

Psychosocial and Contextual Determinants of Word-of-Mouth Transmission

A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy

Ashleigh Ellen Druce Bachelor of Social Science (Psychology) (Honours) USC

School of Economics, Finance and Marketing

College of Business RMIT University

July 2020

Declaration

I certify that except where due acknowledgement has been made, the work is that of the author alone; the work has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the thesis is the result of work which has been carried out since the official commencement date of the approved research program; any editorial work, paid or unpaid, carried out by a third party is acknowledged; and, ethics procedures and guidelines have been followed.

I acknowledge the support I have received for my research through the provision of an Australian Government Research Training Program Scholarship.

Ashleigh Ellen Druce

Date: 11/07/20

Acknowledgements

I would like to sincerely thank my excellent supervisory team for their expertise and guidance throughout my PhD. I am grateful to my principal supervisor, Associate Professor Angela Dobele, for her endlessly positive attitude during the ups-and-downs of the PhD journey, and for pushing me to engage in rewarding experiences that I may not have had the confidence for if not for her enthusiasm and encouragement. I would like to thank my principal supervisor, Associate Professor Constantino Stavros, for being a constant source of stability and wisdom, for his patience, ability to motivate me, and for championing me tirelessly to provide opportunities beyond my PhD that have immensely broadened my horizons as a researcher. I would also like to express my gratitude to my associate supervisor, Dr Adrian Camilleri. I could not have asked for a more knowledgeable supervisor to help me to develop my skills as an experimenter, and I have deeply appreciated Dr Camilleri's attention to detail and ability to challenge me to be a better researcher.

I am also grateful to the professional and academic staff at RMIT University who have provided assistance throughout my studies. In particular, I would like to thank Professor Kate Westberg for her encouragement and highly insightful feedback on this thesis. I would also like to thank the members of the RMIT Behavioural Business Lab, who provided support, inspiration, and advice on the experimental work as it progressed. In particular, I would like to thank Dr Janneke Blijlevens who provided expert feedback on the scale development aspect of my research. I would also like to acknowledge Julia Farrell for her editorial work on several elements of this thesis. I owe much to my family, friends, and husband for their support throughout this process. I would like to thank my parents, Glenys and Gary Druce, who have always inspired me to be curious and seek knowledge. I am also grateful to my sister, Paige Druce, who I look up to as a person and as a researcher. I would particularly like to thank Paige for providing helpful feedback on the single paper meta-analyses reported in this thesis. My deepest gratitude extends to my husband, David Powell, who has talked me through every challenge and celebrated every win with me throughout this PhD journey.

Related Publications

Peer Reviewed Journal Articles

Powell, A. E., Camilleri, A. R., Dobele, A., & Stavros, C. (2017). Developing a scale for the perceived social benefits of sharing. *Journal of Consumer Marketing*, *34*(6), 496-504.

Papers Invited for Revision

Powell, A. E., Camilleri, A. R., Dobele, A. R., Stavros, C. (2020). Pass It On: Transmission and the need to self-enhance. Invited for revision at the *European Journal of Marketing*.

Working Papers

Powell, A. E., Camilleri, A. R. (2020). Word-of-Mouth: Transmission vs generation and the need to self-enhance.

Powell, A. E., Dobele, A. R., Stavros, C. (2020). Negative Brand-Relevant Transmission: Covert self-enhancement and brand indifference.

Peer Reviewed Conference Papers

Powell, A. E., Stavros, C. Dobele, A.R. (2019). Transmission of Negative Brand-Relevant Content on Social Media. Australian and New Zealand Marketing Academy Conference (ANZMAC), Wellington, New Zealand. **Powell, A. E.,** Camilleri, A. R., Dobele, A. R., Stavros, C. (2017). Pass It On: Word-of-Mouth Transmission and the Need to Self-Enhance. Society for Consumer Psychology Conference (SCP), Savannah, United States of America.

Powell, A. E., Camilleri, A. R., Dobele, A. R., Stavros, C. (2017). Understanding wordof-mouth transmission. Australian and New Zealand Marketing Academy Conference (ANZMAC), Melbourne, Australia.

Powell, A. E., Camilleri, A. R., Dobele, A. R., Stavros, C. (2017). Understanding wordof-mouth transmission. The Role of Self-Enhancement and Communication Context in Word-of-Mouth Transmission. Association for Consumer Research Conference (ACR), San Diego, United States of America.

Powell, A. E., Camilleri, A. R., Dobele, A.R., Stavros, C. (2016). Perceptions of social benefit related to electronic word-of-mouth: The development of a brief scale. Australian and New Zealand Marketing Academy Conference (ANZMAC), Christchurch, New Zealand.

Powell, A. E., Camilleri, A. R., Dobele, A.R., Stavros, C. (2015). Psychosocial and contextual determinants of electronic word-of- mouth transmission. Australian and New Zealand Marketing Academy Conference (ANZMAC), Sydney, Australia

Declarationi
Acknowledgementsii
Related Publications iv
Table of Contents vi
List of Tables xii
List of Figures xiv
Abstract1
CHAPTER 1
Introduction
1.1 Justification for the Research5
1.2 Research Questions
1.3 Methodological Overview11
1.4 Summary of Results13
1.5 Overview of Theoretical Contributions14
1.6 Summary of Managerial Implications15
1.7 Delimitations15
1.8 Thesis Structure 17
CHAPTER 2
Literature Review
2.1 WOM: Definitions and Importance in Marketing18
2.1.1 WOM Generation and Transmission

Table of Contents

2.1.2 Emotional Arousal and WOM Transmission	
2.3 Impression Management and Word of Mouth	
2.4 Communication Context	
2.5 Perceived Social Risk and Benefit	
2.5.1 Conceptualisation of Perceived Social Benefit	
2.6 Valence and Word-of-Mouth Transmission: Negativity Bias	
2.7 Summary and Future Directions	
2.8 Significance of This Research	
CHAPTER 3	
Methodology	
3.1 Research Paradigms	
3.2 Positivism and Interpretivism	
3.2.1 Ontologies	
3.2.2 Epistemologies	
3.2.3 Postpositivism and the Current Research	
3.3 Quantitative and Qualitative Research	
3.3.1 Quantitative Research	
3.3.2 Qualitative Research	
3.4 Exploratory, Descriptive, and Causal Designs	
3.4.1 Exploratory Research	
3.4.2 Descriptive Research	67
3.4.3 Causal Research	
2.4.4 Miyod Mothoda Dasigna	
5.4.4 Mixed Methods Designs	

3.5 Methodological Approach: Overview	
3.5.1 Quantitative Studies	73
3.5.2 Qualitative Study	75
CHAPTER 4	77
Initial Quantitative Studies	77
4.1 Study 1	77
4.1.1 Participants	
4.1.2 Stimuli	79
4.1.3 Measures	
4.1.4 Procedure and Design	
4.1.5 Results	85
4.1.6 Discussion	89
4.2 Study 2	
4.2.1 Preliminary Scale Development	
4.2.2 Method	94
4.2.3 Results	
4.2.4 Discussion	
4.3 Study 3	
4.3.1 Participants	
4.3.2 Manipulation and Measures	100
4.3.3 Procedure and Design	101
4.3.4 Results	
4.3.5 Discussion	

4.4 Study 4	
4.4.1 Participants	
4.4.2 Manipulations and Measures	
4.4.3 Procedure and Design	
4.4.4 Results	
4.4.5 Discussion	
4.5 Study 5	
4.5.1 Participants	
4.5.2 Manipulation	
4.5.3 Measures	
4.5.4 Procedure	
4.5.5 Results	
4.5.6 Discussion	
4.6 Study 6	
4.6.1 Participants	
4.6.2 Manipulation and Measures	
4.6.3 Procedure	
4.6.4 Results	
4.6.5 Discussion	
4.7 Study 7	
4.7.1 Participants	
4.7.2 Manipulation	
4.7.3 Measures	

4.7.4 Procedure	
4.7.5 Results	
4.7.6 Discussion	
4.8 Summary of Studies 1-7	
4.8.1 Need to Self-Enhance	
4.8.2 Perceived Social Risk and Benefit	
4.8.3 Communication Context	
4.8.4 Limitations	
4.9 Study 8	
4.9.1 Participants	
4.9.2 Measures	
4.9.3 Procedure	
4.9.4 Results	
4.9.5 Discussion	
CHAPTER 5	
Qualitative Investigation of Negative Transmission	
5.1 Study 9: Background	
5.2 Method	
5.3 Phase 1: Netnographic Analysis.	
5.3.1 Identification of Data Sources.	
5.3.2 Data Collection	
5.3.3 Data Analysis	
5.3.4 Results	

5.3.5 Summary
5.4 Phase 2: Interviews 183
5.4.1 Identification of Informants
5.4.2 Data Analysis
5.4.3 Results
5.5 Discussion
CHAPTER 6
Discussion and Conclusion
6.1 Discussion of Findings and Theoretical Contributions
6.1.1 RQ 1: How does impression management influence transmission behaviour? 203
6.1.2 RQ 2: How does the likelihood of transmission differ across communication contexts?
6.1.3 RQ 3: What are the perceived social benefits of transmission, and how does perceived
social benefit relative to perceived social risk influence the likelihood of transmission? 210
6.1.4 RQ 4: What motivates the transmission of negative brand-relevant content?
6.2 Managerial Implications
6.3 Limitations and Future Directions 223
6.4 Conclusion 225
References
Appendix A: Study 1 Stimuli 262
Appendix B: Questionnaire Items 267
Appendix C: RMIT Ethics Approval

List of Tables

Table 1. Comparison of Generation and Transmission	25
Table 2. Comparison of Positivist, Interpretivist, and Postpositivist Paradigms	52
Table 3. Comparison of Quantitative and Qualitative Research	64
Table 4. Comparison of Research Designs and Application to the Current Thesis	72
Table 5. Arousal Questionnaire Items	80
Table 6. Likelihood of Transmission: Questionnaire Items and Contexts	82
Table 7. Perceived Social Risk Questionnaire Items	83
Table 8. Rosenberg's (1965) Self-Esteem Scale	84
Table 9. Mean Perceived Social Risk by Context	89
Table 10. Perceived Social Benefit: Preliminary Measure	94
Table 11. Rotated Factor Loadings of the 17 Preliminary Items	97
Table 12. Correlations Between Perceived Social Benefit and Likelihood of transmission by	
Context	103
Table 13. Need to Self-Enhance Questionnaire Items	116
Table 14. Correlations Between Perceived Social Benefit and Likelihood of transmission by	
Context	128
Table 15. Likelihood of Transmission Questionnaire Items	134
Table 16. Perceived Social Benefit of Communication Context	135
Table 17. Revised Perceived Social Risk Measure	137
Table 18. Revised Perceived Social Risk Measure	137
Table 19. Summary of Key Relationships	144
Table 20 Summary of Studies 1-7	145

Table 21. Perceived Social Risk and Benefit Measures	156
Table 22. Selected Brands by Industry and Facebook Follower Count	175
Table 23. Participant Information	185
Table 24. Summary of Findings and Theoretical Contributions by Research Question	216

List of Figures

Figure 1. Conceptual Framework
Figure 2. Overview of Methodological Approach
Figure 3. Likelihood of Transmission by Need to Self-Enhance and Arousal Group
Figure 4. Need to Self-Enhance, Perceived Social Risk, and Likelihood of Transmission
Figure 5. Likelihood of Transmission Across Communication Contexts 104
Figure 6. Correlation Between Need to Self-Enhance and Perceptions of Social Risk 111
Figure 7. Likelihood of Transmission Across Communication Contexts
Figure 8. Correlation Between Perceptions of Social Risk and Likelihood of Transmission 118
Figure 9. Perceptions of Social Risk by Group 119
Figure 10. Likelihood of Transmission by Group Across Communication Contexts 120
Figure 11. Mediation Model 127
Figure 12. Correlation Between Perceived Social Benefit and Likelihood of Transmission 127
Figure 13. Likelihood of Transmission by Group 129
Figure 14. Likelihood of Transmission by Group Across Communication Contexts 130
Figure 15. Need to Self-Enhance, Overall Value, and Likelihood of Transmission 139
Figure 16. Likelihood of Transmission by Communication Context
Figure 17. Perceived Social Risk, Benefit, and Overall Value by Communication Context 142
Figure 18. SPM Results for the Need to Self-Enhance and Likelihood of Transmission
Figure 19. SPM Results for Communication Context and Likelihood of Transmission
Figure 20. Participant Generated Messages 159
Figure 21. Study 8: Procedure 161
Figure 22. Perceptions of Social Risk, Benefit, and Overall Value by Timing Group 163

Figure 23. Need to Self-Enhance, Overall Value of Transmission and Generation, and Choice 16	
Figure 24. Inductive and Deductive Classifications	177
Figure 25. Social, Self, and Brand-Related Factors	
Figure 26. Final Conceptual Framework	

Abstract

Understanding consumer motivations for word-of-mouth (WOM) transmission is critical in modern marketing. This is because transmission not only underlies the viral phenomenon, which allows marketers to reach large audiences quickly and cost-effectively, but is also central to marketing communication in that it embodies the movement of shared meaning between brands and consumers. Despite the appeal of viral approaches, considerable trial-and-error remains associated with the design of such campaigns. Further, brands are increasingly challenged by the propensity of negative brand-relevant messages to spread via social media.

A contributing factor to the uncertainty in viral campaign design, and social media management in general, is the comparatively limited understanding of the psychological and contextual factors that drive transmission. This limitation constrains the ability of marketers to create messages that will spread as well as manage the impact of negative WOM. Previous research has established the influence of emotion on transmission and highlights the potential role of the consumer's need to self-enhance. However, how these variables interact with the consumer's perceptions of social risk and benefit to determine transmission in real-world communication contexts is unknown.

This research presents a conceptual framework for understanding the factors that drive transmission and explores key relationships using a mixed methods approach. The first phase of the research consisted of a series of eight quantitative, and primarily, experimental studies. The results of these studies demonstrated that the need to self-enhance moderates the relationship between emotional arousal and the likelihood of transmission: a high need to self-enhance decreases the likelihood to transmit emotionally arousing messages.

The negative relationship between the need to self-enhance and likelihood to transmit was also mediated by perceptions of social benefit relative to risk. Broadcasting, transmitting to weak ties, and via asynchronous (online) communication were perceived to be riskier, less beneficial, and therefore less likely, than narrowcasting, transmitting to strong ties, and via synchronous (face-to-face) communication.

A qualitative investigation was then undertaken, which consisted of two phases: a netnographic exploration of negative brand-relevant transmission, and in-depth interviews. The netnographic phase of the research demonstrated that negative brand-relevant transmission can be both brand-related (driven by product or service failure or corporate irresponsibility) and consumer-related (driven by self and social motives). In-depth interviews then clarified that negative transmission often occurs in the absence of brand hate, particularly when it is used as a covert method of self-enhancement for the transmitter via downward social comparisons.

Overall, this research contributes to the theoretical understanding of the factors that drive transmission by integrating, establishing, and exploring the motivators of this behaviour. This research also has implications for viral marketing campaign design and marketing communication on digital platforms more broadly. Transmittable messages should: (a) boost self-esteem, (b) have value for social relationships, and (c) encourage transmission via narrowcasting to strong ties. When managing the transmission of negative brand-relevant content, brands should avoid reinforcement of negative transmission, unless addressing corporate irresponsibility or product/service failure is possible, as well as harness consumers' tendency to engage in debate and downward social comparisons to increase engagement with, and transmission of, brand-relevant messages.

CHAPTER 1

Introduction

Consumers' propensity to discuss brands with each other has been a focus of the work of marketing scholars and practitioners for decades, with good reason. In essence, consumers are more likely to engage with, and be influenced by, messages that they receive from other consumers than messages from marketers (Goldsmith, 2008; Keller, 2007). Accordingly, understanding why consumers discuss brands, and how this discussion can be successfully leveraged, is a key concern for marketers (Haenlein & Libai, 2017; Roy, Datta, & Mukherjee, 2019). This concern has motivated a considerable body of research related to word-of-mouth (WOM). This term is defined as 'informal communications directed at other consumers about the ownership, usage, or characteristics of particular goods and services or their sellers' (Westbrook, 1987, p. 261).

More recently, the transmission of WOM has been amplified by the acceleration of social media platforms. Social media not only provides marketers with a new, increasingly pervasive channel through which to reach consumers (Klassen et al., 2018), but it also provides an avenue for consumers to discuss their brand-related experiences with others (Gómez, Lopez, & Molina, 2019; Hudson, Roth, Madden, & Hudson, 2015). Early research into WOM focused on the effects of this type of communication on consumers, demonstrating that positive and negative WOM influences attitudes towards products, brands and, ultimately, purchase decision-making (Arndt, 1967; Charlett, Garland, & Marr, 1995). As WOM can now achieve considerable reach and speed via computer-mediated channels, it has become even more central in shaping consumer decision-making (Brown, Broderick, & Lee, 2007; Cheung & Thadani, 2012; Erkan & Evans, 2016). Increasingly important in this context is understanding the differential

characteristics and impacts of WOM generation and WOM transmission.

