked
	24. PostCommentClicked
	25. PostCommentText
	26. PostShareClicked
	27. PostShareText
	28. PostShareConfirmed

NEW PAGE -----

Considering this McDonald's Facebook Page post, how likely are you to do each of the following?

29. Like this post (7pt Likert Scale, Very Unlikely to Very Likely)

- Very Unlikely
- Unlikely
- Somewhat Unlikely
- Neither Unlikely Nor Likely
- Somewhat Likely
- Likely
- Very Likely

30. Comment on this post (7pt Likert Scale, Very Unlikely to Very Likely)

- Very Unlikely
- Unlikely
- Somewhat Unlikely
- Neither Unlikely Nor Likely
- Somewhat Likely
- Likely
- Very Likely

31. Share this post on my wall (7pt Likert Scale, Very Unlikely to Very Likely)

- Very Unlikely
- Unlikely
- Somewhat Unlikely
- Neither Unlikely Nor Likely
- Somewhat Likely
- Likely
- Very Likely

32. Share this post on a friend's wall (7pt Likert Scale, Very Unlikely to Very Likely)

- a. Very Unlikely
 - b. Unlikely
 - c. Somewhat Unlikely
 - d. Neither Unlikely Nor Likely
 - e. Somewhat Likely
 - f. Likely
 - g. Very Likely
33. Like the McDonald's Facebook Page (7pt Likert Scale, Very Unlikely to Very Likely)
- a. Very Unlikely
 - b. Unlikely
 - c. Somewhat Unlikely
 - d. Neither Unlikely Nor Likely
 - e. Somewhat Likely
 - f. Likely
 - g. Very Likely

NEW PAGE -----

34. When I was reading the post, I was able to block out all other distractions. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
35. When I was reading the post, I felt totally immersed in the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
36. When I was reading the post, I felt completely absorbed in the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
37. When I was reading the post, my attention did not get diverted very easily. (7pt Likert Scale, Strongly Disagree to Strongly Agree)

- a. Strongly Disagree
- b. Disagree
- c. Somewhat Disagree
- d. Neither Disagree Nor Agree
- e. Somewhat Agree
- f. Agree
- g. Strongly Agree

NEW PAGE -----

38. My imagination is aroused when I interact with the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
39. I feel curious when interacting with the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
40. The interaction with the post is interesting. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
41. I am absorbed in the interaction in the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
42. It's fun to interact with the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)

- a. Strongly Disagree
- b. Disagree
- c. Somewhat Disagree
- d. Neither Disagree Nor Agree
- e. Somewhat Agree
- f. Agree
- g. Strongly Agree

NEW PAGE -----

43. Even if another food service offers the same quality of services as McDonald's, I would prefer to use the services of McDonald's. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
44. If there is another food service as good as McDonald's, I prefer to go to McDonald's. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
45. It makes sense to use the services of McDonald's instead of services of any other food service even if they are the same. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree



NEW PAGE -----

46. The likelihood that I would purchase from McDonald's is: (7pt Likert Scale, Very Low to Very High)
- a. Very Low
 - b. Low
 - c. Possibly Low
 - d. Neither Low Nor High
 - e. Possibly High
 - f. High

- g. Very High
47. The probability that I would consider buying from McDonald's is: (7pt Likert Scale, Very Low to Very High)
- Very Low
 - Low
 - Possibly Low
 - Neither Low Nor High
 - Possibly High
 - High
 - Very High
48. My willingness to buy from McDonald's is: (7pt Likert Scale, Very Low to Very High)
- Very Low
 - Low
 - Possibly Low
 - Neither Low Nor High
 - Possibly High
 - High
 - Very High
49. For this particular type of purchase, I would use McDonald's. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- Strongly Disagree
 - Disagree
 - Somewhat Disagree
 - Neither Disagree Nor Agree
 - Somewhat Agree
 - Agree
 - Strongly Agree
50. My intention would be to purchase from McDonald's. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- Strongly Disagree
 - Disagree
 - Somewhat Disagree
 - Neither Disagree Nor Agree
 - Somewhat Agree
 - Agree
 - Strongly Agree

INSERT STATUS BAR: 25% then continue to next page
 NEW PAGE -----

Post_2	51. PostHyperLinkClicked
	52. PostLikeClicked

 or 	53. PostCommentClicked
	54. PostCommentText
	55. PostShareClicked
	56. PostShareText
	57. PostShareConfirmed

NEW PAGE -----

Considering this Delta Airlines Facebook Page post, how likely are you to do each of the following?

