

The Effects of Herd Mentality on Behavior

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Glossary

Antagonistic - showing or feeling active opposition or hostility toward someone or something.

Assimilation - the process whereby individuals or groups of differing ethnic heritage are absorbed into the dominant culture of a society.

Assimilationist - a person who advocates or participates in racial or cultural integration.

Bubble - an economic cycle that is characterized by the rapid escalation of market value, particularly in the price of assets.

Conformity - behavior in accordance with socially accepted conventions or standards.

Crowd Culture - the beliefs and interests of a group.

Debutante - an upper-class young woman making her first appearance in fashionable society.

FMRI - Functional magnetic resonance imaging is a technique for measuring and mapping brain activity that is noninvasive and safe.

Free Association - the mental process by which one word or image may spontaneously suggest another without any apparent connection.

Group Distinctiveness - a social group is made to appear more positive and valued by using verbal and non-verbal cues.

Group Mind - the beliefs and desires common to a social group as a whole.

Herd Mentality - the tendency for people's behavior or beliefs to conform to those of the group to which they belong.

I/B/E/S - The Institutional Brokers' Estimate System is a database used by brokers and active investors to access the estimates made by stock analysts regarding the future earnings of publicly traded American companies.

Ingroup - an exclusive, typically small, group of people with a shared interest or identity.

Macroeconomic - a branch of economics dealing with the performance, structure, behavior, and decision-making of an economy as a whole.

Mental Commons - the similar thoughts and beliefs between a group.

Milling - the contact among crowd participants that promotes the development of norms.

Norm Emergence - a large percentage of the population adopts the norm or chooses the same action.

Ontology - the philosophical study of existence, of being.

Outgroup - those people who do not belong to a specific in-group.

Paradigm - a typical example or pattern of something; a model.

Peer Effect - externalities in which the actions or characteristics of a reference group affect an individual's behaviour or outcomes.

Physical Proximity - the tendency for people to form social relationships with individuals who are physically closer to them.

Plural Subjects - the integration of different individual who practice different culture, languages, and beliefs.

Propaganda - information, especially of a biased or misleading nature, used to promote or publicize a particular political cause or point of view.

Psychoanalysis - a system of psychological theory and therapy which aims to treat mental disorders by investigating the interaction of conscious and unconscious elements in the mind and bringing repressed fears and conflicts into the conscious mind by techniques such as dream interpretation and free association.

Public Relations - the professional maintenance of a favorable public image by a company or other organization or a famous person.

Schadenfreude - pleasure derived by someone from another person's misfortune.

Social Integration - the process during which newcomers or minorities are incorporated into the social structure of the host society.

Suffragettes - a woman seeking the right to vote through organized protest.

Symbolic Interactionist - symbolic interactionism is a sociological theory that develops from practical considerations and alludes to people's particular utilization of dialect to make images and normal implications, for deduction and correspondence with others.

Transactive Memory System - a mechanism through which groups collectively encode, store, and retrieve knowledge.

Qualitative - relating to, measuring, or measured by the quality of something rather than its quantity.

Abstract

This study conducted a meta-analysis in order to determine the power that *herd mentality* has on the behavior of an individual. Most of the existing literature emphasizes on how herd mentality is effective for manipulating the masses, however, this study was designed to focus on the use of manipulation between gender and herd size. The methodology for this study was based off Loxton, et. al. (2020) procedures from their meta-analysis of panic buying, herd mentality, and media influencing. Analyzing the volume and timing of consumer spending patterns; the volumes of spending on specific, highly demanded consumer goods during the investigative period; and the implications of media use to influence the masses. Results suggested that the COVID-19 crisis appears to align with behaviors exhibited during historic shock events, in other words, herd mentality affected the behavior of individuals given a crisis. In conclusion, this study seeks to expand this body of research by exploring the effects of herd mentality on behavior.

Dedication

This study is dedicated to the understanding of crowd behavior and social implications within today's society.

Acknowledgments

I wish to convey my profound gratitude to my thesis committee chair and members, Dr. Karen Frederick, Dr. Amanda Ford, and Dr. Michael Robinson, who supported me throughout this endeavor and supplied me with the encouragement, and guidance for continued success.

Preface

The present case for the necessity of the study that has been conducted involves numerous factors driven in response to the rise of social influence within present day society. The epidemic of “*crowd culture*” has contributed to various cases of fear, anxiety, and anger. The current study seeks to add to the body of research surrounding the intersection of cultural values, as well as individual values. The study seeks to expand this body of research by exploring the effects of herd mentality on behavior. This study will further the previous research on this subject matter and will provide evidence for future research. This study will also aid in awareness of the detrimental impact that manipulation and *propaganda* have on the behavior of the masses. The fundamental goal of this research is to gain a better understanding of the issue and serve as a steppingstone from where treatment of this issue can be created and implemented.

Introduction

This study conducted a meta-analysis in order to determine the power herd mentality has on the behavior of an individual. Existing research with respect to herd mentality emphasizes how herd mentality is effective for manipulating the masses. However, for this study the primary focus was on providing further support on the use of manipulation between gender and herd size. When analyzing research regarding herd mentality on individual behavior, studies tend to be highly focused on the volume and timing of consumer spending patterns; the volumes of spending on specific, highly demanded consumer goods; and the implications of media use to influence the masses. Although these spending patterns and implications of media influence are extremely impactful, finding the use of manipulation between various environments and herd size needs to be explored. With that being said, the primary aim of this study was to analyze results and overall themes from previously conducted studies in order to determine the extent of influence and social implications of herd mentality on an individual. With the information provided, outcome differences among components such as gender, age, and race were further explored. If proven successful, the potential impact of these results could aid in the awareness of the detrimental impact that herd mentality has on the behavior of an individual within the masses.