Distinguishing between generation and transmission is pertinent to marketers as each process requires different marketing strategies (Ketelaar et al., 2016). Building on the overarching definition of WOM as a form of interpersonal communication that is related to the ownership or usage of products and services (Westbrook, 1987), WOM *generation* (hereafter, generation) is characterised by the creation of product recommendations and reviews (De Angelis et al., 2012). Conversely, WOM *transmission* (hereafter, transmission) is a more passive, yet critical, form of WOM that involves passing on a brand-relevant message to others (such as sharing an advertisement in the form of a YouTube clip on Facebook, or emailing a link to a news article).

Transmission is the key focus of this research and is more formally defined as the propagation of marketing messages or brand-relevant content by individual consumers to other consumers (Liu-Thompkins, 2012), with this behaviour facilitated by social media. The exponential growth associated with this one-to-many communication underlies the viral phenomenon, which enables highly shareable campaigns to reach large audiences quickly and cost-effectively (Kaplan & Haenlein, 2011). Beyond the opportunity for viral marketing, social media transmission provides brands with a powerful platform from which to engage in identity building and the management of brand–consumer relationships via the transfer of positive brand-relevant content (Essamri, McKechnie, & Winklhofer, 2019; Sharma & Verma, 2018).

The extant literature has to date largely focused on understanding the content-related factors that facilitate transmission and in turn viral and social media marketing efforts (Hinz, Skiera, Barrot, & Becker, 2011; Berger & Milkman, 2012; Koch & Benlian, 2015; Huang et al., 2019). Comparatively less work, however, has been conducted to understand the interaction

between the psychological and contextual factors that drive transmission and how these elements can be influenced by marketers. This research focuses on the psychological and contextual drivers of transmission to inform both the theoretical understanding of this behaviour, and the design and management of viral and social media marketing campaigns. This focus is central to this dissertation and its rationalisation will be discussed in the following section.

1.1 Justification for the Research

Transmission and generation of WOM are often conflated, with transmission not as well understood. This conflation and comparative lack of understanding of transmission as a form of WOM are problematic for marketers, as evidence suggests that the two processes involve different antecedents (De Angelis et al., 2012; Bebbington, McLeod, Ellison, & Fay, 2017). For example, the factors that drive generation are complex, but stem from actual consumption experiences and are often intended to influence others' purchase decision-making (De Matos & Rossi, 2008; Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004). Transmission, however, is more closely related to how individuals use pre-existing messages that they encounter to curate their ideal selves online, and forms an important link in integrated online communication activities by encouraging the referral of trusted and impactful brand representations (Dobele, Lindgreen, Beverland, Vanhamme, & Van Wijk, 2007).

A key finding from the existing literature regarding transmission suggests that emotional arousal is integral in driving this behaviour (Berger & Milkman, 2012). While some research has explored the value of targeting emotionally engaging campaigns to opinion leaders (e.g. Mochalova, & Nanopoulos, 2014), sharing a message that produces emotional arousal does not guarantee viral or social media marketing success: other psychological and context-related factors that determine transmission need to be considered (Berger, 2014; Kaplan & Haenlein,

2011).

At present, detailed understanding of the psychological and contextual drivers of transmission is absent, and this deficiency is said to contribute to the relatively large failure rate associated with viral marketing campaigns (Ketelaar et al., 2016). Further, the lack of a comprehensive understanding of transmission, and the resulting uncertainty, makes it challenging for marketers to design campaigns and social media content that will encourage sharing behaviour (Schulze, Scholer, & Skiera, 2014; Felix, Rauschnabel, & Hinsch, 2017). To address this need for clarity, this research builds upon previous WOM research (introduced in Section 1.2 and discussed in detail in Chapter 2) to advance the theoretical understanding of the psychological and contextual factors that drive transmission.

In addition to the lack of clarity around the factors that drive transmission in general, there is uncertainty regarding the prevalence and impact of negative information about a brand being transmitted or becoming viral, and the course of action that should be taken in response. When negative brand-relevant information is shared by consumers, there can be strong consequences for the brands involved (Huber, Vollhardt, Matthes, & Vogel, 2010). This research therefore also contributes to our understanding of the factors that motivate negative transmission to address the need to identify the best course of action to take when attempting to contain or address this type of negative WOM (Grégoire et al., 2015).

Overall, this thesis specifies and explores the key pathways related to the psychological and contextual drivers of transmission in order to develop a comprehensive theoretical understanding of this behaviour. Investigating the key pathways identified (and therefore the research questions that are introduced in the following section) is important because the fragmented and incomplete nature of our current understanding contributes to a lack of clarity

around best practice in viral and social media campaign design and management.

1.2 Research Questions

The need to understand transmission behaviour in a more comprehensive and specified manner informed the overarching research question that guided this research: *what are the psychological and contextual factors that influence transmission behaviour, and what drives the transmission of negative brand-relevant content?* The following section outlines the key literature that relates to this research question and poses the further, more specific, research questions that guided this investigation.

Previous research suggests that the level of arousal produced by a message influences the likelihood that it will be transmitted (Berger, 2011; Berger & Milkman, 2012; Dobele et al., 2007). Messages that produce high levels of emotion, characterised by an increase in arousal, such as anger, surprise or happiness, are more likely to be transmitted than messages that produce low levels of arousal (Thayer, 1986; Berger & Milkman, 2012). However, behavioural responses to emotional stimuli differ depending on psychological and contextual factors (Simon 1967, Dolan 2002; Ochsner & Gross, 2005). For example, social interactions involve a complex mix of motivations that can lead individuals to act in ways that belie their emotional experience in order to engage in socially acceptable practices (Bandura 1986; Andersen & Chen, 2002). Therefore, while arousal leads, on average, to an increase in the likelihood of message transmission, this relationship likely depends on the psychological motivations of the individual. To address the potential impact of these psychological motivations, this thesis explores the roles of impression management, context-related factors, and perceived social risk and benefit in relation to transmission behaviour. These factors, and the research questions that relate to each factor, are introduced below.

Regarding impression management, this thesis examines how self-concept can influence communication and thereby WOM. Self-concept refers to an organised set of beliefs that a person holds about their identity (Markus & Wurf, 1987). Individuals are inherently motivated to engage in impression management by presenting themselves to others in a way that is congruent with their self-concept (self-verification) and/or will improve their self-concept (selfenhancement; Banaji & Prentice, 1994). Previous literature outlines how impression management shapes the type of WOM that individuals will generate (Alexandrov et al., 2013; Packard & Wooten, 2008; De Angelis et al., 2012; Weingarten & Berger, 2017). For example, individuals are more likely to talk about events they have experienced that cast them in a favourable light (Weingarten & Berger, 2017). Individuals also prefer to generate positive, rather than negative, WOM to facilitate an impression of their expertise (De Angelis et al., 2012; Wojnicki & Godes, 2006).

However, transmission does not require the generation of a message (Bebbington et al., 2017). As a result, understanding the motivation for transmission may relate less to how selfenhancement determines the content of the message and more to how the individual's need to self-enhance influences their likelihood to transmit pre-existing marketing messages via different communication contexts. The importance of impression management in the WOM process, and the comparative lack of understanding of the specific role of this variable in regard to transmission, led to the following research question:

RQ 1: How does impression management influence transmission behaviour?

Transmission can occur via communication contexts that vary in regard to synchronicity, audience type and audience size (Berger, 2014). Synchronicity relates to whether the communication is happening in real time (that is, face-to-face communication) or involves a

delay between the communication being sent and received (Chen, 2017). The audience can differ in relation to the type and strength of social ties between its members (Stutzman & Kramer-Duffield, 2010). It also varies in size: transmission can be narrowcast to small audiences or broadcast to large audiences (De Bruyn & Lilien, 2008; Steffes & Burgee, 2009).

Previous literature has only examined the impact of synchronicity, audience size and audience type on generation (not transmission), and primarily when the communication context is fixed. However, communication context is usually not fixed in relation to transmission. Individuals can be selective about where, when and with whom they transmit, increasingly so with the mobility attached to modern media platforms. The need to understand how communication context influences transmission informed the following research question:

RQ 2: How does the likelihood of transmission differ across communication contexts?

Previous literature has suggested that engaging in WOM can involve positive social outcomes, primarily through the social reinforcement provided when WOM is well-received, which can bolster self-perceptions and social capital, and be a means to engage in altruistic behaviour (Zywica & Danowski, 2008). Some of these positive outcomes have been explored in relation to generation; however, the perceived social benefits associated with transmission behaviour have not been clearly conceptualised or explored. Therefore, this research identifies the potential perceived social benefits of transmission that are conceptually distinct from perceived social risk and explores how these include benefits to self-presentation, self-expression and social relationships.

In addition to presenting a conceptualisation of the perceived social benefit of transmission, this research is the first to highlight how perceived social benefit and perceived social risk can be examined simultaneously to understand how their interplay determines

transmission. Previous research has established perceived value, which is consumers' perceptions of the benefits of a product or service relative to the costs involved, as a driver of WOM (e.g., De Matos & Rossi, 2008). The current research applies this conceptualisation of perceived value; however, it establishes how the perceived social benefit (rather than perceived product or service benefit) relative to the associated perceived social risk (rather than the perceived product or service cost) of transmission determines this type of WOM behaviour. The need to understand both the perceived social benefits of transmission, and how perceived social benefit relative to perceived social risk determines transmission behaviour led to the following research question:

RQ 3: What are the perceived social benefits of transmission, and how does perceived social benefit relative to perceived social risk influence the likelihood of transmission?

While there is some evidence that the emotional valence of the transmittable message (i.e., whether it produces positive or negative emotions) is of secondary importance to the level of emotional arousal that it produces (Berger & Milkman, 2012), the literature pertaining to generation suggests that valence is an important predictor of WOM behaviour (Babić Rosario, Sotgiu, De Valck, & Bijmolt, 2016). There is, for example, evidence of a negativity bias in online product reviews (that is, in the context of generation), in which negative reviews can be more persuasive and more likely to be attended to (Ahluwalia, 2002; Yang & Unnava, 2016). However, it is unclear whether this bias also occurs in the context of transmission, and what specifically motivates the transmission of negative brand-relevant information, which is when the consumer primarily serves to pass on negative information or content that is related to a brand.

Therefore, this thesis draws from the generation and anti-branding literature in order to more deeply investigate the motivators of negative brand-relevant transmission to address the following research question:

RQ 4: What motivates the transmission of negative brand-relevant content?

Drawing on the relevant literature, this research presents a conceptual framework that highlights the established drivers of transmission behaviour and associated pathways for further investigation. The conceptual framework, which is presented in Chapter 2, facilitates understanding of the interactions between psychological factors (emotion, impression management, perceptions of social risk and benefit) and contextual factors (audience size, audience type, synchronicity) involved in the transmission process. This conceptual framework is presented alongside the four major research questions introduced above, and listed below (subquestions pertaining to each of these major RQs are presented and discussed in detail in Chapter 2):

RQ 1: How does impression management influence transmission behaviour? *RQ 2:* How does the likelihood of transmission differ across communication contexts? *RQ 3:* What are the perceived social benefits of transmission, and how does perceived social benefit relative to perceived social risk influence the likelihood of transmission? *RO 4:* What motivates the transmission of negative brand-relevant content?

1.3 Methodological Overview

To address the research questions that stem from the overarching investigation, a mixed methods approach was employed. The research moved sequentially from a quantitative emphasis in relation to RQs 1–3, to a qualitative approach to addressing RQ 4. This mixed methods approach is discussed and fully justified in Chapter 3. It consisted of eight quantitative and

primarily experimental studies (Studies 1-8), and a two-phase qualitative investigation (Study 9). Broadly, the research method took an iterative approach to address the research questions, wherein the results of each stage informed the subsequent investigations.

To address RQs 1–3 a series of eight experimental studies were conducted to demonstrate the causal relationships between arousal, the need to self-enhance, perceptions of social benefit and risk, and participants' likelihood to transmit. This experimental approach was built around an understanding of: (a) the variables that were to be measured, and (b) the presence of existing quantitative relationships (Bryman, 1984). The iterative nature of these experimental studies allowed for refinement of the manipulation and measurement of key variables, as well as for the establishment of a causal chain (Spencer, Zanna, & Fong, 2005; Weinreich, 1996). The complete approach taken, and the accompanying refinements to the manipulations and measurements employed, is detailed in Chapter 4.

In formulating RQ 4, it was recognised that less was known about the specific phenomenon under investigation. This comparatively limited knowledge base reduced the capacity to engage in objective measurement and theory testing in relation to RQ 4. Thus, methods stemming from an interpretivist perspective were adopted in addressing RQ 4 to allow the variables and constructs involved in answering this question to be uncovered throughout the research process (Goulding, 1998). Accordingly, a qualitative investigation of the drivers of negative transmission was conducted to address RQ 4. This adoption of a mixed methods approach allowed for both the triangulation of the experimental findings (Greene, Caracelli, & Graham, 1989) and for the distinct, but complementary, sub-questions that stemmed from RQ 4 to be explored in a flexible, in-depth manner.

Study 9 consisted of a two-phase qualitative study. The first phase was an analysis of comments left by transmitters on brand-relevant content using inductive and deductive coding (Haig, 1995). The second phase involved an interpretive approach using in-depth interviews, projective techniques and thematic analysis to gain a deeper understanding of the motivational drivers and outcomes of participants' negative transmission (Tuohy, Cooney, Dowling, Murphy, & Sixsmith, 2013). Chapter 5 outlines the methodologies employed in this two-phase qualitative investigation in further detail, and discusses the results and specific limitations of these studies.

1.4 Summary of Results

This research demonstrates that, while emotional arousal drives WOM transmission, the need to self-enhance moderates this relationship. A high need to self-enhance decreases the likelihood of transmitting high-arousal content due to the effect of the need to self-enhance on perceptions of social risk and benefit, particularly via broadcasting (rather than narrowcasting), to weak (rather than strong) ties and via online (rather than face-to-face) communication. While a high need to self-enhance generally decreases the likelihood to transmit, transmission can be more likely than generation. This increased likelihood to choose transmission, rather than generation, when there is a high need to self-enhance is attributable to the increased social risk associated with crafting a message (generating WOM) compared to passing on a pre-existing message (transmitting WOM).

These perceptions of social risk relative to perceived social benefit – and individuals' likelihood to transmit – differ depending on audience size, audience type and the synchronicity of the communication. Broadcasting, transmitting to weak ties and transmitting via asynchronous (online) communication are perceived to be riskier and less beneficial, and are therefore less likely to occur than narrowcasting, transmitting to strong ties and transmitting via synchronous

(face-to-face) communication.

The current research further demonstrates that negative transmission can be a more casual and opportunistic form of anti-branding than other forms of negative WOM. Negative transmission is also associated with a lack of brand hate or otherwise strong feelings towards the brand (Zarantonello, Romani, Grappi, & Bagozzi, 2016). Instead, negative transmission is driven more by social motives and the need to self-enhance, particularly in order to create a downward social comparison.

1.5 Overview of Theoretical Contributions

The findings of the current research build substantively on the previous literature by establishing that transmission behaviour is driven not only by arousal, but also by the need to self-enhance and the perceptions of social risk and benefit associated with transmission. The proposal, conceptualisation and establishment of the significance of perceived social benefit in this context is a key theoretical contribution of this research, as is the establishment of the role of overall value (perceived social risk relative to perceived social benefit) in the transmission process.

The current research is also the first to integrate and demonstrate the impact of audience size (broadcasting vs narrowcasting), audience type (strong vs weak social ties) and the synchronicity of the communication (synchronous vs asynchronous) in the transmission process. Further, this study is the first to demonstrate that perceptions of social risk and benefit differ across communication contexts.

In addition, this research extends our understanding of negative WOM by establishing negative transmission as a type of anti-branding that is distinct from previously examined forms. These findings demonstrate the specific drivers of this type of WOM, which differ from the

corporate social irresponsibility and factors related to product/service failure that are heavily implicated in other types of anti-brand communication. As a key distinction, this research establishes that negative transmission more strongly serves social and self-related motives, particularly via downward social comparisons. The current research, therefore, establishes a link between negative transmission and individuals' inherent need to self-enhance – which can be increased via social media use – the need to cope with a negative self-view or need to recover from a threat to one's self-esteem (Chou & Edge, 2012). The theoretical implications of these findings are explored in full detail in Chapter 6.

1.6 Summary of Managerial Implications

The findings have significant managerial implications for brand-relevant content creation and the management of digital and social media marketing. In particular, the findings of Studies 1–8 suggest that content that is designed to be transmitted by consumers should: (a) boost selfesteem, (b) have value for social relationships, and (c) encourage impactful transmissions via narrowcasting to strong ties. Further, the results of Study 9 suggest that, in managing the transmission of negative brand-relevant content, brands should avoid the reinforcement of negative transmission, unless addressing corporate transgressions or product/service failure is possible. Additionally, brands can harness consumers' propensity to engage in debate and downward social comparison to increase engagement with, and transmission of, brand-relevant messages. The managerial implications of the current research are explored in full detail in Chapter 6.

1.7 Delimitations

In interpreting the findings, it is important to note that, with the exception of Study 8, transmission (rather than generation) was the focus of the current research. This was deemed to

be an appropriate scope for this research because, while there is a significant body of research that clarifies the processes involved in generation, this breadth and depth of knowledge is lacking in regard to transmission. Study 8 did build on the findings of earlier studies by providing some comparison between the two types of WOM; however, a comprehensive comparison of the drivers and consequences of generation and transmission was beyond the scope of this work. While there is the potential for further research to investigate the theoretical differences between generation and transmission, the specific focus on transmission was chosen because understanding the drivers of transmission behaviour has a more immediate impact on the design and management of viral and social media marketing.