58. Like this post (7pt Likert Scale, Very Unlikely to Very Likely)

- Very Unlikely
- Unlikely
- Somewhat Unlikely
- Neither Unlikely Nor Likely
- Somewhat Likely
- Likely
- Very Likely

59. Comment on this post (7pt Likert Scale, Very Unlikely to Very Likely)

- Very Unlikely
- Unlikely
- Somewhat Unlikely
- Neither Unlikely Nor Likely
- Somewhat Likely
- Likely
- Very Likely

60. Share this post on my wall (7pt Likert Scale, Very Unlikely to Very Likely)

- Very Unlikely
- Unlikely
- Somewhat Unlikely
- Neither Unlikely Nor Likely
- Somewhat Likely
- Likely
- Very Likely

61. Share this post on a friend's wall (7pt Likert Scale, Very Unlikely to Very Likely)

- Very Unlikely
- Unlikely
- Somewhat Unlikely
- Neither Unlikely Nor Likely
- Somewhat Likely
- Likely
- Very Likely

62. Like the Delta Airlines Facebook Page (7pt Likert Scale, Very Unlikely to Very Likely)

- Very Unlikely
- Unlikely
- Somewhat Unlikely
- Neither Unlikely Nor Likely
- Somewhat Likely

- f. Likely
- g. Very Likely

NEW PAGE -----

63. When I was reading the post, I was able to block out all other distractions. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
64. When I was reading the post, I felt totally immersed in the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
65. When I was reading the post, I felt completely absorbed in the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
66. When I was reading the post, my attention did not get diverted very easily. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree

NEW PAGE -----

67. My imagination is aroused when I interact with the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree

- c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
68. I feel curious when interacting with the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
69. The interaction with the post is interesting. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
70. I am absorbed in the interaction in the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
71. It's fun to interact with the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree

NEW PAGE -----

72. Even if another airline offers the same quality of services as Delta Airlines, I would prefer to use the services of Delta Airlines. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree

- b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
73. If there is another airline as good as Delta Airlines, I prefer to go to Delta Airlines. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
74. It makes sense to use the services of Delta Airlines instead of services of any other airline even if they are the same. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree

NEW PAGE -----

75. The likelihood that I would purchase from Delta Airlines is: (7pt Likert Scale, Very Low to Very High)
- a. Very Low
 - b. Low
 - c. Possibly Low
 - d. Neither Low Nor High
 - e. Possibly High
 - f. High
 - g. Very High
76. The probability that I would consider buying from Delta Airlines is: (7pt Likert Scale, Very Low to Very High)
- a. Very Low
 - b. Low
 - c. Possibly Low
 - d. Neither Low Nor High
 - e. Possibly High
 - f. High
 - g. Very High
77. My willingness to buy from Delta Airlines is: (7pt Likert Scale, Very Low to Very High)
- a. Very Low

- b. Low
- c. Possibly Low
- d. Neither Low Nor High
- e. Possibly High
- f. High
- g. Very High



78. For this particular type of purchase, I would use Delta Airlines. (7pt Likert Scale, Strongly Disagree to Strongly Agree)

- a. Strongly Disagree
- b. Disagree
- c. Somewhat Disagree
- d. Neither Disagree Nor Agree
- e. Somewhat Agree
- f. Agree
- g. Strongly Agree

79. My intention would be to purchase from Delta Airlines. (7pt Likert Scale, Strongly Disagree to Strongly Agree)

- a. Strongly Disagree
- b. Disagree
- c. Somewhat Disagree
- d. Neither Disagree Nor Agree
- e. Somewhat Agree
- f. Agree
- g. Strongly Agree

INSERT STATUS BAR: 41% then continue to next page
NEW PAGE -----

<div> <div>Post_3</div> <div>  </div> </div> <div>or</div> <div>  </div>	80. PostHyperLinkClicked
	81. PostLikeClicked
	82. PostCommentClicked
	83. PostCommentText
	84. PostShareClicked
	85. PostShareText
	86. PostShareConfirmed

NEW PAGE -----

Considering this McDonald's Facebook Page post, how likely are you to do each of the following?