Chapter 1

Background

A new theory about human nature was established by Sigmund Freud. He had uncovered the primal sexual and violent powers concealed within the minds of all human beings. Forces which if not controlled, could lead to the destruction and chaos of societies. At the center of this story, we not only speak on Sigmund Freud but his American nephew, Edward Bernays. Bernays is virtually unknown nowadays, but his contribution to the twentieth century was almost as strong as his uncle's, since Bernays was the first person to take Freud's theories about human nature and use them to exploit the masses. For the first time, he taught American industries how to make people want something they didn't need by catering to their unconscious desires. As a result, a new political concept of manipulating the masses by fulfilling people's deepest selfish desires; rendering them content and docile.

Controlling the Masses

Today, Freud's ideas on how the human mind works have become an accepted part of society along with psychoanalysts, but it was not accepted so easily. Approximately 100 years ago, Freud's ideas were hated by Viennese society and at the time, Vienna was at the center of a huge empire ruling central Europe. Within the authority of the Hoffman accord, Freud's theories were not only humiliating, but the basic idea of questioning and evaluating one's emotions was a danger to their control. The cultural practice of saving face and reputation was the foundation of their lifestyle in Vienna. What terrified the officials of the Empire, perhaps more so, was Freud's theory that deep within all human beings were volatile instinctual drives. Freud had formulated a technique he called *Psychoanalysis*, and through exploring dreams and *free association* he had discovered, as he said, "strong sexual and violent forces that were the remnants of our animal

past; feelings that humans repressed because they were too strenuous. In 1914, the Austro-Hungarian Empire led Europe into war. As the horror mounted, Freud saw it as horrific evidence and truth to his findings, suggesting that this is exactly the way we should have expected people to behave from our knowledge of psychoanalysis. Governments have unveiled these primal energies on human beings, and no one appeared to know how to handle them.

Around that time, Freud's young nephew, Edward Bernays, served as a press agent in America. His primary client was the world-famous opera singer, Caruso, who toured the United States. Bernays' parents had emigrated to the United States 20 years previous, but he remained in contact with his uncle and accompanied him on holiday in the Alps. However, Bernays was preparing to return to Europe for a very different purpose. The night that Caruso performed in Toledo, Ohio, America declared that it was engaging in the war against Germany and Austria. As part of the campaign, the US government established a public information task force, and Bernays was appointed to promote America's war objectives in the press. The President, Woodrow Wilson, had declared that the United States would not fight to restore the old empires, but to bring democracy to all of Europe (Curtis, 2002). Bernays was very successful at spreading this notion both domestically and abroad, and at the end of the war he was selected to join the President at the Paris Peace Conference. Wilson's success in Paris amazed Bernays as well as the other American propagandists. Their propaganda had portrayed Wilson as a liberator of the people, a man who would create a new world in which the individual would be free, making him a hero of the masses. While Bernays witnessed the crowds swell around Wilson, Bernays started to question if it would be possible to do a similar kind of mass persuasion, except in times of peace. Bernays suggested that if you could use propaganda for war, you could certainly use it for peace (Curtis, 2002). At the time, there was a negative connotation on the word 'propaganda', so

Bernays established a title for the line of work that would soon come to be used by corporations and governments alike, *Public Relations*.

Public relations have been at the forefront of mass persuasion for years and the science behind this spectacle is rooted in Dr. Sigmund Freud's Psychoanalytical theories. One of the approaches that was used to measure the primary data was collected through *qualitative* research which would give Bernays an insight into the human mind and in turn, establish his influence on the 20th century. In today's context, Bernays' methods are still being used, with respect to the pace and climate of society. Moreover, the concept of a democratic government is contingent on the people, but Freud was worried that the human unconscious was far too dangerous to control, which would result in rebellion. Some of the research that will be covered include herd behavior in a range of domains as well as the significant relationship between herd behavior and the size of the herd.

Behavior

The core of Bernays' ideology found its origins in Freud's theory of psychoanalysis. Like Freud, Bernays believed that people had irrational thoughts and were absolutely motivated by their unconscious perceptions and desires. Within this perspective, he wanted to help communities preserve their democracy by providing people limited options and letting them determine what was ideal for them (Curtis, 2006, Bernays, 1947; Bernays, 1928; Conner, 2019). Bernays' initial encounter as an American Army consultant during the First World War, as well as his partnership with other thinkers of that time, including Walter Lippmann, made him utilize his modes of communication to not only propagate the enemy, but to also persuade Americans concerning their country's right to go to war (Fletcher, 2014). During the warfare, Bernays found that deception was integral for success and concluded that propaganda could also be used for

legitimate reasons. Yet since the word propaganda was better suited to war, he utilized the term “public relations” in place of “propaganda” for a worthy cause (Bernays, 1928). At the turn of the nineteenth century, America became a mass industrial society with millions of people living in cities. Bernays was eager to devise a method to handle and improve the way these new masses thought and felt by turning to the teachings of Freud. While in Paris, Bernays sent his uncle a box of Havana cigars. In return, Freud provided his nephew with a print of his general “Introduction to Psychoanalysis”. After reading it, the premise of hidden irrational forces within human beings intrigued him and Bernays found himself wondering if he could earn money by manipulating the unconscious.

The description of the unconscious mind by Sigmund Freud is quite renowned. Freud suggests that within the unconscious, there are memories which have been repressed but continue to influence one's behavior. Psychoanalysis reveals unconscious material into conscious awareness. Moreover, the unconscious material includes pain, discomfort, anxiety, or strife. Freud argued that the unconscious tended to affect behavior regardless of people's lack of awareness. One of the most well-known analogies for the unconscious mind is an iceberg. Everything above the water represents conscious awareness while everything below the water represents the unconscious (Cherry, 2020). Bernays intended to tap into the unconscious of the consumer by manipulating one's deepest emotions and desires. Even though we suppress or repress our emotions, they still break through when communicating with others. Freud first describes this in detail in his *General Introduction to Psychoanalysis*.