The methodological approaches selected also served to delimit the scope of this research. Specifically, the experimental studies largely focused on hypothetical transmission scenarios related to fictional news articles and brands. This delimitation was set as this approach: (a) facilitated the experimental control required to establish causal findings, and (b) allowed for a type of content (a news article) that is commonly transmitted in real-world settings to be thoroughly investigated. However, further research should be conducted to understand how consumers' relationship with a brand interacts with arousal, impression management, and perceptions of social risk and benefit to determine the drivers of transmission of other types of brand-relevant content (such as images and video).

Study 9 was exploratory, and the in-depth interviews were conducted with a relatively small and purposively selected sample consisting of individuals who engage in negative transmission. While this approach provided rich data and in-depth insight in relation to RQ 4, future research would be required to determine more generalisable and/or causal relationships between the key variables identified in this study. Further quantitative research examining

negative transmission could also enhance understanding of why some individuals do not engage in negative transmission, or include a comprehensive investigation of the differences between negative transmission and other forms of anti-branding.

1.8 Thesis Structure

This chapter has presented the rationale for and aims of this research, the steps taken to achieve these aims, and a summary of the results. The next chapter, Chapter 2, provides a review of the relevant literature related to impression management, communication context, and perceived social risk and benefit. Chapter 2 also presents the proposed conceptual framework, which highlights the established drivers of transmission behaviour, and the pathways for further investigation, concluding with an elucidation of the significance of this research. Chapter 3 provides an overview of and justification for the mixed methods approach employed in this research. Chapter 4 details the specific methods and results of the series of eight primarily experimental quantitative studies (Studies 1–8), while the two-phase qualitative investigation (Study 9) is outlined in Chapter 5. The final chapter, Chapter 6, presents a discussion of the completed research, and links each key finding to the relevant research question, before discussing the limitations of the research. Chapter 6 also outlines the theoretical and managerial implications of the research findings and potential future research directions in this area, and provides an overall conclusion for this research.

CHAPTER 2

Literature Review

This review will define WOM in the context of the existing literature, highlighting its importance in marketing. Two different types of WOM behaviour (generation and transmission) will be explored and contrasted, and the focus of this thesis on transmission will be outlined. Predominantly, this review focuses on the potential relationships between transmission and the following factors: emotional arousal, impression management (self-verification and selfenhancement), communication context (audience size, audience type, and communication synchronicity), and perceptions of social risk and benefit.

The following sections will thus explore the existing WOM literature. How this knowledge can be applied to transmission, the relationship between emotional arousal and transmission, the role of impression management in determining transmission, and the uncertainty regarding how this factor interacts with arousal will be highlighted. Further, the variables that constitute communication context will be defined, and the role of these in the transmission process will be described. Communication context selection will be introduced, and how this variable may interact with impression management will be discussed. Finally, the concept of negative transmission will be explored, before conclusions and future directions are summarised in the conceptual framework presented at Figure 1.

2.1 WOM: Definitions and Importance in Marketing

WOM can broadly be defined as 'informal communications directed at other consumers about the ownership, usage, or characteristics of particular goods and services or their sellers,' (Westbrook, 1987, p. 261). Early WOM research focused on the consumption-related aspect of this behaviour, highlighting that WOM is interpersonal communication about products or

services that the communicator has utilised (Engel, Kegerreis, & Blackwell, 1969). The conceptualisation of WOM as being precipitated by direct product or service experiences by consumers is an enduring one, with more recent research focusing on how purchase and service experiences drive consumers to share WOM (De Matos & Rossi, 2008; Hennig-Thurau et al., 2004).

Other definitions of WOM are less tied to consumption experiences as a precipitating factor, and capture any 'oral, person-to-person communication between a perceived noncommercial communicator and a receiver concerning a brand, a product, or a service offered for sale' (Arndt, 1967, p. 190). With the impact of the Internet, the definition of WOM was broadened further, to capture eWOM, which is brand-relevant 'information communicated through the Internet (such as reviews, tweets, blog posts, 'likes,' 'pins,' images, video testimonials)' (Babić Rosario et al., 2016, p. 297). This broader definition captures the modern WOM landscape, where specific and consumption-related product or service reviews and recommendations can be sent and received face-to-face or via the Internet, and more passive behaviours (such as 'liking' a brand's social media post) can also serve as a type of WOM.

Therefore, WOM can be thought of as an overarching term which captures a range of behaviours. The commonality between WOM behaviours is that they all involve communicating with others about goods, services, or brands. The differences between WOM behaviours are related to consumption experiences and communication channels. That is, whether the WOM is directly precipitated by, and is descriptive of, a consumption experience, or whether the communicator is merely passing on brand-relevant information (such as sharing a viral advertisement via social media). WOM can also differ depending on whether it is shared face-toface or via the multitude of online communication channels available to contemporary

consumers. The distinctions that can be drawn between types of WOM, and the impact of the communication channel used to share WOM, will be explored further in the subsequent sections of this review.

Despite the varying definitions of WOM, it is, and has long been, recognised as a critically relevant concept related to marketing efforts. There is a large body of research that explores the effectiveness of WOM in driving consumer behaviour. For example, individuals are more likely to trust information from other consumers than information from commercial entities (Meuter, McCabe, & Curran, 2013; Filieri, Alguezaui, & McLeay, 2015). Both positive and negative WOM can influence product attitudes and purchase decision-making (Arndt, 1967; Charlett, et al., 1995; Reigner, 2007). WOM can also form an important part of the post-purchase experience for consumers: venting, seeking justice, service recovery and emotion regulation are all facilitated via WOM behaviour (Richins, 1983; Blodgett, Granbois & Walters, 1993; De Matos & Rossi, 2008; Berger, 2014).

Due to the proliferation and ubiquity of social media and online review sites, eWOM has become a central focus of practitioners and academics in recent years. The increased attention on these platforms is due to the greater reach available in comparison to traditional, face-to-face WOM methods, as well as the fact that digital sharing can be conveyed by one to many with considerable speed (Brown et al., 2007). It is increasingly easy and commonplace for consumers to access – and be influenced by – the opinions of others during the pre-purchase stage of consumption (Chen & Xie, 2008; Muralidharan, Yoon, Sung, Miller, & Lee, 2017). The attention of researchers has, therefore, turned to understanding the factors that drive individuals to talk about their experiences with brands and products online, and what makes these product reviews more or less persuasive (Hennig-Thurau et al., 2004; Babić Rosario et al., 2016).
Another focus of researchers and practitioners is what drives individuals to pass on WOM (such as sharing an advertisement in the form of a YouTube clip on Facebook, or emailing a link to a news article). This type of sharing behaviour is defined as transmission, and involves the propagation of marketing messages or brand-relevant content by individual consumers to other consumers (Liu-Thompkins, 2012). Transmission is not as closely tied to consumption experiences as WOM generation, such as product recommendations and online reviews (De Angelis et al., 2012). Individuals can pass on brand-relevant messages that relate to brands that they do not have a pre-existing relationship with, and the transmission behaviour is not necessarily tied to consumers' brand attitudes, but to their reaction to the brand-relevant content itself (Dobele et al., 2007).

Transmission has gained increased attention from researchers and practitioners as it underlies the viral phenomenon (Kaplan & Haenlein, 2011). While 'going viral' has been demonstrated to have considerable marketing power, particularly in regard to brand building (Miller & Lammas, 2010), there is no specific number of views, or 'shares' at which a piece of brand-relevant content can be said to have become viral (Petrescu & Korgaonkar, 2011). Instead, viral marketing can be conceptualised as the creation of electronic content that can be distributed to Internet users, who then decide if they will pass the content onto others in their social network, providing the potential for the content to 'reach a large group of Internet users at an exponential rate' (Ho & Dempsey, 2010, p. 1000).

In addition to wanting to harness the viral phenomenon for (positive) messages to spread quickly to many, marketers are placing an emphasis on social media marketing in general (Alalwan, Rana, Dwivedi, & Algharabat, 2017). Social media can be used to build brand identity (Gensler, Volckner, & Liu-Thompkins, 2013), encourage the diffusion of positive brand-relevant

information, create value for consumers, and develop brand-consumer relationships (Felix et al., 2017). Successful use of social media in marketing relies on consumers' engagement (generally expressed in the form of likes, shares, and comments) with the content that brands create within the social media environment (Hollebeek, Glynn, & Brodie, 2014; Kietzmann, Hermkens, McCarthy, & Silvestre, 2011). Therefore, consumers' transmission behaviour not only underlies the viral phenomenon, specifically, but also the success of brand identity building and social media marketing efforts in general (Ashley & Tuten, 2015).

Researchers and practitioners have thus far focused on how to seed messages to the optimal amount and type of potential transmitters, as well as on content-related factors that drive transmission (Hinz et al., 2011; Berger & Milkman, 2012). Emerging literature focuses on the individual factors that drive transmission (Berger, 2014; Buechel & Berger, 2018), however, creating brand-relevant content that is highly transmittable and directly encouraging transmission behaviour remains a challenging endeavour for marketers (Schulze et al., 2014). This challenge is compounded by the fact that transmission primarily occurs in a dynamic online environment which is increasingly saturated with content (Lazer, 2015).

The key for marketers is to understand what factors to focus on when creating brandrelevant content that is designed to be transmitted, and how to influence transmission behaviour (Stephen & Lehmann, 2016). As influencing behaviour requires a deep understanding of the multi-faceted motivations involved (Kwasnicka, Dombrowski, White, & Sniehotta, 2016), it is important that a clear and comprehensive picture of the biological, social, psychological, and contextual drivers of transmission is captured.

Therefore, to allow brands to successfully harness transmission behaviour in order to create viral marketing campaigns, and to facilitate social media marketing efforts in general, the

following question must be explored: beyond content and seeding-related factors, what drives individuals to transmit WOM? Untangling this from the previous literature is challenging because generation and transmission are often conflated. This conflation is problematic, as these types of WOM constitute different behaviours, and there is evidence to suggest that they are driven by different motives (De Angelis et al., 2012; Bebbington et al., 2017). The next section of this literature review will explore the distinction between generation and transmission in further detail in order to clearly define the WOM behaviour that is under investigation in the current thesis. Subsequent sections of the literature review will then draw from the WOM literature more broadly in order to develop a conceptual framework, and identify the avenues of investigation that were addressed in the thesis.

2.1.1 WOM Generation and Transmission

The distinction between generation and transmission may be central to understanding individuals' WOM behaviour, as these two types of interpersonal communication have different antecedents and consequences (De Angelis et al., 2012; Kaplan & Haenlein, 2011). WOM is generated following a consumption experience and is driven by a motivation to guide others' purchase decisions (De Matos & Rossi, 2008). Accordingly, the audience for this type of WOM tends to be actively seeking information to facilitate purchasing decisions (Goldsmith & Horowitz, 2013; Darley et al., 2010). While some review sites highlight social connections between reviewers and the audience (e.g., Tripadvisor; McCarthy, Stock, & Verma, 2012), in many cases reviewers are anonymous and unknown to the reader (Chatterjee, 2001; Jensen, Averbeck, Zhang, & Wright, 2013).

In contrast, transmission occurs primarily via social media, on platforms on which users are less likely to be anonymous (Kaplan & Haenlein, 2011). The transmission of brand-relevant

content via social media can occur regardless of the individual's experience with the brand (i.e., the transmitter does not need a pre-existing relationship with the brand to engage in brandrelevant transmission). In contrast to online review sites, people less frequently use social media to reduce risk and get pre-purchase information (Goldsmith & Horowitz, 2013), and more frequently for entertainment, relaxation, and to pass time (Whiting & Williams, 2013; Quaan-Hase & Young, 2010). When transmitting brand-relevant content, individuals are likely to have meaningful social connections to their audience, which can incur stronger social consequences for the transmitter (Ellison, Steinfield, & Lampe, 2010; Chen, 2017).

Transmission can also involve a gradual transformation of the initial message (Bebbington et al., 2017). That is, transmitters can add their own message to the pre-existing message as they pass it on to others (e.g., adding a comment to a brand's pre-existing Facebook post while they sharing it with their followers). The key distinction is that transmission involves the passing on of a pre-existing message with or without some transformation of the message or relationship with the brand, while generation involves the creation of a new message that directly relates to a consumption experience. A summary of factors that distinguish generation from transmission is provided at Table 1.

 Table 1. Comparison of Generation and Transmission

Generation	Transmission	
Interpersonal communication that is related to	The propagation of marketing messages or	
the ownership or usage of products and	brand-relevant content by individual	
services (Westbrook, 1987)	consumers to other consumers (Liu-	
	Thompkins, 2012)	
Follows and describes a consumption	Does not require a pre-existing relationship	
experience (De Matos & Rossi, 2008)	with the brand (De Angelis et al., 2012)	
Used pre- and post-purchase by consumers to	Is not tied to the transmitter's consumption	
guide purchase decisions (De Matos & Rossi	experiences (De Angelis et al., 2012)	
2008)		
When online, is often anonymous (Chatterjee,	Often shared to an audience with which the	
2001; Jensen et al., 2013)	transmitter has a meaningful social	
	connection (Ellison et al., 2010; Chen, 2017)	

Source: Developed for this study from Westbrook, 1987, De Matos & Rossi, 2008, Chatterjee, 2001; Jensen et al., 2013, Liu-Thompkins, 2012; De Angelis et al., 2012, Ellison et al., 2010, and Chen 2017.

Marketers who are concerned with developing brand-relevant content that is designed to spread via transmission have tended to rely on insights that have been developed via the generation literature, given the paucity of information on transmission specifically. While emerging literature has begun to understand how to target emotionally engaging campaigns to opinion leaders, a picture of the motivational drivers of transmission amongst this audience remains incomplete. Therefore, the current thesis aims to address the need to focus on transmission and build an understanding of the drivers of this behaviour from biological, psychological, social, and contextual perspectives. The subsequent sections pertain to the main variables investigated in this thesis and highlight the key research questions that pertain to each one.

2.1.2 Emotional Arousal and WOM Transmission

Successful viral marketing often triggers an emotional response in the transmitter (Dobele et al., 2007). There is considerable tension in the psychology literature regarding the structure of the components of the emotional response (Cowen & Keltner, 2018), and a

comprehensive investigation of the structure of the emotional response is beyond the scope of this thesis. However, it is recognised that across the psychology literature, there is consistency regarding the multi-component nature emotion (Kuppens, Stouten, & Mesquita, 2009). The emotional response is generally conceptualised as consisting of three components: cognitive, affective, and physiological (Lazarus, 1984). While emotion researchers' conceptualisations of the order of these components differ (Mauss & Robinson, 2009), a simple model for understanding the emotional response is as follows: when exposed to emotion-eliciting stimuli, a cognitive appraisal of the stimulus is accompanied by an affective (e.g., the experience of feeling angry) and physiological (e.g., an increase in heart rate) response (Neidenthal, Halberstadt, & Innes-Ker, 1999).

These cognitive, affective, and physiological reactions differ across a number of dimensions (Plutchik, 2003; Thayer, 1986). While there is debate around the number and conceptualisation of these dimensions, there is a consensus that emotions differ regarding valence (positive vs negative feelings; Lerner & Keltner, 2000) and the amount of physiological arousal produced (Hamann, 2012; Thayer, 1986). Emotional arousal (hereafter arousal) involves changes to physiological functioning, such as heart-rate and blood pressure fluctuations, in response to emotion-eliciting stimuli (McCraty, Atkinson, Tiller, Rein, & Watkins, 1995). Some emotions (e.g., anger, surprise, joy) produce an increase in physiological arousal, while other emotions produce a decrease in arousal (e.g., sadness, contentment; Thayer, 1986).

There have been a small number of studies that have tested the effect of arousal on transmission. Berger (2011) and Berger and Milkman (2012) found that content that produces high levels of arousal was more likely to be transmitted than content that produced low levels of arousal. Berger and Milkman (2012) reported a naturalistic study wherein they measured the

emotional content (and corresponding arousal) of 6,956 news articles posted on the New York Times website. Analyses suggested that articles that produced high arousal were more likely to be transmitted (via emailing the link to others) than low arousal articles. This study also reported experimental findings that supported the results of the naturalistic study. Participants in a high arousal group (who jogged on the spot for 30 seconds before exposure to the message) were more likely to report that they would transmit a message with others than those in a low arousal condition.

There are two potential explanations for the effect of arousal on the likelihood of transmission. Firstly, the physiological and psychological 'readiness for action' that arousal produces has been proposed to mediate the relationship between arousal and the likelihood of transmission (Berger, 2013, p. 108). This readiness for action is adaptive, and attributed to the evolutionary purpose that it serves (Berridge & Arnsten, 2013; Plutchik, 2003). Increases in physiological arousal ready the organism for self-protective action, such as the fight or flight response in reaction to threatening stimuli (Jansen, Van Nguyen, Karpitskiy, Mettenleiter, & Loewy, 1995). Conversely, arousal associated with more positive emotions allows individuals to capitalise on these experiences through their behaviour and processing of the emotion-inducing stimuli (Fredrickson, 2001; Taylor et al., 2000). A second explanation for the relationship between arousal and transmission is that the arousal is misattributed to the overall quality of the message itself, leading to more positive evaluations of the content (Berger, 2014; Dutton & Aron, 1974). For example, arousing messages may be perceived as more interesting, or worthy of sharing than non-arousing messages by virtue of the physiological response that they incur.