87. Like this post (7pt Likert Scale, Very Unlikely to Very Likely)

- a. Very Unlikely
- b. Unlikely
- c. Somewhat Unlikely
- d. Neither Unlikely Nor Likely
- e. Somewhat Likely
- f. Likely
- g. Very Likely

88. Comment on this post (7pt Likert Scale, Very Unlikely to Very Likely)

- a. Very Unlikely
 - b. Unlikely
 - c. Somewhat Unlikely
 - d. Neither Unlikely Nor Likely
 - e. Somewhat Likely
 - f. Likely
 - g. Very Likely
89. Share this post on my wall (7pt Likert Scale, Very Unlikely to Very Likely)
- a. Very Unlikely
 - b. Unlikely
 - c. Somewhat Unlikely
 - d. Neither Unlikely Nor Likely
 - e. Somewhat Likely
 - f. Likely
 - g. Very Likely
90. Share this post on a friend's wall (7pt Likert Scale, Very Unlikely to Very Likely)
- a. Very Unlikely
 - b. Unlikely
 - c. Somewhat Unlikely
 - d. Neither Unlikely Nor Likely
 - e. Somewhat Likely
 - f. Likely
 - g. Very Likely
91. Like the McDonald's Facebook Page (7pt Likert Scale, Very Unlikely to Very Likely)
- a. Very Unlikely
 - b. Unlikely
 - c. Somewhat Unlikely
 - d. Neither Unlikely Nor Likely
 - e. Somewhat Likely
 - f. Likely
 - g. Very Likely

NEW PAGE -----

92. When I was reading the post, I was able to block out all other distractions. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
93. When I was reading the post, I felt totally immersed in the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree

- c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
94. When I was reading the post, I felt completely absorbed in the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
95. When I was reading the post, my attention did not get diverted very easily. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree

NEW PAGE -----

96. My imagination is aroused when I interact with the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
97. I feel curious when interacting with the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
98. The interaction with the post is interesting. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree

- b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
99. I am absorbed in the interaction in the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
100. It's fun to interact with the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree

NEW PAGE -----

101. Even if another food service offers the same quality of services as McDonald's, I would prefer to use the services of McDonald's. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
102. If there is another food service as good as McDonald's, I prefer to go to McDonald's. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree

103. It makes sense to use the services of McDonald's instead of services of any other food service even if they are the same. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree

NEW PAGE -----

104. The likelihood that I would purchase from McDonald's is: (7pt Likert Scale, Very Low to Very High)
- a. Very Low
 - b. Low
 - c. Possibly Low
 - d. Neither Low Nor High
 - e. Possibly High
 - f. High
 - g. Very High
105. The probability that I would consider buying from McDonald's is: (7pt Likert Scale, Very Low to Very High)
- a. Very Low
 - b. Low
 - c. Possibly Low
 - d. Neither Low Nor High
 - e. Possibly High
 - f. High
 - g. Very High
106. My willingness to buy from McDonald's is: (7pt Likert Scale, Very Low to Very High)
- a. Very Low
 - b. Low
 - c. Possibly Low
 - d. Neither Low Nor High
 - e. Possibly High
 - f. High
 - g. Very High
107. For this particular type of purchase, I would use McDonald's. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree


g. Strongly Agree

108. My intention would be to purchase from McDonald's. (7pt Likert Scale, Strongly Disagree to Strongly Agree)

- a. Strongly Disagree
- b. Disagree
- c. Somewhat Disagree
- d. Neither Disagree Nor Agree
- e. Somewhat Agree
- f. Agree
- g. Strongly Agree

INSERT STATUS BAR: 55% then continue to next page

NEW PAGE -----

<p>Post_4</p>  <p>OR</p>	109. PostHyperLinkClicked
	110. PostLikeClicked
	111. PostCommentClicked
	112. PostCommentText
	113. PostShareClicked
	114. PostShareText
	115. PostShareConfirmed

NEW PAGE -----

Considering this Delta Airlines Facebook Page post, how likely are you to do each of the following?