The ante-chamber of the unconscious cannot be seen by the conscious, which is in the other room; therefore, for the time being they must remain unconscious. When they have succeeded in pressing forward to the threshold, and have been sent back by the

watchman, then they are unsuitable for consciousness and we call them suppressed.

Those impulses, however, which the watchman has permitted to cross the threshold have not necessarily become conscious; for this can happen only if they have been successful in attracting to themselves the glance of the conscious. We therefore justifiably call this second room the system of the fore-conscious. In this way the process of becoming conscious retains its purely descriptive sense. While this information might not be accessible consciously, it still exerts an influence over current behavior(Freud, 1922, p. 357)

Public Persuasion

The implication that human decision-making is not just between individuals, but between populations, leads to the concept that knowledge influences behavior. Bernays began to develop this idea of appealing to people's irrational emotions, propelling him into a category that surpasses government officials and managers who believed they could sell and promote a product by hitting people with loads of factual information. Bernays knew that this was not the way. To test this, Bernays prepared an experiment for the general population. His most significant experiment was to convince women to smoke. Around this time, there was a stigma around women smoking, and one of his initial clients, George Hill (president of the tobacco company), approached Bernays to find a way to crack it. Bernays responded by hiring psychoanalyst, Dr. Brill, to find out what cigarettes mean to women. After a series of qualitative tests, Brill reported that cigarettes represented male sexual dominance and was a symbol of the penis. He advised Bernays that if he could devise a way to associate cigarettes with the concept of questioning male dominance, women would smoke, and they would feel empowered.

Annually, New York stages the Easter Day Parade, where thousands of people come to enjoy it, and Bernays intended to hold an event there. He convinced a handful of powerful *debutantes* to conceal cigarettes under their clothing, then they were instructed to join the parade, and at his cue, they light up the cigarettes dramatically. Bernays then informed the press that he had heard that a group of *suffragettes* were preparing to protest by lighting up what they called “Torches of Freedom” (Curtis, 2006). Bernays set up an elaborate event to which he knew there would be an outcry. He also knew that the photographers would be there to capture this moment. With the phrase, “Torches of Freedom”, Bernays utilized the symbol of Lady Liberty to weigh in and appeal to people's emotions. After hitting the front page of every newspaper in the US, Bernays had successfully made it socially acceptable for women to smoke in public, thus propelling cigarette sales. Bernays deliberately created the idea that if a woman smoked cigarettes, it made her strong and independent, a concept that still exists today. This proved to Bernays that it was possible to encourage people to act irrationally if you connect goods to their emotional needs and desires. The idea that smoking actually made women freer was completely irrational, but it made them feel more independent (Curtis, 2006). This implied that meaningless items could become important emotional representations of how you wished others to see you. Rather than selling products to a person's intellect, Bernays saw the power of selling to a person's hidden desires, suggesting that the consumer would feel better with the product. What Bernays was doing fascinated the American corporations (Curtis, 2006). They had emerged from the war powerful and wealthy, but what they were concerned about was the matter of overproduction, and people would simply have enough products and stop buying. During this point, several goods were still bought by the masses based on need, selling products on the basis of their own sensible qualities. What certain companies discovered was that they needed to change the way

how most Americans thought about their goods. One leading Wall Street banker, Paul Mazur of Lehman Brothers was clear about what was necessary, “we must shift America” he wrote, “from a need to a desires culture. People must be trained to desire, to want new things even before the old had been entirely consumed. We must shape a new mentality in America, man's desires must overshadow his needs” (Curtis, 2006).

Understanding the Crowd

Jean Gabriel Tarde, a French philosopher and sociologist made important contributions to general social theory and to the study of collective behavior, public opinion, and personal influence. In comparison to Gustave Le Bon, who studied contemporary culture in terms of crowds, Tarde stressed the significance of the public. Crowds depend on *physical proximity*, which derive from shared experiences of their members, who may not be in immediate physical proximity (Tarde, 1969). Gustave Le Bon, the father of crowd psychology, was a French social psychologist. Le Bon believed that understanding crowd psychology was crucial for a proper understanding of both history and the nature of man. As he wrote in his classic work, *The Crowd: A Study of the Popular Mind*,

It is crowds rather than isolated individuals that may be induced to run the risk of death to secure the triumph of a creed or an idea, that may be fired with enthusiasm for glory and honour...Such heroism is without a doubt somewhat unconscious, but it is of such heroism that history is made. (Le Bon, 1895, p. 9)

Le Bon defines a crowd as a group of individuals united by a common idea, belief, or ideology. The premise on what unites a crowd is not chosen by a process of reasoning and examination of evidence, rather crowds accept beliefs and ideas superficially and utilize them as a catalyst for revolutionary action. According to Le Bon, when an individual becomes part of a

crowd or group, he/she undergoes a profound psychological transformation. Le Bon states, “he is no longer himself, but has become an automaton who has ceased to be guided by his will” (Le Bon, 1895, p. 36). He goes on to say, “In a crowd every sentiment and act is contagious, and contagious to such a degree that an individual readily sacrifices his personal interest to the collective interest” (Le Bon, 1895, p. 10). This idea maintains that a crowd forms when an influential idea unites a number of individuals and propels them to act towards a common goal. An example of this would be the recent protests in several U.S. states against government-imposed lockdowns in response to the COVID-19 pandemic. It is important to note that these influential ideas are never created by members of the crowd, instead, they are presented as a simplified idea. For example, a professor can compose a book explaining the nature of justice, however the crowd would require this concept to be simplified in order to stimulate a revolutionary action. Le Bon suggests that this is where a leader would come into play. It is the leader of a crowd who translates these complex concepts into clear ideas. Majority of the masses do not have a clear understanding or reasoning of subjects outside their own specialty, in this aspect, the leader would serve as a guide. We can identify how passionate and energized crowds or groups become when a leader projects that a cause is being fought in the name of freedom, peace, and prosperity – as seen with Woodrow Wilson. Le Bon wrote, “How numerous are the crowds that have heroically faced death for beliefs, ideas, and phrases that they scarcely understood” (Le Bon, 1895, p. 42). This refers to the ideas in which leaders manipulate to govern and control crowds.