While emotion, and the resulting arousal, increase the likelihood of transmission, behavioural and cognitive responses to emotional stimuli may differ depending on psychosocial

and contextual factors (Dolan, 2002; Ochsner & Gross, 2005; Simon, 1967). Social interactions, including those that occur online, involve a complex mixture of motivational forces that may lead individuals to act in ways that belie their true emotional experience to adhere to social norms and manage others' impressions of them (Andersen & Chen, 2002; Bandura, 1986). Due to this, the impact of arousal on transmission may differ in strength depending on the motivations of the individual and the context of the communication. That is, while arousal has been shown to lead to an increase in the likelihood of transmission, it is possible that in real-world situations psychosocial and cognitive factors, such as impression management and communication context, interact with this effect.

2.3 Impression Management and Word of Mouth

When individuals transmit WOM they are engaging in social interactions that provide an opportunity for impression management (Schlenker, Britt, & Pennington, 1996). Impression management involves the behaviours and social displays individuals engage in to influence how others view them (Leary & Kowalski, 1990). Individuals are inherently motivated to manage others' impressions of them, and this concern is evident both in face-to-face and online communications (Rosenberg & Egbert, 2011). That is, when an individual engages in WOM activity, whether face-to-face or online, they will be presented with an opportunity to manage others' impressions of them. This impression management opportunity may then prime motives related to the maintenance and enhancement of the self-concept (Rosenberg & Egbert, 2011; Triandis, 1989).

The self-concept is a schematically organised set of beliefs or ideas that a person holds about their identity that determines the processing of information about the self, and can motivate social behaviour (Markus & Wurf, 1987). Put simply, self-concept theory suggests that

individuals will present themselves in a way that is congruent with their self-concept (selfverification), and/or in a way that will improve their self-concept (self-enhancement; Banaji & Prentice, 1994). Further, this motivation becomes stronger as behaviour becomes more visible, such as on popular social networking sites like Facebook or Twitter, where actions will be broadcast to a large audience (Eisingerich et al., 2015). Therefore, an individual's inherent motivation to maintain and enhance their self-concept may influence the relationship between arousal and transmission, especially when this communication occurs in highly visible communication contexts. The importance of self-concept in the context of interpersonal communication leads to the following research question:

RQ 1: How does impression management influence transmission behaviour?

Previous research supports the importance of self-concept in determining online social behaviour. For example, Hollenbeck and Kaikati (2012) found that Facebook users were more likely to 'like' brands on Facebook when they perceived the brand to be congruent with their self-concept. Using a mixture of qualitative procedures, including focus groups and observations of actual online behaviour, Hollenbeck and Kaikati examined how 84 participants (aged 20-28 years) used brands to signal their identity online. Participants in this study were likely to associate themselves with brands that they perceived to be congruent with how they viewed themselves, and many of their Facebook activities centred around communicating their self-concept to others through the brands that they interacted with or 'liked'. These findings suggest that self-verification plays a role in determining transmission behaviour. However, research is yet to test the effect of this motivation on the transmission process which leads to the following sub-question, stemming from RQ 1:

RQ 1a: How does self-verification influence WOM transmission?

While the role of self-verification requires exploration, there is evidence to suggest that WOM can be self-enhancing. De Angelis et al. (2012) conducted a series of experimental investigations to examine the influence of self-enhancement motivation on what type of WOM individuals would share. In these studies, a sample consisting of college students were allocated to either a high need to self-enhance condition or low need to self-enhance condition. Selfenhancement motivation was manipulated by requiring those in the high need to self-enhance condition to describe their performance in the subject at which they were performing the most poorly. The participants in the low need to self-enhance condition were instead required to describe a neutral situation.

Following the self-enhancement manipulation, De Angelis et al. (2012) asked participants to describe a consumption experience. Participants in the high need to self-enhance condition were more likely to share WOM which cast them in a positive light. That is, they either *transmitted* a negative consumption experience that occurred to someone else, or *generated* positive WOM about their own consumption experience, which made them appear to have good judgement and be connoisseur-like. When there was a low need to self-enhance, no such relationship was observed between the object of the consumption experience (i.e., the self or others) and the valence (i.e., the positivity or negativity) of the experience.

De Angelis et al. (2012) observed the impact of self-enhancement motivation on face-toface WOM, and a similar relationship has been observed regarding other forms of communication. Jeong, Paek, and Lee (2013) found that communicating with participants via a highly visible social networking site (Facebook) was more effective in increasing participants' intention to align themselves with a pro-social cause than using less public communication channels (e.g., email). That is, participants were more likely to 'like' and support a cause on

Facebook when contacted via this channel, as they felt that their social network would see it. Participants were less likely to align themselves with the cause if they were contacted via email, as they felt that others would not see it. That is, participants in this study wanted to present a favourable impression to others, and when the communication context and message (i.e., supporting a cause via Facebook) were congruent with this motivation, participants were more likely to engage. According to Jeong et al., this suggests that self-enhancement motivation drives online social behaviour.

The impact of self-verification and self-enhancement (i.e., impression management in general) on the relationship between arousal and transmission behaviour remains unclear. That is, how this inherent motivation to engage in impression management interacts with arousal to predict transmission is yet to be examined. Further, impression management may not only influence *what* individuals will transmit but *how*, *where*, and *with whom* they will transmit. Once an individual has decided to transmit the message, they may then *select* an appropriate communication context in which to transmit the message (e.g., face-to-face vs emailing it to one friend vs sharing with a large group of friends on Facebook). Given that the context of the communication may have an influence on: (a) what people are willing to transmit, and (b) impression management concerns (Berger, 2014), further work is needed to understand how impression management influences communication context choice when transmitting WOM, which leads to the following research questions:

RQ 1b: Do impression management concerns moderate the relationship between arousal and WOM transmission?

RQ 1c: Does impression management determine WOM transmission across different communication contexts?

2.4 Communication Context

Three dimensions that may drive the effect of communication context on transmission behaviour are communication synchronicity, audience type, and audience size (Berger, 2014). Different types of interaction involve different combinations of these dimensions. For example, face-to-face transmission is synchronous, it may be directed toward a large or small audience, and the audience may consist of close friends, acquaintances, or strangers.

The asynchronous nature of written communication (as opposed to the synchronous, realtime nature of face-to-face communication) allows individuals to be more considered about the messages they transmit. Berger and Iyengar (2013) found that communication synchronicity influenced WOM: when communication was asynchronous (rather than synchronous), individuals were able to more carefully craft their message, and this led participants to generate more interesting (and, therefore, self-enhancing) WOM (Berger & Iyengar, 2013).

While Berger and Iyengar (2013) demonstrate the importance of *how* individuals communicate in determining WOM behaviour, *who* an individual is communicating with may also have an effect on what they will share. Audience type may determine WOM activity as a function of social ties (Berger, 2014; De Bruyn & Lilien, 2008). The social tie between two individuals may be strong, weak, or non-existent, depending on the nature of the relationship (Granovetter, 1973). Audience type is important in determining WOM activity because individuals tailor what they share to match the closeness of their relationship to the receiver (Stutzman & Kramer-Duffield, 2010). This message-tailoring is particularly relevant to transmission as online platforms facilitate broadcasting to large, heterogeneous audiences (e.g. Facebook).

When transmitting WOM, individuals may either narrowcast information to a small

audience (e.g., sending an email to one receiver) or broadcast a message to a large audience (e.g., sharing to a Twitter newsfeed to thousands of followers). Barasch and Berger (2014) found that broadcasting, compared to narrowcasting, is more likely to lead to the transmission of a message that is self-enhancing. Their research also indicated that participants who were asked to broadcast WOM were more likely to engage in protective self-enhancement than those who were asked to narrowcast. That is, participants in the broadcasting condition avoided sharing content that would cast them in a negative light to a greater extent than those in the narrowcasting condition. Broadcasting increased participants' self-focus, which in turn increased their motivation to engage in protective self-enhancement (i.e., sharing WOM to facilitate positive impressions) in this study, a finding that is inconsistent with other research in this area (e.g., De Angelis et al., 2012).

An alternate explanation for the effect of audience size on communication is provided by Eisingerich et al. (2015) who found that broadcasting, compared to narrowcasting, involved greater perceived social risk, albeit only in a generation, rather than transmission, context. That is, participants felt that engaging in broadcasted WOM generation, compared to narrowcasted face-to-face WOM generation, was riskier regarding the audience disapproval and potential embarrassment. As a result of this perceived social risk, participants reported less likelihood to engage in broadcasted eWOM, rather than narrowcasted, face-to-face WOM. Therefore, the difference in WOM activity due to audience size is also mediated by perceived social risk.

Interestingly, Eisingerich et al. (2015) also found that when there was a high need to selfenhance, the effect of perceived social risk on WOM activity was reversed. Participants with a chronically high need to self-enhance reported being more likely to broadcast eWOM than they

were to narrowcast face-to-face WOM. These findings are inconsistent with those of Barasch and Berger (2014). While both studies provide support for the notion that broadcasting increases the importance of self-enhancement motivation in determining what people will share, Barasch and Berger's findings suggest that broadcasting results in protective, rather than acquisitive, self-enhancement activity. However, if there is indeed increased perceived social risk associated with broadcasting (as the results of Eisingerich et al., 2015 suggest) a need to engage in protective self-enhancement (as demonstrated by Barasch & Berger, 2014) would decrease the likelihood to broadcast WOM.

Unlike participants in Barasch and Berger's (2014) study, participants in the study reported by Eisingerich et al. did not engage in protective self-enhancement; rather, their increased likelihood to broadcast WOM was driven by acquisitive self-enhancement (i.e., sharing WOM to facilitate positive impressions). That is, participants wanted to cast themselves in a positive light by sharing WOM. Broadcasting, rather than narrowcasting, may have provided a more salient opportunity to do this as it allowed them to engage in impression management with many people at one time.

Overall, the previous findings suggest that the context of the communication may have an influence on: (a) the messages that individuals will generate, and (b) their self-enhancement concerns (Berger, 2014; Chou & Edge, 2012). It is therefore imperative to understand how the need to self-enhance and perceptions of social risk and benefit influence communication context choice when engaging in transmission. Previous literature in this area has only examined the impact of synchronicity, audience size, and audience type on WOM generation, and primarily when the communication context was fixed. That is, participants have been allocated to a particular communication context, and then the impact of that context on the messages that they

generated has been measured. However, communication context is rarely fixed regarding transmission. Individuals can be selective regarding where, when, and with whom they transmit. This potential selectivity regarding communication context in the transmission process leads to the following research question:

RQ 2: How does the likelihood of transmission differ across communication contexts?2.5 Perceived Social Risk and Benefit

Previous research (discussed above) has demonstrated the role of consumers' perceptions of social risk - the risk of disapproval or embarrassment as a result of sharing - in the transmission process. However, the greater perceived social risk incurred by WOM on digital platforms is clearly not a significant barrier to transmission behaviour, with the exponential growth of this activity in recent years (De Angelis et al., 2012; Hennig-Thurau et al., 2004). Indeed, people can be more likely to generate WOM via online platforms, rather than face-toface, provided that it will cast them in a positive light (Eisengerich et al., 2015). This finding suggests that the increased perceived social risk incurred by online contexts may be offset by the potential social benefit associated with sharing. Accordingly, engaging in WOM has been shown to provide individuals with an opportunity to gain social approval, express their identity, and build relationships with others (Berger, 2014).

The possibility that the likelihood of transmission depends on the perception of both social risk and benefit highlights the current uncertainty regarding how the interplay between social risk and benefit influences transmission. Understanding this potential interaction between perceived risk and benefit, as well as the impact of perceived social benefit on transmission, will allow marketers to more effectively design communication campaigns that allow consumers to capitalise the perceived benefits, and decrease the perceived risks, associated with transmission.

To explore this research direction perceived social benefit must be clearly conceptualised. The conceptualisation proposed by the current thesis is outlined below.

2.5.1 Conceptualisation of Perceived Social Benefit

Individuals' perceptions have been shown to influence their likelihood to share WOM. Previous research has examined the role of perceived value - consumers' perception of the benefit of a product or service relative to the cost involved - as an antecedent of WOM activity (De Matos & Rossi, 2008). The current conceptualisation of perceived value, however, establishes how the perceived social benefit (rather than perceived product or service benefit) relative to the associated perceived social risk (rather than the perceived product or service cost) of transmission determine this type of WOM behaviour.

Therefore, previous work regarding perceived social risk, which is defined as the potential for embarrassment or disapproval for the sharer as a result of sharing WOM (Eisingerich et al., 2015), served as a basis for the definition of perceived social benefit. This definition of perceived social risk highlighted the potential for perceived social benefit to involve social approval (rather than disapproval), a factor that has been shown to motivate WOM (Chu & Kim, 2011). This definition is also limited to risk to the sharer, rather than to others (Eisingerich et al., 2015). Therefore, the current conceptualisation of perceived social benefit also involved benefit to the sharer, rather than focusing solely on benefit to others.

While the previous conceptualisation of perceived social risk was a useful starting point from which to define perceived social benefit, it was not sufficient to reverse the definition of perceived social risk. Research involving the conceptualisation of risk and benefit related to risky decision making (Weber, Blais, & Betz, 2002) and online purchase behaviour (Forsyth, et al., 2006) suggests that, rather than opposite ends of a continuum, perceived risk and benefit are

conceptually distinct. Therefore, while perceived social benefit may be oppositional to perceived social risk (i.e., involve the opportunity for approval rather than disapproval), perceived social benefit may also involve distinct aspects that are not present in the current conceptualisation of perceived social risk.

To investigate this possibility further, the literature was examined to identify further aspects of perceived social benefit beyond gaining social approval. The results demonstrated that sharing WOM can fulfil individuals' need for social interaction (Hennig-Thurau et al., 2004). More specifically, social interaction primes motives related to impression management, social bonding, and can build social capital (Schlenker et al., 1996; Ellison, Steinfield, & Lampe 2007). Accordingly, people share WOM to: (a) manage the impressions others form of them (Sundaram, Mitra, & Webster, 1998; Lovett, Peres, & Shachar, 2013), and (b) improve their relationships with others (Berger, 2014; Brown et al., 2007; Cheung & Lee, 2012; Hennig-Thurau, et al., 2004).

Therefore, in line with the previous literature concerned with perceived social risk, social interaction, and WOM motivation, perceived social benefit is defined as the potential for the sharer to gain approval from others, engage in impression management, and experience social bonding as a result of sharing WOM. The following sections describe these aspects of perceived social benefit in detail.

Impression Management. As explored in previous sections, impression management involves behaviour that verifies and enhances the self-concept, which is a set of beliefs individuals hold about their identity (Markus & Wurf, 1987). WOM provides individuals with an opportunity to engage in both self-verification and self-enhancement, and this opportunity may be perceived as a potential benefit associated with transmission. Impression management is,

therefore, not only a well-established driver of WOM in general, but a key social benefit that may occur as a result of transmission (Schlenker et al., 1996; Sundaram et al., 1998).

Social Bonding. People are inherently driven to engage in social bonding, which involves the development and maintenance of relationships with others (Baumeister & Leary, 1995; Leary, 1990). This need to build and enhance interpersonal relationships can be satisfied by creating and spreading WOM (Berger, 2014). Engaging in WOM can improve social relationships and bolster feelings of community membership (Cheung & Lee, 2014). In online social networks, individuals' frequency of WOM creation has a positive relationship to the strength of their relationships with others in the network, as well as to levels of reciprocal trust and influence (Chu & Kim, 2011). The positive influence of sharing WOM on the quality of individuals' relationships is, therefore, a well-established antecedent of WOM behaviour (Lovett et al., 2013), and may be a social benefit perceived during the WOM process.

Computer-Mediated Communication and Altruism. Engaging in computer-mediated WOM, rather than face-to-face WOM, can reduce social anxiety related to social bonding. Online communication can be more comfortable for individuals who have difficulty relating to others, as online communication is easier to compose and revise than face-to-face communication (Caplan, 2002). While it is possible that engaging in online transmission is beneficial to some individuals, as it facilitates social interactions for those who struggle to relate to others, it is unclear whether the computer-mediated nature of online transmission provides a perceptible social benefit to the sharer in general.

Individuals may also share their experiences and opinions to benefit those in their social network. Generating WOM regarding negative experiences can warn others to avoid making similar choices while generating positive WOM can guide purchasing decisions (Hennig-Thurau

et al., 2004). It is unclear whether: (a) sharing to warn or guide others is purely altruistic, or whether individuals perceive that a reciprocal social benefit will occur if they share WOM to benefit others (Berger, 2014), and (b) whether this is a perceived benefit of transmitted, rather than generated, WOM.

Perceived social benefit (as conceptualised above) is proposed as a new potential influencer of transmission behaviour. Transmission can be self-enhancing, and the social reinforcement provided when WOM is well-received can bolster self-perceptions (Zywica & Danowski, 2008). The current research posits that transmission may be associated with these positive social outcomes, and result in a perceived social benefit to the transmitter, which leads to the following research questions:

RQ 3: What are the perceived social benefits of transmission, and how does perceived social benefit relative to perceived social risk influence the likelihood of transmission?

RQ 3a: Is the relationship between impression management and WOM transmission driven by perceived social risk and perceived social benefit?