116. Like this post (7pt Likert Scale, Very Unlikely to Very Likely)

- a. Very Unlikely
- b. Unlikely
- c. Somewhat Unlikely
- d. Neither Unlikely Nor Likely
- e. Somewhat Likely
- f. Likely
- g. Very Likely

117. Comment on this post (7pt Likert Scale, Very Unlikely to Very Likely)

- a. Very Unlikely
- b. Unlikely
- c. Somewhat Unlikely
- d. Neither Unlikely Nor Likely
- e. Somewhat Likely
- f. Likely
- g. Very Likely

118. Share this post on my wall (7pt Likert Scale, Very Unlikely to Very Likely)

- a. Very Unlikely
- b. Unlikely
- c. Somewhat Unlikely
- d. Neither Unlikely Nor Likely
- e. Somewhat Likely
- f. Likely

- g. Very Likely
- 119. Share this post on a friend's wall (7pt Likert Scale, Very Unlikely to Very Likely)
 - a. Very Unlikely
 - b. Unlikely
 - c. Somewhat Unlikely
 - d. Neither Unlikely Nor Likely
 - e. Somewhat Likely
 - f. Likely
 - g. Very Likely
- 120. Like the Delta Airlines Facebook Page (7pt Likert Scale, Very Unlikely to Very Likely)
 - a. Very Unlikely
 - b. Unlikely
 - c. Somewhat Unlikely
 - d. Neither Unlikely Nor Likely
 - e. Somewhat Likely
 - f. Likely
 - g. Very Likely

NEW PAGE -----

- 121. When I was reading the post, I was able to block out all other distractions. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
 - a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
- 122. When I was reading the post, I felt totally immersed in the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
 - a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
- 123. When I was reading the post, I felt completely absorbed in the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
 - a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree

- g. Strongly Agree
124. When I was reading the post, my attention did not get diverted very easily. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree

NEW PAGE -----

125. My imagination is aroused when I interact with the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
126. I feel curious when interacting with the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
127. The interaction with the post is interesting. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
128. I am absorbed in the interaction in the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree

- f. Agree
 - g. Strongly Agree
129. It's fun to interact with the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree

NEW PAGE -----

130. Even if another airline offers the same quality of services as Delta Airlines, I would prefer to use the services of Delta Airlines. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
131. If there is another airline as good as Delta Airlines, I prefer to go to Delta Airlines. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
132. It makes sense to use the services of Delta Airlines instead of services of any other airline even if they are the same. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree

NEW PAGE -----


133. The likelihood that I would purchase from Delta Airlines is: (7pt Likert Scale, Very Low to Very High)
- a. Very Low

- b. Low
 - c. Possibly Low
 - d. Neither Low Nor High
 - e. Possibly High
 - f. High
 - g. Very High
134. The probability that I would consider buying from Delta Airlines is: (7pt Likert Scale, Very Low to Very High)
- a. Very Low
 - b. Low
 - c. Possibly Low
 - d. Neither Low Nor High
 - e. Possibly High
 - f. High
 - g. Very High
135. My willingness to buy from Delta Airlines is: (7pt Likert Scale, Very Low to Very High)
- a. Very Low
 - b. Low
 - c. Possibly Low
 - d. Neither Low Nor High
 - e. Possibly High
 - f. High
 - g. Very High
136. For this particular type of purchase, I would use Delta Airlines. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
137. My intention would be to purchase from Delta Airlines. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree

INSERT STATUS BAR: 70% then continue to next page

NEXT PAGE -----

Post_5	138. PostHyperLinkClicked
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	139.	PostLikeClicked
	140.	PostCommentClicked
	141.	PostCommentText
	142.	PostShareClicked
	143.	PostShareText
	144.	PostShareConfirmed

NEW PAGE -----

Considering this Delta Airlines Facebook Page post, how likely are you to do each of the following?