So, if we as humans are irrational when moving as a collective group, why do we join the crowd? Le Bon proposed that when an individual lives as an ‘individual’, forced to take responsibility, he is apt to feel a crushing burden and sense of impotence. In joining a crowd or a

mass movement, the individual is temporarily relieved of said responsibility and burden. In times of uncertainty, people are afraid and when we are afraid, we rely on the herd to guide us. This goes back to the unconscious fears that Freud spoke on. A recent experiment was conducted to examine the social influences of groups on an individual. Chiara Lisiciandra et al. (2013), explains how peer group opinion alters normative judgments of scenarios involving violations of moral, social, and decency norms. In this study, they found that even moral norms are subject to *conformity*, especially in situations with a high degree of social presence. This research questions the very identity of not only the group, but the identity of the individual.

Social Identity

Social psychologist, Henri Tajfel, proposed that the groups that you belong to, whether it be your religion, family, or football team, give you a sense of social identity; a sense of belonging in a social world (Tajfel, 1970). Tajfel calls this, Social Identity Theory, a theory he developed after surviving as a prisoner of the second World War in Nazi occupied Poland. Tajfel then immigrated to Britain where he later ran the classic Minimal Group experiments. In these experiments, participants were divided into groups completely randomly and asked to allocate a reward (Tajfel, 1970). They immediately showed favoritism towards those in their own group and maximized their own groups outcome. This highlighted the trivial division between people which was enough to trigger discriminatory behavior. These discriminatory attitudes served several purposes, for example, believing you are part of a “good group” builds self-esteem. It is not a bad thing to be proud of your family or friends. On the other hand, this creates a “bad group” and stereotype about others, negative ideas about them as a whole. When it comes to Social Identity Theory, these stereotypes may vary in severity and negativity depending on both the *ingroup* and *outgroup* study. Research has repeatedly shown that cultures and societies all

over the world consistently carry strong negative stereotypes about one group in particular, immigrants. Immigrants are people leaving an outgroup and attempting to join the ingroup for a number of reasons including safety, security, or even opportunities (Lee, 2006). Research in intercultural relations have shown while the stereotype that people hold may vary by their nation of origin, level of education, religion, or socioeconomic class, the connotation tends to remain negative or ambivalent at best and this is problematic. When immigrants attempt to join an ingroup, holding negative stereotypes against them, their ability to integrate and contribute becomes more difficult (Lee, 2006). Luckily, scientists have also studied how to reduce this empathy gap.

In one experiment, participants in an *fMRI* were first shown images of members in their ingroup receiving painful shock, and members of an outgroup receiving the same shock. As expected, the participants reported feeling more empathy for the ingroup individuals which was supported by their brain activity. However, in this case, a member of the participants ingroup or outgroup could give money to save the participants from the shock. The participants were told whether or not they had been spared and who had paid to spare them. Seeing a member of their outgroup help them builds empathy for that outgroup and this was supported by the brain activity when they saw members of their ingroup, and outgroup shocked again after the training (Hein, 2015). This suggests that doing nice things for members of your outgroup will help pull all groups together. Beyond that, giving the outgroup an opportunity to help you will build your own levels of empathy. This research indicates that an individual's behavior shifts in favor of the group or herd they belong to, supporting the idea that individuals move irrationally as a unit.

Chapter 2

Literature Review

During periods of stress or shock, such as the COVID-19 period, herd mentality manifests itself in several different key areas including stock prices, consumer purchase behaviors, and collective societal anxiety (Loxton, et, al., 2020). By covering topics like herd mentality, Group-Mind Theory, Emergent Norm Theory, Social Identity Theory, and herding behavior in a financial crisis, a more robust understanding of how the effects of herd mentality on behavior becomes apparent.

What is Herd Mentality?

Herd mentality is defined as an alignment of thoughts and/or behaviours of individuals in a group, that emerges without purposeful coordination by a central authority or leading figure, and instead through local interactions among agents (Kameda and Hastie, 2015). In today's context, Freud's contributions to understanding the unconscious mind and behavior play a role in the driving force of "*crowd culture*". In a recent article, "In Praise of Herd Mentality," author Robert Frank spoke on a campaign that was intended to slow the sale of cigarettes. He mentions, one of the strongest predictors of whether someone will become a smoker is the smoking rate among his peers. With fewer people starting to smoke, Americans had fewer smoking peers, which reduced smoking rates further (Frank, 2020). Frank goes on to provide an example which found that military families who were relocated to areas with a 1 percent higher obesity rate than average, were 5 percent more likely to become obese during their assignment there. This provides an insight on the influence of the environment and herd. The question that arises: how does the herd size affect the behavior of an individual? In a recent publication, Herd Behavior, implications of herd size affecting behavior is discussed. Herd behavior is derived from animal

behavior, more specifically, when they are put into a dangerous situation like escaping a predator, the herd moves as a unit to survive. Applying this to human behavior allows us to gain insight into what herd mentality is. As mentioned before, the term *herding* refers to an alignment of thoughts or behaviors of individuals in a group. Most importantly, this shift often emerges through local interactions among individuals rather than through purposeful coordination by a central authority or a leading figure in the group (Kameda, 2015). Large-scale rallies, riots, strikes, religious gatherings, sporting events, and occurrences of mob violence all exhibit human herd behavior. When herd behavior takes hold, an individual's judgment and opinion formation is stifled as he or she blindly joins the group's movement and behavior. Crowds gathered in response to an injustice or protest may exhibit aggressive herding behavior. According to psychologists, a *group mind* may affect a mob and encourage people to behave in ways they would not individually, increasing the probability that conditions will provoke violence. It is worth noting that socioeconomic conditions also vary over time and space, creating temporal and geographical clusters of crime (Kameda, 2015). Considering the recent studies of herd behavior, we can make the correlation between an emotional representation to not only an item but to an ideology. In retrospect, identifying how powerful this idea was but looking at how the media moves and renders the public docile, one begins to wonder if Bernays foresaw this danger that his uncle Freud warned him about.