Further, as individuals engage in WOM to achieve psychological and social goals (De Angelis et al., 2012), communication context choice may be due to how efficiently the context will facilitate these goals. Accordingly, perceived social risk and perceived social benefit of each communication context may influence individuals' choice. This possibility is captured in the following research question:

R3b: Does the communication context influence perceived social risk/and or perceived social benefit associated with WOM transmission?

2.6 Valence and Word-of-Mouth Transmission: Negativity Bias

In many cases, brands have been able to benefit from the viral phenomenon – creating a message that will spread quickly to many via social media has led to notable marketing successes (Dobele et al., 2007). However, the two-way nature of social media communication means that brands have little control over the message: negative WOM regarding brands can also become viral, which can be damaging and difficult to control (Grégoire et al., 2015). There is evidence for consumers' readiness for, and enjoyment of, the transmission of negative content related to brands: public relations disasters gain considerable traction online, and digital campaigns can be 'hijacked' by the public (Wan, Koh, Ong, Pang, 2015; Jackson & Welles, 2015; Krishnamurthy & Kucuk, 2009). The difficulty in controlling, predicting and handling the viral spread of negative WOM stems from the limited understanding of the factors which drive the transmission of negative content about a brand. Research from the WOM generation and brand hate literatures provides a basis for answering this question, but the subtleties of the transmission of negative brand-relevant content social media are not yet well understood (Ott & Theunissen, 2015; Valentini, 2015).

Valence (whether the WOM is positive or negative) has an impact on the consequences of WOM generation, but it is unclear whether this bias also affects transmission behaviour. Negative product reviews (i.e., generated WOM) are more salient, persuasive, and valuable to consumers, and thus have a greater influence on decision making than positive reviews (Ahluwalia, 2002). This negativity bias in regard to WOM generation is attributed to three factors. Firstly, negative cues are less frequent than positive cues in the contexts in which this information is received, and this relative novelty increases the salience of negative product reviews (Sen & Lerman, 2007). Secondly, those who offer negative arguments are perceived to have greater expertise than those who offer positive arguments (Amabile, 1983; Teven, 2008).

Finally, people are inherently motivated to attend to negative cues due to the greater value of this information from an evolutionary perspective (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001).

The brand hate literature highlights the role of service failure and negative emotion, focusing on the creation of anti-brand websites that provide an outlet for highly motivated detractors to form communities dedicated to criticising a brand. These anti-brand websites are formed with the aim of turning other consumers against the brand, or changing the behaviour of the brand in question (Krishnamurthy & Kucuk, 2009). On social media more specifically, negative WOM and brand hate do occur – individuals can complain about service failures, or promote anti-brand websites via these platforms (Kucuk, 2008).

However, unlike negative WOM or anti-brand activities, no service failure or genuine brand hate is needed to precipitate the transmission of negative brand-relevant content via social media: those who transmit negative content about a brand on social media can have a tenuous relationship to the brand in question and may not engage in anti-brand communities. Rather, there is a somewhat opportunistic element to transmission, whereby social media provides individuals with the opportunity to voice their opinions regarding a brands actions (regardless of the relationship between the transmitter and the brand) for their social network to see. Therefore, the factors that drive negative WOM and brand hate need to be explored as potential drivers of the transmission of brand-relevant content. Currently, there is a lack of empirical evidence for: (a) the impact of valence on the transmission of brand-relevant content, and (b) the psychological drivers of the transmission of negative brand-relevant content, which raises the following research question:

RQ 4: What motivates the transmission of negative brand-relevant content?

2.7 Summary and Future Directions

Taken together, the above literature review provides an overview of what is understood about WOM, the distinction between transmission and generation, and an exploration of the factors that are likely involved in the transmission process derived from the WOM, psychology, and interpersonal communication literature. The review of this literature resulted in the following research questions, which guided the research conducted in this thesis:

RQ 1: How does impression management influence transmission behaviour?

RQ 1a. Does self-verification influence WOM transmission?

RQ 1b. Do impression management concerns moderate the relationship between arousal and WOM transmission?

RQ 1c. Does impression management determine WOM transmission across different communication contexts?

RQ 2: How does the likelihood of transmission differ across communication contexts?

RQ 3. What are the perceived social benefits of transmission, and how does perceived social benefit relative to perceived social risk influence the likelihood of transmission?

RQ 3a: Is the relationship between impression management and WOM transmission driven by perceived social risk and perceived social benefit? *R3b:* Does the communication context influence perceived social risk/and or perceived social benefit associated with WOM transmission?

RQ 4: What motivates the transmission of negative brand-relevant content?

In this section, these research questions are revisited in the context of a conceptual framework which was developed to structure the approach to the research in this thesis. Then, an

exploration of the significance and implications of the research is provided.

Based on the review of the relevant extent literature, further work is needed to understand the role of self-verification and how impression management interacts with arousal to determine transmission behaviour across communication contexts (RQs 1, 1a, 1b, 1c). The potential roles of perceived social benefit and perceived social risk should be established, including whether these variables influence transmission and/or mediate the relationship (if one does exist) between impression management and transmission likelihood across communication contexts (RQs 2, 3, 3a, and 3b). Finally, the drivers of negative transmission should be explored and clarified (RQ 4).

This section summarises the previous literature and future directions regarding arousal, impression management, and communication context in the conceptual model shown at Figure 1. This model outlines three types of pathway identified in the literature review: (1) consistently demonstrated relationships, (2) inconsistently demonstrated relationships, and (3) avenues for further investigation. The current research aims to address the opportunities for future research that correspond to RQs 1-4.

A series of nine studies were developed to address RQs 1-4. That is, to examine the impact of individuals' need to self-enhance, perceptions of social risk, and perceptions of social benefit on the likelihood of transmission across different communication contexts. Seven of these studies were initially completed, the results of which are described in Chapter 4. As detailed in Chapter 4, these studies took a primarily experimental approach to addressing RQs 1b, 1c, 2, and 3. The approach that was taken was iterative, with the results of each study informing the design and approach of subsequent studies. Upon completion of Study 7, the findings of the completed studies were integrated, and the key limitations were considered.

Based on the remaining research questions (RQs 1a and 4), and the limitations of completed studies, two further avenues for investigation were identified. The first was a final experimental investigation which aimed to build on the results of Studies 1-7. The second approach involved a two-phase qualitative investigation of the drivers of negative transmission to address RQ 4 specifically. An overview of the methodological approaches used to address RQs 1-4 is provided in Chapter 3. Chapters Four and Five outline the specific methodologies and results of each of the studies conducted.

2.8 Significance of This Research

Taken together, the findings of the extant literature highlight: (a) the importance of understanding transmission, and (b) the currently disjointed understanding of this behaviour from a psychological and contextual perspective. The fragmented and incomplete nature of the current understanding of transmission contributes to a lack of clear best practice regarding viral and digital campaign design. This research aims to reduce the uncertainty regarding this design through the identification and exploration of key research directions in this area (see Figure 1). The implications of these future directions are as follows.

Understanding how emotion, impression management, perceived social risk, and perceived social benefit interact to motivate sharing behaviour would inform the development of messages that are intended to be transmitted. Previous work has focused primarily on asking individuals to generate WOM and examining how self-enhancement motivation shapes the message that they create (e.g. De Angelis et al., 2012; Weingarten & Berger, 2017). However, transmission behaviour does not involve the generation of a message by the sharer; rather, it involves the passing on and gradual transformation of a pre-existing message (Bebbington et al., 2017). Therefore, in the context of transmission, how the need to self-enhance influences the

likelihood of transmission of a pre-existing message through the impact of this need on perceptions of the risks, and benefits, associated with transmission requires a deeper understanding. Developing this understanding of how the need to self-enhance, and perceptions of risk and benefit, influence transmission will allow marketers to create messages which are congruent with these psychological goals.

Further, the communication context may determine the consequences of transmission for marketers. For example, broadcasted WOM facilitates brand awareness, while narrowcasted WOM can be more effective at generating engagement with, and acceptance of, the message (Ang, 2014; Aral & Walker, 2011). Further, the literature has only considered the impact of synchronicity, audience size, and audience type on the types of messages participants will generate when the communication context is fixed (i.e., participants do not choose the communication context). However, real-world transmission behaviour involves choosing where, when, and with whom to transmit. Understanding how individuals select the transmission context (when the context is not fixed) can, therefore, assist marketers to develop messages that will not only be likely to spread, but be likely to spread via the desired communication context.

The transmission of negative brand-relevant content has strong implications for brands' online reputations and performance (Leitch & Merlot, 2017). However, consumers' motivations for transmitting negative, rather than positive, WOM are not yet well understood. Therefore, the course of action that will be most effective in reducing the impact of negative transmission remains unclear. Understanding the consumer motivations for negative transmission, specifically, will aid in the management of digital campaigns, particularly regarding how negative transmission can be contained, or neutralised.

Figure 1. Conceptual Framework



CHAPTER 3

Methodology

The previous chapter outlined the literature that relates to transmission and specified four research questions (and associated sub-questions). The research philosophy and overarching methodological approach employed to address these research questions is outlined in this chapter. The specific methods of each of the nine studies conducted in the current research are presented in detail in Chapters Four and Five.

In developing the research philosophy and overarching methodological approach that guided the development of the studies conducted, research paradigms and data collection approaches were contrasted. In contrasting positivist and interpretivist paradigms, and associated qualitative and quantitative approaches to the data collection, a postpositivist approach to the research involving a mixed methods design was selected. This chapter provides an overview of: (a) the research paradigms considered for the current research, (b) a contrast of qualitative vs quantitative approaches, and (c) an overview of the mixed methods design that was employed in the thesis.

3.1 Research Paradigms

To address RQs 1-4, the overarching research paradigm that was be used to guide the methodologies and research designs of the current research needed to be identified. Research paradigms can be defined as 'accepted examples of actual scientific practice... which include law, theory, application, and instrumentation' (Kuhn, 1962, p. 10). Paradigms provide a framework that specifies the beliefs about the world that underpin the research that is to be conducted (Arndt, 1985). These beliefs inform the ways in which information is sought and interpreted (Deshpande, 1983).

Broadly, research paradigms differ in regard to: (a) ontology, (b) epistemology, and (c) methodology (Guba & Lincoln, 1994; Lincoln, Lynham, & Guba, 2011). Ontological beliefs relate to reality and how this reality can be understood (Guba & Lincoln, 1994; Lawson, 2012). Certain research paradigms involve an ontological perspective that specifies that there is one version of reality that can be uncovered, tested, and proven (Bettany & Woodruffe-Burton, 2009). Contrasting research paradigms view reality as socially constructed and, therefore, highlight that multiple realities must exist (Shrivastava & Kale, 2003).

From an epistemological perspective, research paradigms differ regarding beliefs about how knowledge can be understood, developed, and substantiated (Gialdino, 2009). Epistemology 'deals with the connection between the researcher and that being researched' (Rahi, 2017, p. 403), and relates to the level of objectivity that is appropriate in developing knowledge (Guba & Lincoln, 1994).

The ontological and epistemological perspectives of the research paradigm, therefore, inform the methodology that specifies what type of information should be collected during the research process (Marsden & Littler, 1996; Barnham, 2015). This methodological approach guides the specific methods employed to collect and analyse data (Baker, 2000).

The following section will outline two paradigms – positivism and interpretivism – in relation to their ontological and epistemological orientations. Following this discussion of positivism and interpretivism, specific methodologies associated with these paradigms will be contrasted, before the methods employed in the current research are outlined.

3.2 Positivism and Interpretivism

The paradigms that guide researchers across the various scientific disciplines are numerous and increasing (Michalska, 2015). However, the social and marketing sciences have

been largely governed by two: positivism and interpretivism (Goulding, 1999; Rahi, 2017; Shaikh, Modi, Yadav, & Kumar, 2018). Therefore, positivism and interpretivism will be described and contrasted, particularly in relation to the differences regarding the ontological and epistemological assumptions of these predominant paradigms.

3.2.1 Ontologies

Positivism borrows the beliefs and practices involved in the natural sciences and applies these to the study of social phenomena, such as those that are investigated in the marketing and social sciences (Marsden & Littler, 1996). From an ontological perspective, positivism assumes that reality is singular and facts about social phenomena can be discovered empirically. The discovery of these facts can lead to the development of cause and effect relationships that generalise across individuals and contexts (Hunt, 1991; Hamet & Michel, 2018).

In contrast, interpretivism rejects the notion of a universal reality that can be measured and extrapolated. Instead, an interpretivist ontology highlights the existence of multiple realities (Shaikh et al., 2018). These realities are socially constructed and grounded in the context of each individual (Goulding, 2002). An interpretivist ontology emphasises the subjective nature of reality, and highlights that facts cannot be disentangled from the experience, beliefs, and worldview of the researcher and the research participants (Hogg & Maclaran, 2008).

The positivist and interpretivist paradigms can, therefore, be distinguished based on the emphasis placed on determining universal truths and generalisable findings vs the existence of multiple realities that cannot be universally comprehended (Weinreich, 1996; Brannen, 2017). These ontological assumptions lead to epistemological differences between positivism and interpretivism.

3.2.2 Epistemologies

A positivist epistemology values objectivity in the research process (Lincoln & Guba, 1994). As the ontological perspective of positivism assumes that there is a singular reality that exists independently of the researcher (Guba & Lincoln, 1994; Zyphur & Pierides, 2019), the research process must involve a level of unbiased detachment (Marsden & Littler, 1996). This detachment avoids interference with the phenomena of interest, or any contamination of the discovery of facts due to the researcher's context, beliefs, or world view (Marsden & Littler, 1996; Brannick & Coghlan, 2007).

Conversely, an interpretivist epistemology invites subjectivity into the research process (Goulding, 1998). The ontological assumptions of interpretivism centre around the existence of multiple realities that cannot be universally deduced (Lincoln et al., 2011). Therefore, the associated interpretivist epistemology involves the construction of a version of reality that is subject to the researcher's experiences and perceptions (Arndt, 1985; Hunt, 1991).

Rather than serving as a barrier to the accurate understanding of the phenomena under investigation, this introduction and recognition of subjectivity in interpretivist research allows for the complexity of human experiences and social contexts to be adequately comprehended (Deshpande, 1983). This comprehension is borne from the recognition that the researcher's world view and interpretations will inevitably shape the research process, but also through an emphasis on individual experiences and perceptions as the most instructive source of knowledge about social phenomena (Marsden & Littler, 1996; Hines & Quinn, 2005).

3.2.3 Postpositivism and the Current Research

Despite the prevalence of positivism and interpretivism in the marketing and social sciences, the basic ontological and epistemological assumptions of these paradigms have been subject to critique. In particular, positivist approaches to research can be viewed as reductive,

rigid, and unable to capture the breadth and detail of complex and contextualised social phenomena (Hunt, 1991; Levin, 1991; Zyphur & Pierides, 2019). Interpretivism, in contrast, can be viewed as overly dependent on the researcher's capability to record and interpret imprecise and unscientific forms of data (Guba & Lincoln, 1994; Chung & Alagaratnam, 2001). The subjective nature of interpretivist approaches has been argued to require further, more positivistic investigation in order to determine findings that are dependable and generalisable (Morgan, 2007).

A positivist approach to research has largely dominated the academic marketing literature due to this capacity to produce generalisable findings and predict consumer behaviour with relative certainty (Chung & Alagaratnam, 2001; Hanson & Grimmer, 2007). However, the aforementioned shortcomings of this paradigm have been widely discussed (Barker, Nancarrow, & Spackman, 2001; Chung & Alagaratnam, 2001) and this has led to both an increased recognition of the value of interpretive approaches (Goulding, 2002), and an increased acceptance of pluralism in paradigmatic alignment overall (Hunt, 1991; Midgely, Nicholson, & Brennan, 2017).

A postpositivist paradigm embraces this pluralism, assuming elements of both positivist rigour and interpretivist contextuality (Guba & Lincoln, 1994). Postpositivism involves seeking knowledge about generalisable facts that can be discovered by the researcher, as per a positivistic approach. However, postpositivism also involves the acknowledgement that universal truths are not necessarily discoverable, and retains the prioritisation of subjectivity and multiple perspectives that is central to interpretivism (Guba & Lincoln, 1994). A summary of the comparisons between positivism, interpretivism, and postpositivism is presented at Table 2.

	Positivism	Interpretivism	Postpositivism
Ontology	Singular,	Multiple realities	Singular reality that
	comprehendible		can only be
	reality		imperfectly
			comprehended
Epistemology	Objectivist, discovery	Subjectivist,	Dualist
	of facts	construction of reality	
Methodology	Quantitative	Qualitative	Quantitative and
			qualitative

Table 2. Comparison of Positivist, Interpretivist, and Postpositivist Paradigms

Source: Adapted from Guba and Lincoln (1994); Marsen and Littler (1996).

While critics of postpositivism suggest that adopting this paradigm can dilute the strengths of the approaches from which it is comprised (Patomäki & Wight, 2000; Harrison & Reilly, 2011), careful and appropriate application of a postpositivist framework can mitigate the respective limitations of positivism and interpretivism. This careful application of postpositivism involves: (a) retaining the principles the of the research methods that stem from positivist and interpretivist paradigms by providing a clear demarcation between the goals and capabilities of each method, and b) allowing the application of research techniques to be guided by the nature of the research questions (Johnson & Onwuegbuzie, 2004; Harrison, 2013).