145. Like this post (7pt Likert Scale, Very Unlikely to Very Likely)
 - a. Very Unlikely
 - b. Unlikely
 - c. Somewhat Unlikely
 - d. Neither Unlikely Nor Likely
 - e. Somewhat Likely
 - f. Likely
 - g. Very Likely
146. Comment on this post (7pt Likert Scale, Very Unlikely to Very Likely)
 - a. Very Unlikely
 - b. Unlikely
 - c. Somewhat Unlikely
 - d. Neither Unlikely Nor Likely
 - e. Somewhat Likely
 - f. Likely
 - g. Very Likely
147. Share this post on my wall (7pt Likert Scale, Very Unlikely to Very Likely)
 - a. Very Unlikely
 - b. Unlikely
 - c. Somewhat Unlikely
 - d. Neither Unlikely Nor Likely
 - e. Somewhat Likely
 - f. Likely
 - g. Very Likely
148. Share this post on a friend's wall (7pt Likert Scale, Very Unlikely to Very Likely)
 - a. Very Unlikely
 - b. Unlikely
 - c. Somewhat Unlikely
 - d. Neither Unlikely Nor Likely
 - e. Somewhat Likely
 - f. Likely
 - g. Very Likely
149. Like the Delta Airlines Facebook Page (7pt Likert Scale, Very Unlikely to Very Likely)
 - a. Very Unlikely
 - b. Unlikely
 - c. Somewhat Unlikely

- d. Neither Unlikely Nor Likely
- e. Somewhat Likely
- f. Likely
- g. Very Likely

NEW PAGE -----

150. When I was reading the post, I was able to block out all other distractions. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
151. When I was reading the post, I felt totally immersed in the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
152. When I was reading the post, I felt completely absorbed in the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
153. When I was reading the post, my attention did not get diverted very easily. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree

NEW PAGE -----

154. My imagination is aroused when I interact with the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)

- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
155. I feel curious when interacting with the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
156. The interaction with the post is interesting. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
157. I am absorbed in the interaction in the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
158. It's fun to interact with the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree

NEW PAGE -----


159. Even if another airline offers the same quality of services as Delta Airlines, I would prefer to use the services of Delta Airlines. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- Strongly Disagree
 - Disagree
 - Somewhat Disagree
 - Neither Disagree Nor Agree
 - Somewhat Agree
 - Agree
 - Strongly Agree
160. If there is another airline as good as Delta Airlines, I prefer to go to Delta Airlines. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- Strongly Disagree
 - Disagree
 - Somewhat Disagree
 - Neither Disagree Nor Agree
 - Somewhat Agree
 - Agree
 - Strongly Agree
161. It makes sense to use the services of Delta Airlines instead of services of any other airline even if they are the same. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- Strongly Disagree
 - Disagree
 - Somewhat Disagree
 - Neither Disagree Nor Agree
 - Somewhat Agree
 - Agree
 - Strongly Agree

NEW PAGE -----

162. The likelihood that I would purchase from Delta Airlines is: (7pt Likert Scale, Very Low to Very High)
- Very Low
 - Low
 - Possibly Low
 - Neither Low Nor High
 - Possibly High
 - High
 - Very High
163. The probability that I would consider buying from Delta Airlines is: (7pt Likert Scale, Very Low to Very High)
- Very Low
 - Low
 - Possibly Low
 - Neither Low Nor High
 - Possibly High
 - High

- g. Very High
164. My willingness to buy from Delta Airlines is: (7pt Likert Scale, Very Low to Very High)
- Very Low
 - Low
 - Possibly Low
 - Neither Low Nor High
 - Possibly High
 - High
 - Very High
165. For this particular type of purchase, I would use Delta Airlines. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- Strongly Disagree
 - Disagree
 - Somewhat Disagree
 - Neither Disagree Nor Agree
 - Somewhat Agree
 - Agree
 - Strongly Agree
166. My intention would be to purchase from Delta Airlines. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- Strongly Disagree
 - Disagree
 - Somewhat Disagree
 - Neither Disagree Nor Agree
 - Somewhat Agree
 - Agree
 - Strongly Agree

INSERT STATUS BAR: 85% then continue to next page
NEW PAGE -----

<p>Post_6</p>  <p>or</p>	167. PostHyperLinkClicked
	168. PostLikeClicked
	169. PostCommentClicked
	170. PostCommentText
	171. PostShareClicked
	172. PostShareText
	173. PostShareConfirmed

NEW PAGE -----

Considering this McDonald's Facebook Page post, how likely are you to do each of the following?