Social Theories

Group-Mind Theory

Gustave Le Bon (1895) proposed a Group-Mind Theory, stressing how people lose all sense of self and duty when they are part of a crowd. Because of their sheer numbers, they will develop a sense of invincible strength (Bon, G. L. 1895). This is plausible because when we obey

others, we all feel more reliable and have a sense of belonging. Take the stock market as an example; an increasing number of college students and elders have begun investing in stock markets because those around them have benefited, and this has encouraged them to follow suit. They claim their investment strategies are sound because a large number of people have reaped the benefits. The more people who have participated, the more confident they feel about their "sound" decision. What exactly is a group-mind? One theory is that the collective mind is simply the sum of its individual members; nevertheless, conclusions regarding group mind are often distinguishable from individual minds. Jenkins and colleagues (2014) discovered that individuals can assign beliefs and interests to a group even though certain thoughts are not attributed to any of the group's individual members (and vice versa). Assume that a group is selecting entertainment for a charity event, and half of the group chooses contemporary music whereas the other half chooses country music. As a solution, the group decides on jazz for the occasion. Although the group overall chose jazz, one would not relate this choice to any individual group member. As a result, groups are considered to be more than just a random set of individuals.

Gestalt psychology has established that groups are greater than the sum of their parts. (Wertheimer, 1938). As a result, there are two levels of comprehension when it comes to group perception: on the first level, individual minds are within the group, and at the second level, a single emergent group mind. Although most emergent occurrences are more complicated than their underlying components, the emergent mind of a group can be an extreme rarity. According to research, individuals are perceived to have both the capabilities to think and experience, but individuals are unlikely to recognize these capabilities in groups, especially with experience (Knobe and Prinz, 2008; Rai and Diermeier, 2015; Waytz and Young, 2012). For example, it sounds strange for Microsoft to experience joy but not as strange for Microsoft to be excited

about a new product. Potential reasons for this inconsistent perspective include a group's lack of body (Gray, Knickman, and Wegner, 2011) and the characteristics of individual group members (Waytz and Young, 2012), all of which project the group mind as flawed. Nevertheless, it is assumed that if groups are interpreted differently, they may be profound. A "group of individuals" may have few thoughts, but "individuals in a group" may have more. In this regard, the perception of mind is contingent on whether people focus on the group or the individual. In other words, we could talk about a collective mind if the mental states related is a single-minded entity. It is not, for example, a plural sum of (individual) mental states or properties but rather a "social integrate" (Pettit 2003a) of sorts. In this instance, the properties of an interconnected mind can be truly shared by a multitude of minds since they are properties of a single mental entity or mind on its own.

Emergent Norms Theory

Here is another well-known crowd psychology theory that explains how herding behavior develops. Turner and Killian (1987) investigated how social experiences form norms. Before there is crowd behavior, society is fraught with chaos and misunderstanding. Many people have their own perspectives on life and in this process, some people emerge as leaders, offering firm opinions and acting decisively. The society would eventually obey the leaders and reject opposing viewpoints. Crowd psychology develops over time. Leaders are crucial in herding trends since the majority of the herd will follow them.

The fundamental premises of Emergent Norm Theory are that collective behavior is logical, that a reaction to an uncertain triggering event would spark a new norm of conduct suitable to the situation through group processes without advance preparation and planning. Turner and Killian introduced emergent norm theory in 1972, and it has evolved from two major

traditions. First, Turner and Killian were inspired by the Le Bonian tradition of seeing collective behavior as irrational actions in order to understand how norms are established in crowds. Second, *symbolic interactionist* perspectives and small group research helped to create a model of norms as they emerge from interaction. According to Emergent Norms Theory, crowds gather when a crisis arises that causes people to reject previous concepts of acceptable behavior and discover new ways of behaving. When a crowd emerges, there is no specific norm regulating crowd activity, and there is no leader. The crowd, on the other hand, focuses on those who behave in a unique fashion and this concept is adopted as the modern standard for crowd activity. While this new standard becomes institutionalized within the crowd, compliance and regulations against deviant behaviors emerge, and resistance is muted. This silencing of opposing viewpoints leads to the crowd's appearance of unanimity. The norms that develop within crowds are not strict rules for behavior. Rather, they are more like overarching frameworks for behavior that set limits on what is appropriate (Turner and Killian, 1987). These norms arise as a result of emergent or preexisting social interactions. Turner and Killian argue that everything that encourages contact among crowd participants promotes the development of norms, in a process they refer to as "*milling*." Furthermore, while emergent norm theory challenges the premise that crowd activity is particularly irrational, it claims that many crowd agents are suggestible, and that this suggestibility leads to the growth of emergent norms.