In particular, research questions that are formed within a historical context of positivistic research and, therefore, provide opportunities for precise and objective measurement are particularly amenable to the objective detachment and scientific analysis that is inherent to positivism (Morgan, 2007). In the current thesis, RQs 1-3 were formed in such a context of positivistic convention. The generation literature has been broadly positivist in approach (King, Racherla, & Bush, 2014; Huete-Alcocer, 2017), and the knowledge provided by this extant literature aided in the development of testable theoretical pathways with regard to WOM transmission. Further, a base from which to build the procedures and tools required to engage in

objective measurement and theory testing was established by this existing positivistic WOM literature.

In formulating RQ 4, it was recognised that less was known about the specific phenomenon under investigation – negative transmission as a form of online anti-branding. This comparatively lacking knowledge base reduced the capacity to engage in objective measurement and theory testing in relation to RQ 4. Instead, addressing RQ 4 using methods that stem from an interpretivist perspective allowed the variables and constructs involved in answering this question to be uncovered throughout the current research (Clark & Creswell, 2008).

Further, the overarching research question that guided this thesis is as follows: *what are the psychological and contextual factors that influence transmission behaviour, and what drives the transmission of negative brand-relevant content?* Transmission behaviour, which is at the centre of the overarching research question (and the further, specific research questions) posed in this thesis, is an inherently social phenomenon. It is, therefore, likely that transmitters' experiences, motivations, and perceptions are idiosyncratic and contextually bound. The complexity associated with the behaviour under investigation calls for multiple data types (and, therefore, overarching ontological and epistemological perspectives) in order to be comprehensively understood (Morgan, 2007). The introduction of a postpositivist, rather than a purely positivist, paradigm allows for these idiosyncrasies and contextual factors to add nuance to the overall findings of this research. This nuance is provided by enhancing generalisability where achievable and appropriate, but also seeking in-depth understanding where necessary (Clark & Creswell, 2008; Harrison, 2013).

Overall, the research conducted draws from both positivism and interpretivism. This postpositivist framework was informed by the nature of the extant literature and resulting

research questions posed, and had implications for the methodological approach and research designs that were employed. The following section will discuss methodological perspectives, with a focus on the distinction between quantitative and qualitative methods, before the specific research designs employed in the current research are discussed.

3.3 Quantitative and Qualitative Research

The ontological and epistemological assumptions that underlie the positivist and interpretivist orientations have implications for the research methodologies that fit well within these paradigms. While it has been argued that methodologies can straddle both interpretivist and positivist paradigms (Allwood, 2012), the tendency of a positivist alignment to be associated with quantitative research and an interpretivist alignment to lead to qualitative research is strong and enduring (Baškarada & Koronios, 2018; Berkovich, 2018). This is because the methodology deals directly with how reality can be viewed, and how knowledge about reality should be captured (Hunt, 1991; Guba & Lincoln, 1994). In the following section, quantitative and qualitative methodologies will be described in relation to their main aims and the nature of the data and analysis that is conducted to meet these aims, before the specific research designs that are conventional within these approaches is outlined.

3.3.1 Quantitative Research

Quantitative research involves the collection and analysis of numeric data. It is positivist in nature because it assumes that: (a) reality can be distilled in the form of numeric outcomes, (b) social phenomena can be captured and transformed by way of scientific analysis, and (c) that this numeric data should be gathered and analysed while retaining objectivity in the measurement process (Hanson & Grimmer, 2007). This process of quantification is wide-spread and valued in the sciences as numbers are exact, informative, and governed by the laws of mathematics

(Morgan, 2007). For example, it can be more informative to suggest that a certain percentage of consumers hold a particular attitude than to suggest that few, some or many do (Marsden & Littler, 1996). This quantification allows for statistical analysis to be conducted, resulting in research outcomes that are precise and generalisable.

The precision associated with quantitative research is attributable to the application of objective measurement techniques. An objective measurement process involves a level of researcher detachment from the data collection, in which quantitative data collection tools provide standardised methods for capturing the required information (Schaeffer & Presser, 2003). Consequently, quantitative approaches lend well to the application of deductive reasoning. Deductive reasoning involves moving from general theory to specific observations which are used as evidence to either support or disconfirm theory (Arthur, 1994). Quantitative research, therefore, can be seen as a form of theory testing (Antwi & Hamza, 2015).

Quantitative research and, thereby, deductive reasoning, involves the measurement of clearly specified variables from a large number of cases. Observing a large number of cases ensures statistical power, as well as enhances the generalisability of the research results – a key aim of quantitative approaches and the overarching positivist paradigm (Sawyer & Ball, 1981; McShane & Böckenholt, 2016). The observation of a large number of cases is specific in that the variables that are to be measured, and a standardised process for measuring these variables, is clearly outlined before data is collected (Pieters, 2017).

Quantitative Data Collection and Analysis. Much quantitative research in the social and marketing sciences involves the measurement of variables that are not inherently numeric, for example; consumers' attitudes, perceptions, or behavioural intentions (Mardsen & Littler, 1996).

Common quantitative data collection tools, therefore, involve questionnaires and observations in which participants' answers or evaluators' ratings are transformed into a numeric format.

The numeric scale that is applied in this data collection process has implications for the information and analysis that can stem from the tool (Velleman & Wilkinson, 1993). Nominal and ordinal scales provide information about categorisation and order, respectively. However, nominal and ordinal scales do not allow for inferences to be made regarding the distances between scale points, therefore, data collected using nominal and ordinal scales cannot be subjected to mathematical functions such as addition or multiplication (Brown, 2011). Interval and ratio scales do allow for equal distances between scale points to be inferred, and ratio data also possesses an absolute zero – indicating that a zero on the scale is indicative of a true absence of what is being measured (Brown, 2011).

These properties of equal distances between scale points and an absolute zero allow interval and ratio data to be amenable to broader types of statistical analysis than nominal or ordinal data (Barbeito & Simpson, 1991). In the current thesis, data from Likert-type and semantic differential response scales have been treated as interval data, allowing for the selected statistical analyses to be performed. This treatment of data from Likert-type and semantic differential scales as interval data is conventional in the previous literature (Maurer & Pierce, 1998; Batterton & Hale, 2017).

Reliability and Validity. The data collection tools that assist in the measurement of quantitative variables are carefully designed in order to standardise their application, ensuring that the same type and amount of data is collected from each participant (Barnham, 2015). As well as this standardisation, quantitative data collection tools require careful design and pretesting to ensure the reliability and validity of the tool. Reliability refers to the ability of the data
collection tool to produce the same or highly similar results over multiple testing procedures (Edris & Meidan, 1990). When applied to questionnaire development, reliability can be established through measures of stability, equivalence and homogeneity (Cook & Beckman, 2006).

Test-retest reliability involves an assessment of stability, referring to the ability of the measure to produce similar scores from the same participant across multiple testing occasions (Rousson, Gasser, & Seifert, 2002). Equivalency is demonstrated via inter-rater reliability, which is particularly central to measures that involve a form of judgement by evaluators during the measurement process (McHugh, 2012). Internal stability is indicative of the consistency of participants' responses to items on the scale, with a high level of consistency, indicating that the items reliably measure the desired variable (Malhotra, Hall, Shaw, & Oppenheim, 2006). The internal consistency of a quantitative measurement tool developed for this thesis is discussed in Section 3.5 and detailed in Chapter 4.

While these measures of reliability are important, a quantitative data collection tool can only be useful if it is also a valid measure of the underlying construct. The validity of quantitative measurement tools refers to the ability of the measure to accurately capture the intended construct (Singh, 2017). For example, face validity involves establishing that the measure appears, generally to an informed observer, to be a reasonable indicator of the construct that is being quantified at face value (Nevo, 1985; Rattray & Jones, 2007).

However, face validity is not sufficient to ensure that the measure is adequately valid – content and criterion validity also need to be considered in the design of quantitative data collection tools. Content validity is established through linking the items of the data collection tool to the domains, or facets, of the construct that is to be quantified (Landsheer & Boeiji,

2010). This operationalisation can be derived from the extant literature that aids in the conceptualisation of the construct that is to be measured, or from exploratory research (Haynes, Richard, & Kubany, 1995; Landsheer & Boeiji, 2010). Criterion validity can be determined by comparing participants scores on the data collection tool to their scores on established measures of the same, similar, or divergent constructs (Voorhees, Brady, & Calantone, 2016). The establishment of validity regarding quantitative measurement tools developed for the current research is discussed Section 3.5 and detailed in Chapter 4.

The application of quantitative data collection tools results in the collection of, usually large, amounts of numeric data. As previously discussed, the aims of quantitative research involve the application of statistical techniques to describe meaningful patterns in data or make inferences that relate to specific hypotheses with a high degree of confidence (Black, 1999). There is objectivity, therefore, not only throughout the measurement process but also through the analysis of the data. While the researcher does apply their interpretation of how the data supports or disconfirms the hypotheses under investigation, these inferences are made within the constraints of a rule-based analysis (Tracey, 2000).

Overall, quantitative research is particularly amenable to addressing research questions that have been formed under a positivist research paradigm and involves objective measurement and analysis that results in the development of precise and generalisable findings (Brannen, 2017). As previously discussed, quantitative research assumes that social realities can be transformed, reliably and validly, into a numeric format. While this assumption underpins the strengths of quantitative research – the objective measurement of the key variables and production of generalisable findings – this assumption has been criticised in a manner that is in line with the aforementioned limitations of a positivist ontology and epistemology.

Critics of quantitative research highlight that meaning and context are lost by reducing the phenomenon of interest to a strictly numeric format (Firestone, 1987; Labuschagne, 2003). A reliance on statistical analysis and, in particular, statistical significance can also constrain the ability of quantitative research to produce rich insights (Amrhein, Greenland, & McShane, 2019). The prioritisation of objectivity, reliability, and strict adherence to rule-based numeric analysis can be unyielding to the nuance and social context that can be present in qualitative data (Goulding, 2002).

Despite the limitations of quantitative research, this approach remains a pillar of the marketing and social sciences due to the ability of the associated research methods to produce precise, scientific findings (Nakata & Huang, 2005; Chung & Alagaratnam, 2001; Hanson & Grimmer, 2007). As discussed in relation to positivism, the strengths of quantitative approaches are particularly relevant in circumstances in which the parameters of the research problem are clearly defined, and the existing literature provides a basis for objective measurement and theory testing (Morgan, 2007). In the current research, RQs 1-3 focused on testing highly specified theoretical pathways derived from the previous literature, which also provided established quantitative measures of key variables that could be developed, expanded, and/or adapted for the purposes of the current research. Therefore, a series of quantitative studies were conducted to address RQs 1-3, which are introduced in Section 3.5 and outlined in detail in Chapter 4.

3.3.2 Qualitative Research

Qualitative research involves data that is less uniform than quantitative data. Rather than being collected and analysed in one, specific form, like the numeric measurement that is inherent to quantitative approaches, qualitative methodologies allow for the capture of diverse representations of the world. Images, artefacts, thoughts, and observations can all be collected

and analysed under a qualitative framework, however, the most common type of qualitative data is collected and analysed in the form of words (Tesch, 2013). Qualitative approaches are seen as interpretivist because the collection and analysis of qualitative data involves the recognition of the value of understanding the multiple perspectives and social contexts that influence the phenomena under investigation (Janesick, 1994; Goulding, 2002). Further, in qualitative approaches researcher subjectivity is not only inevitable, but desirable in order to construct meaning (Morgan & Drury, 2003).

In contrast to quantitative research, which generally involves the use of deductive reasoning, qualitative research is largely inductive in nature (Hyde, 2000). The inductive reasoning that is central to much qualitative research involves moving from specific observations, usually of a smaller number of cases than in quantitative research, in order to form a general theory about the phenomenon under investigation (Boddy, 2016). Qualitative research engages in this process of induction and, therefore, theory building (rather than theory testing, as per deductive reasoning), by analysing large amounts information about the topic of interest (Crouch & McKenzie, 2006). Patterns, themes, ideas, and, ultimately, theory are drawn directly from the qualitative data (Percy, Kostere, & Kostere, 2015).

Qualitative Data Collection and Analysis. While the aim of quantitative research is to reduce the phenomenon of interest to a standardised numeric measurement, the goal of qualitative research is to instead deeply explore the phenomenon – collecting large amounts of information that is as rich in detail, context, and participants' perceptions and interpretations as possible (Shaw, 1999). Where quantitative researchers strive for standardisation and objectivity in their measurement processes, qualitative researchers aim to allow each participant freedom to provide whichever answers best describe their experiences, immerse themselves in the data

collection process, analyse the data as it is being collected, and use this information to guide subsequent collection attempts (Lawrence & Tar, 2013; Fielding, Fielding, & Hughes, 2013).

Unlike the relatively rigid data collection tools associated with quantitative research, qualitative methods of data collection vary regarding the amount of researcher involvement and their format (Langley & Klag, 2019). Qualitative data collection techniques tend to be relatively unstructured and researcher dependent in comparison to quantitative approaches, involving observations that are more flexible and naturalistic than the standardised numeric measurement processes involved in quantitative research (Mays & Pope, 1995; Bowen, 2008).

Where quantitative research involves statistical analysis and numeric reporting, qualitative research involves textual analysis and interpretation of the data (Carley, 1993). This process involves a theory-laden interpretation of the data by the researcher, who ascribes meaning to the qualitative data through their understanding of the research questions, the participants, and the social context that surrounds the phenomenon under investigation (Goulding, 1998). In comparison to the rule-based statistical analysis that is involved in quantitative research, qualitative data analysis approaches are more varied (Leech & Onwuegbuzie, 2007).

Despite the variance in approaches to qualitative data analysis, there is consistency in that rigorous and systematic processes are adopted (Mays & Pope, 1995; Hair & Lukas, 2014). Quantitative analysis approaches generally involve the following stages: data reduction, data display, and verification (Hair & Lukas, 2014). Data reduction involves using categorisation procedures to reduce and organise the, often vast, amounts of qualitative data involved in the analysis (Griggs, 1987). In the case of text-based qualitative data, this process of reduction involves the repeated reading of text, during which codes are applied to sections which belong to

the same category (Chowdhury, 2015). These categories are merged into larger themes and overarching theoretical constructs through ongoing comparison between codes, and the identification of the conditions or contexts that are associated with the coding (Ryan & Bernard, 2003).

Qualitative data display involves using excerpts of the data (usually in the form of quotations) in order to illustrate the categories, themes, constructs, and the overarching theory that is derived from the data (Donmoyer & Yennie-Donmoyer, 1995). However, similarly to quantitative research, tables and diagrams can also be used to summarise the data and main theoretical conclusions (Hair & Lukas, 2014). These theoretical conclusions are also subject to verification, which involves establishing the credibility of the results (Morse, Barret, Mayan, Olson, & Spiers, 2002). In qualitative research, the establishment of credibility is analogous to the concepts of reliability and validity discussed in relation to quantitative research.

Reliability and Validity. Quantitative research requires the adoption of standardised and objective data collection tools that have been established as reliable and valid before use in the research. Qualitative approaches establish the credibility of the theory that is generated through the research by adopting rigorous data collection, analysis, and presentation processes (Harding, 2018). While qualitative research establishes this credibility throughout the data collection and analysis process, by adopting rigorous and systematic processes in these phases of the research (Mays & Pope, 1995), there is some overlap in the establishment of credibility in both quantitative and qualitative research.

Cross-researcher reliability in qualitative research is similar to the quantitative approach to inter-rater reliability, as it demonstrates equivalency between multiple researchers regarding their coding of the qualitative data (Golafshani, 2003). Similar to the quantitative approach to

face validity, demonstrating emic validity in qualitative research involves an assessment of the validity of the coding, categorisation, and overall theory building of the research at face value. However, unlike quantitative approaches to face validity, establishing emic validity involves a process of member checking in which the analysis and findings are assessed by those within the culture that is under investigation (Niblo & Jackson, 2004; Cho & Trent, 2006).

The credibility of qualitative research can also be enhanced through the triangulation of major findings (Leech & Onwuegbuzie, 2007). Triangulation involves exploring the research question from multiple perspectives to assess whether varying approaches to the research converge regarding the major findings (Hall & Rist, 1999). This variety can involve using multiple data sets, data collection methods, samples, and researchers (Hair & Lukas, 2014). Triangulation can also involve addressing the research problem using both qualitative and quantitative research methods (Hanson & Grimmer, 2007; Harrison & Reilly, 2011) – the current research adopts such a mixed methods design, and this is discussed in Section 3.5.

Overall, qualitative research is largely inductive in reasoning and therefore embraces data collection and analysis processes that prioritise richness, subjectivity, social understandings, multiple perspectives, and the involvement of the researcher in the data collection process (Goulding, 1998; Gummesson, 2005). In contrast to quantitative research, qualitative approaches lack the precision and generalisability provided by statistical analysis (Hanson & Grimmer, 2007). Further, qualitative analysis is less rule-based than quantitative analysis, providing a greater capacity for researcher bias as it relies on the interpretation of ambiguous and relatively imprecise data (Gummesson, 2005). A summative comparison of qualitative and quantitative approaches is presented at Table 3.

Quantitative Research	Qualitative Research
Deductive reasoning	Inductive reasoning
Numeric data, usually from a large number	Multiple data types, most often text-based,
of cases	usually from a small number of cases
Standardised, objective measurement	Flexible, researcher-dependent data collection
techniques	techniques
Reliability and validity of data collection	Credibility established via multiple methods
tool/s determined quantitatively prior to	during the research process, including during
data collection	data analysis and the verification of results
Rigid, rule-based statistical analysis	Variance in approaches to data analysis,
	usually involving data reduction, data display,
	and verification

 Table 3. Comparison of Quantitative and Qualitative Research

Source: Adapted from Hair and Lukas (2014).