174. Like this post (7pt Likert Scale, Very Unlikely to Very Likely)
- Very Unlikely
 - Unlikely
 - Somewhat Unlikely
 - Neither Unlikely Nor Likely

- e. Somewhat Likely
 - f. Likely
 - g. Very Likely
175. Comment on this post (7pt Likert Scale, Very Unlikely to Very Likely)
- a. Very Unlikely
 - b. Unlikely
 - c. Somewhat Unlikely
 - d. Neither Unlikely Nor Likely
 - e. Somewhat Likely
 - f. Likely
 - g. Very Likely
176. Share this post on my wall (7pt Likert Scale, Very Unlikely to Very Likely)
- a. Very Unlikely
 - b. Unlikely
 - c. Somewhat Unlikely
 - d. Neither Unlikely Nor Likely
 - e. Somewhat Likely
 - f. Likely
 - g. Very Likely
177. Share this post on a friend's wall (7pt Likert Scale, Very Unlikely to Very Likely)
- a. Very Unlikely
 - b. Unlikely
 - c. Somewhat Unlikely
 - d. Neither Unlikely Nor Likely
 - e. Somewhat Likely
 - f. Likely
 - g. Very Likely
178. Like the McDonald's Facebook Page (7pt Likert Scale, Very Unlikely to Very Likely)
- a. Very Unlikely
 - b. Unlikely
 - c. Somewhat Unlikely
 - d. Neither Unlikely Nor Likely
 - e. Somewhat Likely
 - f. Likely
 - g. Very Likely

NEW PAGE -----

179. When I was reading the post, I was able to block out all other distractions. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree

- g. Strongly Agree
- 180. When I was reading the post, I felt totally immersed in the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
 - a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
- 181. When I was reading the post, I felt completely absorbed in the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
 - a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
- 182. When I was reading the post, my attention did not get diverted very easily. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
 - a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree

NEW PAGE -----

- 183. My imagination is aroused when I interact with the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
 - a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
- 184. I feel curious when interacting with the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
 - a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree

- f. Agree
 - g. Strongly Agree
185. The interaction with the post is interesting. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
186. I am absorbed in the interaction in the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
187. It's fun to interact with the post. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree

NEW PAGE -----

188. Even if another food service offers the same quality of services as McDonald's, I would prefer to use the services of McDonald's. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
189. If there is another food service as good as McDonald's, I prefer to go to McDonald's. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree

- d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
190. It makes sense to use the services of McDonald's instead of services of any other food service even if they are the same. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree

NEW PAGE -----

191. The likelihood that I would purchase from McDonald's is: (7pt Likert Scale, Very Low to Very High)
- a. Very Low
 - b. Low
 - c. Possibly Low
 - d. Neither Low Nor High
 - e. Possibly High
 - f. High
 - g. Very High
192. The probability that I would consider buying from McDonald's is: (7pt Likert Scale, Very Low to Very High)
- a. Very Low
 - b. Low
 - c. Possibly Low
 - d. Neither Low Nor High
 - e. Possibly High
 - f. High
 - g. Very High
193. My willingness to buy from McDonald's is: (7pt Likert Scale, Very Low to Very High)
- a. Very Low
 - b. Low
 - c. Possibly Low
 - d. Neither Low Nor High
 - e. Possibly High
 - f. High
 - g. Very High
194. For this particular type of purchase, I would use McDonald's. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree

- c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree
195. My intention would be to purchase from McDonald's. (7pt Likert Scale, Strongly Disagree to Strongly Agree)
- a. Strongly Disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Neither Disagree Nor Agree
 - e. Somewhat Agree
 - f. Agree
 - g. Strongly Agree

INSERT STATUS BAR: 97% then continue to next page
 NEW PAGE -----

196. Considering your normal daily activities and interactions, please rate your personality in the following areas: (7pt Semantic Differential Scale)
- a. Extrovert to Introvert
 - b. Assertive to Unassertive
 - c. Talkative to Silent
197. What country do you live in?
- A. FREE RESPONSE TEXT BOX
198. Gender
- a. Female
 - b. Male
199. Age
- a. Under 18
 - b. 18-23 years old
 - c. 24-29 years old
 - d. 30-35 years old
 - e. 36-45 years old
 - f. 46-55 years old
 - g. 56-65 years old
 - h. Over 66 years old
200. What do you think this study is about?
- a. FREE RESPONSE TEXT BOX

INSERT STATUS BAR: 100% then continue to next page
 Thank you for your participation.

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BIBLIOGRAPHY

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