There are two major points of criticism that have been leveled at Emergent Norm Theory. The first, suggested by Reicher in 1987, contends that when crowds gather, they bring norms with them. As a result, new norms are not needed to emerge. These norms vary based on the crowd's composition—for example, an angry crowd gathered after the imprisonment of a community member would display different norms than a group of suburban teens at a music

festival. These variations represent the various ways that crowds behave, but they are still norms. The second line of critique contends that all social activity involves the restructuring of social norms, and that the ingenuity in norm formation and behavior that has evolved to be known as “*norm emergence*” is typically achieved through long-term reasonable planning processes or dependence on minor changes to existing repertoires (Tilly 1993). Couch (1968), written prior to the introduction of emergent norm theory, is often quoted in support of this critique. Some researchers have also indicated that there are major methodological complexities in tracing the development of a norm in a crowd environment.

Although emergent norm theory was initially applied to a wide range of collective actions, it is now the most widely used to better explain the behavior of large groups, or crowds. Specifically, Emergent Norms Theory has acquired a significant presence in disaster research, as it is used to explain the actions of individuals that encounter a destabilizing crisis (a disaster) and are then challenged to find new ways to react to help ensure the protection and survival of as many citizens as possible. Dynes and Tierney (1994), for example, used Emergent Norm Theory to further explain the civilian prompted evacuation of the World Trade Center on September 11, 2001. Other scholars, like Johnson 1987, have proposed that Emergent Norm Theory can demonstrate not only orderly civilian initiated evacuations, but also the violent and selfish actions that can occur during mass panics. Johnson argues that the collapse of social order in some cases contributes to these forms of actions as reasonable responses to the new social circumstances.

Social Identity Theory

Researchers in the field of social identity have made significant strides in recent years, both internally (in terms of clarifying and expanding the theory) and externally (in terms of using

the theory to apply to new areas). The renewed emphasis on the theory's motivational foundation is an example of internal evolution. In recent years, the desire for uniqueness and self-definition has surpassed self-esteem as the most examined motive for group behavior. The focus on *group distinctiveness* as a driving factor has culminated in certification of the similarity–attraction hypothesis of intergroup relations (Jetten, Spears, and Postmes, 2004), fresh approaches to the study of deviance (Abrams, Marques, Bown, and Henson, 2000), and dismissal of both *assimilationist* (Hornsey and Hogg, 2000) and ‘color-blind’ (Brown and Hewstone, 2005) approaches to intergroup contact. Moreover, Hogg (2000) has expanded on the importance of *group distinctiveness* in establishing social significance, suggesting that many group processes – such as identification, *assimilation* to norms, and intergroup prejudice – are fueled in part by a desire to minimize one's subjective ambiguity about what to say, do, think, or feel.

Another aspect of evolution is the association between the individual and the group. Social identity theorists fought diligently to differentiate themselves from individualistic and reductionist methods to group processes. As a result, there was an implicit belief that the group self was the sole basis for self-definition, as well as skepticism toward analyses that inferred individual-based motivations for group behavior. Theorists have recently been playing ‘catch-up,’ attempting to convey in a more complex manner the personal correlations between desires for individual distinctiveness, group membership, and self-enhancement, and how the manifestation of these desires is formed by culture (Hornsey and Jetten, 2004). As a result, there is a subtle shift away from the idea that the association between the personal and collective self is ‘*antagonistic*.’ Individuals are formed and affected by group norms, but group norms are constantly challenged, debated, and shaped by individuals (Hornsey, 2006; Postmes and Jetten, 2006; Postmes, Spears, Lee, and Novak, 2005).

Considering the theory's external growth, social identity research has expanded in terms of both the contingent measures used and the realms of power. In terms of its dependent factors, a strong focus has been placed in recent years on implementing social identity concepts to group-based emotions and tracking how these emotions influence intergroup behavior (Smith, 1993). Emotions that have been examined for research include shame (Ellemers, Doosje, and Spears, 2004), collective guilt (Doosje, Branscombe, Spears, and Manstead, 1998), and intergroup *Schadenfreude*, or deriving pleasure from the misfortunes of others, (Leach, Spears, Branscombe, and Doosje, 2003). It was found that these emotions influenced the way the group thought and moved within a society. Research shows that shame or guilt may have a positive impact on social interaction by encouraging others to engage in pro-social behavior and encouraging people to help those who have been mistreated. Finally, over the last decade, the social identity *paradigm* has been used to educate and change areas that overlap with or fall outside of conventional social psychological studies of group processes. The social identity approach, for example, has refined how we forecast attitudes and behaviors by honing our perception of norms, findings that has had a huge effect on a variety of applied domains (Terry, Hogg, and White, 2000). Social identity concepts are also starting to influence our interpretation of communication (Hogg and Reid, 2006), justice (Tyler, Degoe, and Smith, 1996), and political psychology (Brewer, 2001).

Herding Behavior on the Financial Crisis

The foreclosures crisis is a significant historical phenomenon for studying herding behavior, as it affects thousands of similar bonds simultaneously. People's herding behavior of borrowing loans and purchasing houses for short-term gains drove up US real estate prices from early 2000 to 2007. Not only average mortgage lenders, but even low-income families, could not

wait to apply for home mortgages in the face of such strong temptation. Since institutional investors were subjected to the same knowledge: Historically, low interest rates and their vulnerability to the stock market following *bubbles*, they made similar investment moves to adjust their desire for housing investment. That is how herding behavior develops. However, because of banks' poor lending standards, which resulted in them making mortgage loans to low-credit borrowers, the default phenomenon increased, causing financial market panic. Because of the systemic irrationality, the effects were serious.