As previously outlined, the current thesis adopts elements of both positivism and interpretivism, and this pluralism extends to the methodologies employed. The research conducted was both quantitative and qualitative, resulting in a mixed methods design. In the following section, the three major research designs, and associated methods, are described before the mixed methods approach that is applicable to the current research is discussed.

3.4 Exploratory, Descriptive, and Causal Designs

As discussed in Section 3.3, quantitative and qualitative research have different aims. Quantitative research involves the reduction of social phenomena to numeric format that is amenable to statistical analysis and theory testing (Heit, 2000). Conversely, qualitative research involves the collection of rich, contextualised data that is interpreted through a process of immersion and theory building (Goulding, 2002). These differences allow qualitative and quantitative approaches to be more or less amenable to particular research designs and associated data collection methods.

Exploratory, descriptive, and causal research designs differ regarding their aims, data collection methods, and key considerations (Malhotra et al. 2006; Hair & Lukas, 2014). The

following section will outline the characteristics and key considerations related to each research design, before the applicability of each to the current thesis is summarised.

3.4.1 Exploratory Research

Exploratory research is conducted when the research issue is ambiguously defined, or there is a level of uncertainty regarding the parameters of the research questions (Stebbins, 2001). Often used as a preliminary research design to specify goals for further research, exploratory research aims to gain rich insights into the investigated phenomena (Neelankavil, 2015). The aim of exploratory research is to understand the issue under investigation in greater detail, with a focus on gaining deep insights into the particular sample studied, rather than the generation of precise and highly generalisable findings (Zikmund, D'Alessandro, Winzar, Lowe, & Babin, 2017).

Accordingly, exploratory research is primarily associated with research methods that involve the collection and analysis of qualitative data. Qualitative research methods are numerous and include interviews, focus groups, content analysis, and ethnography (Goulding, 1998). These methods are similar in that the aim is to collect qualitative data. However, the particular techniques involved in these methods differ.

For example, in-depth interviews involve an unstructured discussion between the researcher and participant and result in the collection of large amounts of qualitative data (Stokes & Bergin, 2006). While this discussion is guided by the researcher's initial understanding of the phenomenon under investigation, and the specific research question/s that are to be addressed, in-depth interviews retain flexibility regarding the questions that are posed to participants (Zikmund et al., 2017). In contrast to the structured and standardised nature of quantitative methods, in-depth interviewing involves the use of laddering and probing questioning techniques

to deeply explore each participant's thoughts, feelings, behaviours, and perspectives (Hair & Lukas, 2014).

Ethnographic methods can involve in-depth interviewing but are also characterised by an immersion of the researcher in the particular cultural context in which the phenomenon of interest occurs (Lewis & Russell, 2011). The researcher collects the data via interviewing and/or descriptive observations of the phenomena in a naturalistic setting (Zikmund et al., 2017). Ethnographic approaches differ in the degree to which the researcher interferes with the phenomena of interest – either through becoming an active participant in the culture itself, or through passive and anonymous observation (Lewis & Russell, 2011). Netnography is a form of ethnography that often involves such a passive observation, particularly of online cultures, requiring little researcher intervention for observation to occur (Kozinets, 2002; Sandlin, 2007). In this thesis, in-depth interviewing and netnographic methods were employed in order to address RQ 4. These methods are outlined in Section 3.5, and detailed in Chapter 5.

The strengths of exploratory research align with those that are inherent to the qualitative nature of the associated research methods. The richness of qualitative data, and the flexibility of the methods involved in exploratory research, are particularly useful in addressing research problems that are ambiguous, or poorly defined (Zikmund et al., 2017). This flexibility allows for facets of the phenomenon under investigation to be explored which may be overlooked or undiscovered using more structured and standardised quantitative methods (Milliken, 2001).

The limitations of exploratory designs relate to the lack of generalisability associated with qualitative research methods (Labuschagne, 2003). The aim of exploratory research is to understand the research topic with greater depth, and while qualitative methods provide this indepth understanding, these methods tend to be conducted with relatively small samples to

accommodate the collection of large amounts of rich data (Boddy, 2016). Accordingly, when aiming to develop precise and generalisable findings, further research is required to build on the findings developed via exploratory research (Hair & Lukas, 2014).

3.4.2 Descriptive Research

Descriptive research is conducted to describe characteristics with a high level of generalisability, and is often employed to answer 'who', 'what', 'where', and 'how' research questions (Zikmund et al., 2017, p. 24). Unlike exploratory research, descriptive research requires a more detailed understanding of the phenomenon under investigation. This detailed understanding of the phenomenon under investigation is required because the research methods associated with descriptive designs tend to be quantitative and, therefore, more structured than those involved in exploratory research (Punch, 2003).

Descriptive research often involves structured quantitative observational approaches and/or survey-based research methods (Hair & Lukas, 2014). The quantification processes associated with questionnaire design discussed in Section 3.3.1 are central to descriptive research, which involves the development of reliable and valid quantitative data collection tools. In contrast to exploratory designs, the generalisability of the findings is a key aim of descriptive research, therefore, larger and more representative samples are required (Barnham, 2015).

While descriptive designs, and the associated quantitative methods, provide the opportunity to generate precise and generalisable findings, these approaches do not yield the rich, in-depth, insights of exploratory research (Fine & Deegan, 1996). Therefore, a considerable understanding of the research problem is required to facilitate the development of structured and standardised quantitative data collection tools appropriate for use in descriptive designs (Zikmund et al., 2017). Further, due to the descriptive nature of this approach, the analysis of the

resulting quantitative data is limited to providing correlational insights, rather than the establishment of cause and effect relationships between key variables (Malhotra et al., 2006).

In the current thesis, a descriptive research design aided in the construction and validation of a measure of perceived social benefit, in order to partially address RQ 3. The construction and validation of this measure is introduced in Section 3.5, and described in detail in Chapter 4.

3.4.3 Causal Research

Causal research employs experimental research methods to determine cause and effect relationships between two or more variables (Oppewal, 2010). Experimental methods involve highly controlled and standardised procedures that require a highly detailed understanding of the nature of the research problem. This detailed understanding of the research problem is required due to the necessity for valid and reliable quantitative measurement, but also due to the need to understand the processes required for the manipulation of variable/s in order to determine cause and effect relationships (Zikmund et al., 2017).

Cause and effect relationships are demonstrated through the establishment of: (a) temporal sequence, (b) concomitant variation, and (c) a non-spurious association (Domegan, McHugh, Biroscak, Bryant, & Calis, 2017; Zikmund et al., 2017). Temporal sequence refers to determining that the cause precedes the effect, while concomitant variation involves demonstrating that a change in the independent variable causes a change in the outcome variable. Establishing a non-spurious association involves ruling out causation by other variables that are not measured or controlled for within the procedure (Domegan et al., 2017).

Experimental designs that successfully establish temporal sequence, concomitant variation, and a non-spurious association possess internal validity, which indicates the accuracy of the causal findings (Schram, 2005). A key method for enhancing internal validity is the

adoption of random allocation to experimental groups, which allows for the influence of extraneous variables that are outside of the researcher's control (e.g., participant characteristics) to be mitigated (Hair & Lukas, 2014).

However, meaningful experimental results also require the establishment of external validity. External validity involves the generalisability of the experimental findings to the outside world, and experimental methods can prioritise precision and controlled procedures over a relationship to real world experiences and behaviour (Schram, 2005). An exception to this potential lack of external generalisability is field experimentation, which takes place in real-world settings and, conversely, can lack experimental control (Gneezy, 2017).

A primarily experimental approach was taken in this research to address RQs 1-3. The need to establish internal validity while ensuring that the findings would generalise to real-world settings was balanced by conducting a series of experiments that involved the measurement of self-reported likelihood of transmission, which culminated in a final experiment that measured actual transmission behaviour.

The precision, control, and accompanying relative lack of rich insights and depth associated with the quantitative research in the current thesis were also offset by the inclusion of qualitative approaches in addressing RQ 4. The implications of this mixed methods approach are discussed in the following section.

3.4.4 Mixed Methods Designs

The aim of mixed methods designs is to blend the use of quantitative and qualitative research in order to develop a level of understanding that surpasses the strengths and limitations of each method (Deshpande, 1983). Accordingly, mixed methods designs are congruent with a postpositivist paradigm, as the mixing of quantitative and qualitative approaches allows for the

discovery of generalisable facts, while retaining the importance of subjectivity and multiple perspectives in the research process (Atieno, 2009; Guba & Lincoln, 1994).

The blending of positivist and interpretivist approaches to research has been criticised due to the conflicts between the underlying ontological and epistemological assumptions of each paradigm (Denzin, 2010). However, the use of mixed methods designs is increasing, as is acceptance that employing both qualitative and quantitative methods facilitates the triangulation of research findings and provides a practical solution to research questions that require multiple approaches to be sufficiently addressed (Deshpande, 1983; Carins, Rundle-Thiele, & Fidock, 2016).

Mixed methods designs can involve different approaches to the combination of quantitative and qualitative methods to meet different goals. These goals can include the triangulation of findings or the offsetting of weaknesses inherent to each method to address diverse research questions, as discussed. However, mixed methods designs can also be employed in order to use qualitative methods in the development of quantitative data collection instruments, and to blend the discovery of relationships between quantitative variables with the deeper social meanings held by participants (Bryman, 2006).

To meet these goals, mixed methods designs can involve the concurrent use of quantitative and qualitative methods, and/or these methods can be employed sequentially. Research that moves from qualitative to quantitative methods sequentially tends to be exploratory in focus, with an overarching aim to employ quantitative methods to confirm the theory generated in the initial qualitative phase of the research (Clark & Creswell, 2008; Harrison, 2013). Mixed methods involving the concurrent use of quantitative and qualitative methods, or those that move from quantitative to qualitative approaches sequentially, have an

explanatory focus, and are often used to address the aforementioned aims related to triangulation of findings, offsetting the weaknesses of each approach, and adding social context to quantitative results (Harrison & Reilly, 2011).

In this research, quantitative and qualitative approaches were employed concurrently, in that a small-scale qualitative investigation aided in the revision and adaptation of a quantitative data collection tool. This process is detailed in Chapter 4. More broadly, the research in this thesis moved sequentially from a quantitative emphasis in relation to RQs 1-3, to a qualitative approach to addressing RQ 4. This sequential and explanatory approach to the research enabled precise and generalisable findings to be developed in addressing RQs 1-3, but the comparative lack of understanding related to RQ 4 to be explored with greater depth. Table 4 provides an overview of this methodological approach, which is discussed further in Section 3.5. The detailed methods of each completed study are specified in Chapters Four and Five. In Chapter 6 the results of both the quantitative and qualitative phases of the current research are integrated in relation to each research question.

	Exploratory	Descriptive	Causal
Aims	Discovery of in-depth insight, collection of rich information related to the investigated phenomena	Description of characteristics with a high degree of generalisability	Establishment of cause and effect between two or more variables
Research Methods	Qualitative, e.g., interviews, ethnography	Quantitative, e.g., surveys, structured observations	Quantitative, experiments
Application in the Current Thesis	Qualitative research undertaken to inform the refinement of a measure of perceived social risk; a two- phase qualitative investigation involving netnography and in- depth interviews employed to address RQ 4	Quantitative, survey- based approach to partially address RQ 3, establish the reliability and validity of a measure of perceived social benefit	Quantitative and primarily experimental approach to addressing RQs 1-3

Table 4. Comparison of Research Designs and Application to the Current Thesis

Source: Adapted from Zikmund et al. (2017).

3.5 Methodological Approach: Overview

The research methodology employed in this thesis had three broad aims: (1) to develop and pilot test stimuli appropriate for use in research aiming to understand transmission behaviour, (2) to test the conceptualisation and scale development associated with perceived social risk and benefit, and (3) to address RQs 1-4. To meet these aims, eight quantitative studies were designed, which fit into a broader framework of methodological and conceptual development and refinement (see Figure 2). This framework involved taking an iterative approach to this research, wherein the results of each stage informed the subsequent investigations. Based on the results and limitations of Studies 1-8, and the nature of RQ 4, a twophase qualitative design (Study 9) was developed to address RQ 4. The current research conformed in all respects with the RMIT Code of Conduct for Research. Ethical clearance was obtained before the commencement of this research from the University Human Research Ethics Committee. The potential risks and benefits associated with this study, participant recruitment, questionnaire items and interview guides, and protecting confidentiality of responses was considered in this process. The below sections outline the overarching research approaches employed, and the specific methods, outcomes, and limitations of each study are outlined in Chapters Four and Five.

Figure 2. Overview of Methodological Approach



3.5.1 Quantitative Studies

An overarching link between Studies 1-8 is that a quantitative and primarily experimental approach was employed. Quantitative research was the most appropriate methodology because a positivist approach was taken to the formation and testing of the research questions (Firestone,

1987; Babones, 2016). Specifically, a series of experimental studies were employed. This experimental approach allowed for the establishment of causal relationships between the key variables in this research in a manner that was objective and reliable (Spencer et al., 2005; Weinreich, 1996). This objective and reliable quantitative measurement was appropriate and achievable because, based on the extant literature, a reasonable understanding of: (a) the variables that were to be measured, and (b) existing quantitative relationships, was present (Bryman, 1984).

Despite the benefits of a quantitative methodology from the perspective of reducing bias and increasing generalisability (Leung, 2015; Yilmaz, 2013), there were inherent challenges associated with this approach. The capacity to demonstrate causal relationships is a key strength of experimental designs, however this is heavily dependent on the precision of the measures and manipulations employed in the research (Weinreich, 1996). This challenge was addressed by the iterative approach taken to designing the experimental studies. This iterative approach involved assessing and refining the scales and manipulations adapted from the literature to enhance the reliability and validity of the research throughout.

For example, in addition to pilot testing and refining the stimuli and manipulations employed in these experiments, an initial study was undertaken to develop a measure of perceived social benefit appropriate for use in the current research and future studies. This study focused on the conceptualisation of perceived social benefit, and the development of an eightitem measure, which is described in detail in Chapter 4. Further, an existing measure of perceived social risk that was derived from the literature was expanded to be appropriate for the measurement of this variable in the context of transmission (rather than generation) through a

qualitative investigation of these risks. This refinement of the measurement of perceived social risk is discussed in Chapter 4.

A further challenge in conducting this experimental research is that the studies primarily involved measuring and manipulating the variables of interest outside of the natural context in which the behaviour occurs (Weinreich, 1996). While this allowed for precise and isolated examination of the psychological variables of interest, this approach can reduce the ecological validity of the research (Berkowitz & Donnerstein, 1982; Onwuegbuzie & Leech, 2005). This challenge was addressed in two ways. Firstly, the final experiment in the series of eight experiments involved the measurement of actual WOM behaviour (detailed in Chapter 4). Secondly, a two-phase qualitative investigation of the drivers of negative transmission was conducted, which involved the examination of real-world transmission (detailed in Chapter 5).

3.5.2 Qualitative Study

While RQs 1-3 were clearly articulated and the variables involved were amenable to quantitative analysis, the lack of clarity in the extant literature regarding negative transmission as a form of anti-branding, encapsulated in RQ 4, was identified. This identification of the lack of clarity regarding the conceptualisation of negative transmission and the associated motivators of this specific behaviour highlighted the need to address this related, but distinct, research question in a manner that would allow for flexible and in-depth exploration (Brannen, 2005). Accordingly, a qualitative approach was taken to address RQ 4.

The two-phase qualitative investigation conducted to address RQ 4 was exploratory in nature. Overall, both phases adopted a grounded theory perspective in order to generate, rather than test, theory (Glaser & Strauss, 1967). The first phase involved an analysis of comments left by transmitters on brand-relevant content. Inductive and deductive coding approaches were

employed, which allowed for the research to be both grounded in the empirical observations made, and interpreted in the context of existing research (Haig, 1995; Fereday & Muir-Cochrane, 2006).

The second phase involved an interpretive methodology in order to describe and understand participants' transmission behaviour more deeply (Tuohy et al., 2013). The second stage involved in-depth interviews, projective techniques, and a thematic analysis to understand and classify the interview data, through a process of immersion, coding, and the identification of themes (Green et al., 2007). Chapter 5 outlines the design of this two-phase qualitative investigation in more detail, as well as discusses the results and specific limitations of this twophase study.

Broadly, while this qualitative research lacked the conclusive elements of the earlier, quantitative and experimental studies reported in this thesis (Allan, 2003), the addition of this work allowed for the limitations of the quantitative work to be partially addressed. Specifically, the adoption of a mixed methods approach, overall, allowed for both the triangulation of the experimental and qualitative findings (Greene et al., 1989) and for real-world transmission behaviour to be explored more deeply than quantitative research alone would allow. Most importantly, the inclusion of the qualitative research allowed for RQ 4 to be addressed with the necessary breadth and depth required.

Chapter 4 outlines the eight quantitative studies that were conducted to address RQs 1b, 1c, 2, and 3. In Chapter 4, the results are summarised in Tables 20, and the limitations of these quantitative studies are explored. To address RQs 1a and 5, a two-phase qualitative investigation (Study 9) was designed. This qualitative research is described in detail in Chapter 5.