Hirshleifer et al. (1994) investigates security analysis and investment activities when private knowledge becomes accessible to some stress market members before others in a related report, suggesting a tendency toward herding. The findings of empirical research seem to confirm these theoretical predictions. Graham (1999), for example, examines herding toward the recommendation of value line using newsletter analyst methods from 1980 to 1992, and the findings affirm his model's theoretical predictions. Cote and Sanders (1997) found that reputation perceptions and the legitimacy of the popular forecast are positively linked to herding behavior, while forecast ability is negatively related to herding behavior. Hong et al. (2000) explores the relationship between forecasting capacity and career issues using an *I/B/E/S* data set of 8,421 US security analysts who developed earnings forecasts between 1983 and 1996. They claim that, on average, novice analysts who make risky predictions that differ from the majority are more likely to be fired than more seasoned analysts. More significantly, their predictions stray less from majority forecasts, in other words, new analysts' herd more than their more seasoned peers. According to the authors, these results are aligned with career driven herding theories, which state that an individual with more career desires can herd more than an individual with no career desires.

It is worth noting that another research has found that herding is unrelated to age: According to Ashiya and Doi (2001), *macroeconomic* forecasters in Japan show herding activity regardless of age. Chevalier and Ellison (1999) suggest that junior managers have potential to herd into common markets in a related study for fund managers, and their results back up this claim. Welch (2000) makes use of the Zacks' Historical Recommendations Database, which includes 226 US brokers between 1989 and 1994. The results show that security analysts' suggestions have a positive impact on the modifications of the next two analysts. Furthermore, the findings show that the majority has a weaker effect as it correctly predicts subsequent price changes (consistent with models where analysts herd due to scarce information). The impact of speculation on analyst recommendations is often higher during bullish market conditions, suggesting weaker knowledge collection during bullish market conditions (Clement and Tse, 2005; DeBondt and Forbes, 1999). There is also support that the more complex the role of the study, the greater the degree of herding: Kim and Pantzalis (2003) investigate the period between 1980 and 1998 and discover that herding appears to be more prominent among analysts who focus on diverse companies. Moreover, investors tend to condemn analyst herding activity because the market value of the businesses protected by herding analysts is lower. Furthermore, Olsen (1996) observes that herding has a favorable tendency and inaccuracy in analyst earnings forecasts. According to Olsen, investors will misinterpret lower forecast distribution as lower risk and positive prejudice as high potential returns. This can lead to unusually low returns for stocks with uncertain potential earnings. Jegadeesh and Kim (2010) propose a two-period model in an optimized market where it is feasible to distinguish between herding based on emulation and herding based on facts. They contend that, while the past may add interference and topple stock prices, the latter may not. Furthermore, the market can tell whether an analyst is herding or

not when revamping a recommendation. They put their method to the test with sell-side analyst recommendations from the *I/B/E/S* database between 1993 and 2005, and the results show analyst herding. Herding appears to be more prominent for analysts from major brokers, analysts who monitor stocks with a low recommendation dispersion, and analysts who do not revisit their recommendation regularly. Their findings on the response of stock prices to analyst reviews suggest that the market recognizes an analyst's propensity for herding. They also reveal that if the analyst has a motive to herd, there is a strong relationship between the stock price response and the divergence of the analyst's recommendation from the consensus. Based on their findings Jegadeesh and Kim are skeptical that herding has a destabilizing impact on markets

Two facts have emerged from research on gender gaps in investment decisions: (1) women investors appear to be cautious, and (2) women have a lower level of trust than men in the same circumstances. Men and women have differing perceptions toward risk, according to empirical evidence. Women are more cautious than men, according to Barsky et al. (1997), while Jianakoplos and Bernasek (1998) note that roughly 60% of women respondents in a 1989 Survey of Consumer Finance showed no willingness to take financial risks. While both men and women are overconfident, men are usually more so than women. Several research, including those of Deaux and Emswiller (1974), Lenney (1977), and Beyer and Bowden (1997), have supported these findings. With respect to finance, men appear to feel more knowledgeable than women (Prince, 1993). Barber and Odean (2001) also suggest that men are more overconfident than women in the financial sector. Women are not as confident as men in their capacity to make sound financial decisions (Schumell, 1996), and they find investment to be somewhat intimidating (Bach, 2000). Estes and Hosseini (1988) discovered that even though history and education are accounted for, women investors have lower trust in investment decisions. These

findings conclude that women are less likely to follow the crowd due to the lack of confidence to make a risky decision.

Chapter 3

Rationale

The intended purpose of this study and utilized literature is to investigate the impact of herd/mob mentality on the individual. The study seeks to expand this body of research by exploring the effects of herd mentality on behavior and how it is utilized in other domains. This meta-analysis was conducted in order to determine the power that herd mentality has on the behavior of an individual.

Strengths and Weaknesses of a Meta-analytic Approach

The meta-analysis method has the advantage of contributing to research by the dissection and integration of many articles, which can then be used to improve research precision. Furthermore, performing a meta-analysis improves the predictive influence of observed results while also presenting research analyses of subgroups that may react significantly well or adversely to an intervention. Utilizing statistics, researchers could assess study heterogeneity to decide what proportion of total variance is due to chance (Finckh and Tramer, 2008).

The methodological complexity of the meta-analysis method is cited as one of its flaws. Meta-analyses are often just as good as the studies they analyze, and they are prone to selection bias. When the studies chosen are of poor quality or inadequate in number, the results are less likely to be accurate. Additionally, publication bias will contribute to the censorship of studies that do not yield statistically meaningful results, thus influencing proposed outcomes. When the results of experiments are skewed, writers appear to record the most favorable data while paying less attention to non-significant results. Furthermore, eligibility requirements may be influenced in such a way that studies with findings that contradict the investigators' views are excluded. Another issue with the meta-analytic method is that researchers are forecasting the uncertain

future using information explained by past events (Yu, 2015). As previously stated, differing conditions across studies will result in contradictory findings since not all research use the same procedures and definitions. Having said that, Slavin and Smith (2008) argue that small studies are not necessarily biased but become biased when examined as a series of experiments. (Yu, 2015). Overall, meta-analyses are required to drive the research forward and gain a deeper understanding of the herd and its counterparts.

Discussion

This meta-analysis was conducted in order to identify the power herd mentality has on the behavior of an individual. Some of the research questions that were addressed include: What is herd mentality? How is herd mentality utilized across domains? How does herd mentality effects behavior? Herd mentality is defined as an alignment of thoughts and/or behaviours of individuals in a group, that emerges without purposeful coordination by a central authority or leading figure, and instead through local interactions among agents. Herd mentality is utilized in many domains but the ones covered in this meta-analysis include gender, age, race, and socioeconomic aspects. In order to understand how the crowd behaves, a reference to the individual's unconscious needed to be explored. By looking to Freud and his theory of psychoanalysis, a foundation was established to understand the mind of not only the individual but the crowd as well. Historical research on Edward Bernays and how he utilized Freud's theory was a steppingstone into social psychology. Bernays, and other likeminded theorists like, Le Bon, Tarde, and Tajfel expanded on these social implications.

Group-Mind Theory

Reflecting on research regarding a group mind, Jenkins (2014) understood that individuals can assign beliefs and interests to a group even though certain thoughts are not

attributed to any of the group's individual members (and vice versa). In other words, the group mind did not define the individual mind. It is understood that a group mind is more than just a random set of individuals, it is a single minded entity that makes decisions that best fit the groups motives and beliefs. Furthermore, it is stated that a collective mind is the object to which mental states are related in a single-minded entity. It is not, for example, a plural sum of (individual) mental states or properties but rather a “social integrate” as Pettit explains.

Emergent Norms Theory

Inspired by Le Bonian tradition, social theorists Turner and Killian (1987) investigated how social experiences form norms in a theory called, Emergent Norms. They suggest that amidst panic and disaster, people adopt new norms and reject any past or known norms because of the chaos. This was interesting because it reflects just how an individual will change their concepts of what is normal to move past a disaster as they unite with the group. It is also reminiscent of Freud’s ideas on the unconscious and how it affects out conscious behaviors. It also supports the idea that the mentality of the herd effects the behavior of an individual.

Although Emergent Norm Theory was initially applied to a wide range of collective actions, it is important to note that it is the most widely used to better explain the behavior of large groups, or crowds.

Social Identity Theory

Every crowd has its own values, culture, and agenda, it is how a crowd is identified. Social psychologist, Henri Tajfel, proposed that the groups that you belong to, give you a sense of social identity; a sense of belonging in a social world. Tajfel calls this, Social Identity Theory, and it is important to note that belonging to a group places atrivial division between people which triggers discriminatory behavior. These discriminatory attitudes, e.g., believing you are

part of a “good group” (ingroup) builds self-esteem. On the other hand, this creates a “bad group” (outgroup) and stereotype about others as a whole. It was interesting how immigrants would try to integrate with an ingroup for a better life and their perspective on the hardships they encounter. In recent years, the desire for uniqueness and self-definition has surpassed self-esteem as the most examined motive for group behavior. Among other researchers, Hogg, expanded on the importance of *group distinctiveness* in establishing social significance, suggesting that many group processes are fueled in part by a desire to minimize one's subjective ambiguity about what to say, do, think, or feel. In other words, an individual's social identity is reinforced by their group. This idea is reminiscent of the Emergent Norms Theory and how an individual's identity is integrated with the crowd. The social identity approach, for example, has refined how we forecast attitudes, emotions, and behaviors by honing our perception of norms.

Herding Behavior on the Financial Crisis

In the financial realm, when private knowledge becomes accessible to some stress market members before others, it suggests a tendency toward herding. It is interesting how people will ignore their own knowledge of finances when they see a number of people making financial decisions. It was stated that people feel at ease knowing that others have made the same decisions regarding investments. In a study by Cote and Sanders (1997), they found that reputation and perceptions of popular forecast are positively linked to herding behavior, while forecast ability is negatively related to herding behavior. In other words, herding is used when average people see a person of influence invest or use a certain product. This same method was used by Edward Bernays when he employed famous actors and people in power to use and endorse certain products to gain sales. Some research suggests that young brokers tend to follow the herd more than seasoned brokers because of the fear and self-doubt. The research also

presented information regarding investments made by the opposite gender. The research concluded that women are less likely to follow the crowd due to the lack of confidence to make a risky decision. From the research provided, it has been suggested that age does not play a role in herd behavior. There was no indication that would suggest age being a factor as the research considered elements of the unconscious, environment, personal influence, socioeconomic status, and norms.

Implication of Future Research

In any case, herd mentality has a potentially valuable role in understanding the social implications of an individual. Existing literature leaves many questions that still need to be answered. For example, how related are animal herd behaviors to human herd behaviors? When can Herd Mentality be considered good? Do you lose your sense of self after engaging with the herd? Although most research into herd mentality and other sources discussed present a better understanding of how it effects behavior, there are still aspects that need to be explored and addressed.

Benefits of Research

In conclusion, the effects of herd mentality on behavior can be examined in many domains and through a range of interventions. As it pertains to present day society, it is important to understand the implications of herd mentality within adolescence. In *Age of Opportunity: Lessons from the New Science of Adolescence*, Lawrence Steinberg (2014) explores the age crime rate, which increases around the age of 18, and also addresses reckless behavior. He relates this to their high responsiveness to rewards as well as the “*peer effect*,” which states that risks rise when adolescents are with or being observed by other adolescents. This implies that as a teen, you are more likely to be swayed by the herd as Steinberg suggests that teens are

more susceptible to peer pressure, because that their character is still developing. By progressing and furthering the research surrounding herd mentality, an awareness to the benefits of positive change can result in positive behavior for the future. Overall, there are many benefits to the research provided to understand the crowd. Through this meta-analysis, the research was able to present and determine the power that herd mentality has on the behavior of an individual.

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