CHAPTER 4

Initial Quantitative Studies

This chapter outlines the methods and results of eight quantitative, primarily experimental, studies. These studies were conducted to address RQs 1, 2, and 3, and took an iterative approach, as discussed in Chapter 3. One study in this series (Study 2) was focused on developing a valid and reliable measure of a concept proposed as a result of the literature review – perceived social benefit. In addition to the development of this perceived social benefit measure, the first seven studies were subject to the process of stimulus, measure, and methodological refinement outlined in Figure 2, wherein the results of each study informed the design of subsequent studies. Section 4.8 of this chapter summarises the findings of this series of initial studies and includes a single paper meta-analysis of key findings to quantitatively synthesise the results where applicable. The pathways tested and the variables that were measured and manipulated in each of the studies in this series are summarised at Tables 19 and 20.

In Section 4.9, a final experimental study is outlined. This final experimental study (Study 8) involved a preliminary investigation of participants' choice between transmission and generation. This investigation of choice between transmission and generation went beyond the research questions posed in this thesis, but provided an opportunity to build on earlier findings and partially address the limitations of the initial seven studies.

4.1 Study 1

Study 1 had three broad aims. First, to replicate the finding derived from the literature that arousal increases the likelihood of transmission. Second, to understand the role of selfenhancement and how this variable interacts with arousal and perceived social risk to determine

transmission likelihood. Third, to examine how perceived social risk differs across communication contexts. The research hypotheses were derived from the literature review and the conceptual framework presented at Figure 1. The hypotheses were:

H1: High arousal stories will be more likely to be transmitted than low arousal stories.
H2: Consumers' need to self-enhance will moderate the relationship between arousal and transmission likelihood such that those with a high need to self-enhance will be less likely to transmit.

H3: Perceived social risk will differ depending on the communication context.
H3a: Broadcasting will be perceived as riskier than narrowcasting.
H3b: Sharing with weak ties will be perceived as riskier than sharing with strong ties.

H3c: Synchronous communication will be perceived as riskier than asynchronous communication.

H4: The need to self-enhance will be negatively related to the likelihood of transmission.*H5:* Perceived social risk will mediate the relationship between need to self-enhance and the likelihood of transmission.

An experimental procedure was developed to test these hypotheses, which is described in the following section.

4.1.1 Participants

Participants were recruited using Amazon Mechanical Turk (AMT), which is a North American online recruitment service. AMT recruitment is timely, cost-effective, and yields good quality data (Buhrmester, Kwang, & Gosling, 2011; Goodman, Cryder, & Cheema, 2013; Paolacci & Chandler, 2014). To be eligible to take part in the experiment, participants needed to have active email and Facebook accounts. Additionally, attention check questions were employed during the procedure, which took the form of three multiple-choice questions about the content of the fictional news story that participants were exposed to ('What type of product is sold by the company in the story?; What is Four Paws?; What did the dogs take part in?'). One hundred and seventy-one participants begin the procedure. Based on the eligibility requirements and analysis of the attention check items, the final sample consisted of 147 participants, 54% female, with an average age of 34.5 years. For taking part in the experiment, participants were compensated at approximately US\$6/hr. The online study took approximately 10 minutes to complete, and participants were paid US\$1.00.

4.1.2 Stimuli and Procedure

Participants were exposed to a brief, fictional story that was created and designed to manipulate arousal through the influence of these stories on emotion (see Appendix A). Three stories were used; one that elicited happiness (an emotion characterised by high arousal; Thayer, 1986), one that elicited anger (an emotion characterised by high arousal; Thayer, 1986), and an emotionally neutral story. Following exposure to the story, participants completed questionnaire items that measured their arousal, likelihood to transmit the story, perceptions of the social risk of transmission, and their need to self-enhance, respectively.

Each of these three stories shared a common subject matter: a partnership between an organic dog food company and an animal rescue shelter. The narrative of each story was varied to produce the appropriate emotional response, and these stories were pilot tested using an AMT derived sample of 154 participants to ensure that they elicited the correct emotions. The pilot test also measured the arousal associated with each of these stories. As intended, the happiness-eliciting and anger-eliciting stories produced significantly more arousal than the emotionally

neutral story¹. Both positively and negatively valenced high arousal stories were included in the procedure for generality.

4.1.3 Measures

Arousal. Arousal was measured using a three-item scale constructed by Berger (2011). Participants were presented with three items (see Table 5), and asked to respond to each on a seven-point scale (see Appendix B for all questionnaire items used across the series of seven studies). These items produced a highly internally consistent measure of arousal (Cronbach's $\alpha = 0.91$)

Table 5. Arousal Questionnaire Items

How do you feel right now?
1. very passive - very active
2. very mellow - very fired up
3. very low energy - very high energy

Likelihood of Transmission. Participants' likelihood to transmit the stimuli was measured using a nine-item scale adapted from an item employed in Berger and Milkman (2012). Berger and Milkman asked participants 'how likely would you be to share this [the stimulus] with others?', and participants indicated their response using a seven-point scale (*not at all likely - very likely*). The measure employed in the current study used the same question stem

¹ In this pilot test, arousal was measured using the three item scale presented in Table 5. The high arousal happinesseliciting (M = 4.53; SD = 1.34) and anger-eliciting stories (M = 4.94; SD = 1.63) did not significantly differ in regard to the amount of arousal produced (t(101) = 1.29, p = 0.20). The happiness-eliciting story did produce significantly greater arousal than the neutral story (M = 3.86; SD = 1.34; t(100) = 2.46, p < .01), as did the anger-eliciting story (t(101) = 3.47, p < .001).

('How likely would you be...') and the same response scale, but measured participants' likelihood to transmit across different communication contexts that differed regarding audience size (broadcasting vs narrowcasting), audience type (tie strength), and synchronicity (synchronous vs asynchronous). Scores on these items were averaged to produce measures of participants' likelihood of transmission for narrowcasting, broadcasting, strong ties, weak ties, synchronous, and asynchronous communication. The items that correspond to each of these communication context factors are outlined in Table 6. Participants' scores on all items were also averaged, with higher scores indicating a higher likelihood of transmission (Cronbach's $\alpha = 0.96$).

 Table 6. Likelihood of Transmission: Questionnaire Items and Contexts

How likely would you be to:	Context	
1. Share publicly on your Facebook wall for all of your friends to see?	Broadcast; mixture of tie strength; asynchronous	
2. Share this with a large group which consists of your close friends and acquaintances if they were sitting with you right now?	Broadcast, mixture of tie strength, synchronous	
3. Share privately using email or Facebook Messenger with a close friend?	Narrowcast; strong tie; asynchronous	
4. Share this with an acquaintance using email or Facebook Messenger?	Narrowcast; weak tie; asynchronous	
5. Share this with a close friend if they were sitting with you right now?	Narrowcast; strong tie; synchronous	
6. Share this with an acquaintance if they were sitting with you right now?	Narrowcast; weak tie; synchronous	
7. Share this with a large group of acquaintances if they were sitting with you right now?	Broadcast, weak ties, synchronous	
8. Share this with a large group of acquaintances online using Facebook or email?	Broadcast, weak ties, asynchronous	
9. Share this with a large group of your close friends if they were sitting with you right now?	Broadcast; strong ties; synchronous	

Note. Participants were exposed to the items in the left column. No significant difference was found between likelihood of transmission to weak ties, or a mixture of strong and weak ties. Therefore, in the main analyses these items were collapsed.

Perceived Social Risk. Perceived social risk was measured using a scale adapted from

three items constructed by Eisingerich et al. (2015). The three-items scale from the previous

literature was expanded to consist of 18 items in order to measure the perceived risk of

embarrassment or disapproval as a result of sharing across each of the communication contexts

outlined in Table 3 (see Table 7). Participants' responses were measured on a four-point scale

(strongly agree – strongly disagree), and this measure was highly internally consistent

(Cronbach's $\alpha = 0.97$).

Table 7. Perceived Social Risk Questionnaire Items

Below is a list of statements dealing with your general feelings about what you share with others:

1. I feel it is risky to share a story with a large group of others/a person.

- 2. I am worried that people may disapprove of me if I share a story with a large group of others/another person.
- 3. I am afraid that I may be embarrassed or look stupid by sharing a story with a large group of others/a person.
- 4. I feel it is risky to share a story with an acquaintance/ a close friend.
- 5. I am worried that people may disapprove of me if I share a story with an acquaintance/ a close friend.
- 6. I am afraid that I may be embarrassed or look stupid by sharing a story with an acquaintance/a close friend
- 7. I feel it is risky to share a story with someone face-to-face/using email.
- 8. I am worried that people may disapprove of me if I share a story with someone face-to-face/using email.
- 9. I am afraid that I may be embarrassed or look stupid by sharing a story with someone face-to-face/using email.

Need to Self-Enhance. Need to self-enhance was measured using a 10-item self-esteem scale constructed by Rosenberg (1965). Participants were asked to describe how they feel about their self-concept (see Table 8) and responded using a four-point scale (*strongly agree; agree; disagree; strongly disagree*). This scale has been shown to be a valid and reliable measure of need to self-esteem (Rosenberg, 1965; Cronbach's $\alpha = .86$). Scores on this measure of self-esteem have been shown to provide an indication of an individual's need to self-enhance: the lower the reported self-esteem, the greater the need to self-enhance (De Angelis et al., 2012). Therefore, once participants' scores on the self-esteem measure were summed, lower scores indicated a higher need to self-enhance.

Table 8. Rosenberg's (1965) Self-Esteem Scale

Below is a list of statements dealing with your general feelings about yourself:
1. On the whole, I am satisfied with myself.
2. At times, I think I am no good at all.
3. I feel that I have a number of good qualities.
4. I am able to do things as well as most other people.
5. I feel I do not have much to be proud of.
6. I certainly feel useless at times.
7. I feel that I'm a person of worth, at least on an equal plane with others.
8. I wish I could have more respect for myself.
9. All in all, I am inclined to feel that I am a failure.
10. I take a positive attitude toward myself.

4.1.4 Procedure and Design

The experiment was conducted via an online survey using Qualtrics Survey Development software (Qualtrics.com). If participants chose to respond to the recruitment advertisement, they clicked a link that directed them to the online experiment. Once they clicked on the link, participants saw an information page, and informed consent was sought. If this consent was provided, participants were asked to indicate whether they had an active email and Facebook account. If participants answered 'yes' to both of these questions, then they continued to the main portion of the online experiment.

In the main portion of the online experiment, participants were randomly allocated to one of three groups:

- 1. High arousal, positive valence (i.e., exposed to the story that elicited happiness).
- 2. High arousal, negative valence (i.e., exposed to the story that elicited anger).
- **3.** Low arousal (i.e., exposed to the neutral story).

Next, participants were shown the relevant stimuli (i.e., the happiness-eliciting, angereliciting, or neutral stimulus) before they completed the questionnaire items that measured arousal, likelihood of transmission, perceived social risk, and need to self-enhance. Therefore, arousal (high positive vs high negative vs low) served as a manipulated independent variable within a mixed factorial design. The need to self-enhance was a further, non-manipulated, independent variable, and likelihood of transmission was analysed both between subjects (i.e., between the arousal groups) and as a repeated measurement to compare participants' likelihood of transmission across the communication contexts.

4.1.5 Results

Arousal. To test the hypothesis that high arousal stories would be more likely to be shared than a low arousal story (H1) a one-way ANOVA with planned contrasts was conducted. The independent variable was arousal and the dependent variable was participants' average likelihood of transmission across the nine communication contexts. The ANOVA demonstrated a significant effect of arousal on likelihood of transmission, F(2, 143) = 18.51, p < .001. In support of H1, planned contrasts revealed that average likelihood of transmission was significantly higher for participants who read the anger-eliciting story (M = 3.82; SD = 1.20) than those who read the neutral story (M = 2.40; SD = 1.29), $t(96) = 5.60 \ p < .001$, 95% Confidence Interval (CI) [.83, 2.01]. There was also a significantly higher likelihood of transmission between participants who read the happiness-eliciting story (M = 3.58; SD = 1.21) and those who read the neutral story, t(96) = 4.67, p < .001, 95% CI [.58, 1.77].

Need to Self-Enhance. A moderation analysis using *PROCESS* (Model 1; Hayes, 2012) was conducted to test H2. The independent variable was arousal, the dependent variable was average likelihood of transmission, and need to self-enhance was the moderating variable. In

support of H2, the need to self-enhance moderated the relationship between arousal and likelihood of transmission, B = .02, 95% CI [-.0002, .0423], t = 1.96, p = .05. When the need to self-enhance was high there was no difference in the likelihood of transmission as a function of arousal group. However, when the need to self-enhance was low, the likelihood of transmission was higher for the high arousal groups (see Figure 3).



Figure 3. Likelihood of Transmission by Need to Self-Enhance and Arousal Group

Perceived Social Risk. Mean perceived social risk scores were examined to provide preliminary evidence for H3 (see Table 9). Perceived social risk differed across these contexts, with broadcasting being perceived as the riskiest context in which to transmit WOM. A one-way repeated measures ANOVA with repeated contrasts was conducted to provide evidence for H3a, H3b, and H3c. The repeated measures ANOVA was significant, F(5, 725) = 50.04, p < 0.001. Broadcasting (M = 3.35; SD = 2.38) was perceived as riskier than narrowcasting (M = 2.48; SD = 1.95), F(1, 144) = 43.30, p < 0.001, [.62, 1.13]. Sharing with weak ties (M = 2.79; SD = 2.00) was perceived as riskier than sharing with strong ties (M = 1.85; SD = 1.75), F(1, 144) = 27.87, p < .001, [1.23, -.67]. Therefore, H3a and H3b were supported.

A repeated contrast comparing perceptions of the risk involved in asynchronous, compared to synchronous, communication, was also significant, F(1, 144) = 3.79, p = 0.05, [-.046, 0.004]. Contrary to H3c, however, asynchronous communication (M = 2.60; SD = 1.95) was perceived to be riskier than synchronous communication (M = 2.37; SD = 1.88).

Need to Self-Enhance and Perceived Social Risk. Mediation analysis was conducted using *PROCESS* (Model 4; Hayes, 2012) to test the mediation model proposed by H3 and H4. The independent variable was need to self-enhance, the mediating variable was perceived social risk, and the dependent variable was average likelihood of transmission (see Figure 4). Congruent with H4, there was a significant direct effect of need to self-enhance: self-esteem scores were positively related to likelihood of transmission, b = 0.65, Bias Corrected and Accelerated Bootstrap (BCa) CI [0.173, 0.114]. The need to self-enhance also had a significant effect on perceived social risk b = -0.99, BCa CI [-1.423, -0.554], which demonstrated that as the need to self-enhance increased (i.e., participants' self-esteem score decreased), perceived social risk increased.

There was no significant indirect effect of need to self-enhance on likelihood of transmission through perceived social risk, b = 0.02, BCa CI [-0.010, 0.059]. Correlational analyses revealed a potential explanation for this non-significant result: perceived social risk was significantly negatively related to likelihood of transmission when participants read the

happiness-eliciting story (r = -0.29, p < 0.05) or the anger-eliciting story (r = -0.23, p = 0.05) but not when participants read the neutral story (r = 0.21, p = 0.07).



Figure 4. Need to Self-Enhance, Perceived Social Risk, and Likelihood of Transmission

Note. Pathways marked with an asterisk are significant at < 0.05.

Communication Context. Participants' likelihood of transmission differed depending on the communication context, F(1, 144) = 33.84, p < .001 (see Table 9). A repeated measures analysis demonstrated that participants were significantly more likely to transmit via narrowcasting (M = 3.35; SD = 1.39) than via broadcasting (M = 3.17; SD = 1.45), F(1, 144) = 11.96, p = .001, [-.28, -.08], to strong ties (M = 3.47; SD = 1.42) than to weak ties (M = 3.15; SD = 1.39), F(1, 144) = 37.35, p < .001, [-.28, -.41], and via synchronous (M = 3.55; SD = 1.49) rather than asynchronous communication (M = 2.89; SD = 1.44), F(1, 144) = 60.95, p < .001, [-.82, -.49].

	Perceived Social Risk		Likelihood of Transmission	
Context	М	SD	М	SD
Broadcasting	3.35	2.38	3.17	1.45
Sharing with Weak Ties	2.79	2.00	3.15	1.39
Asynchronous Communication	2.60	1.96	2.89	1.44
Narrowcasting	2.48	1.95	3.35	1.39
Synchronous Communication	2.37	1.88	3.55	1.49
Sharing with Strong Ties	1.85	1.75	3.47	1.42

Table 9. Mean Perceived Social Risk by Context

Note. Means are listed in descending order (greatest to least perceived social risk).

4.1.6 Discussion

Regardless of the emotional valence of the story (happy vs angry), the high arousal (happiness-eliciting and anger-eliciting) stories resulted in a significantly greater likelihood of transmission than the low arousal story (neutral). Participants' need to self-enhance moderated this relationship. Participants in the high arousal groups reported that they would be more likely to share the story they read when they also had a low need to self-enhance. No such relationship was observed between need to self-enhance and likelihood of transmission when participants read the neutral story: participants were unlikely to share the neutral story regardless of their reported need to self-enhance. Therefore, when arousal was high, having a low need to self-enhance increased the likelihood of transmission.

Likelihood of transmission differed depending on the communication context. Participants were more likely to broadcast, share with strong ties, and transmit via synchronous communication than they were to narrowcast, share with weak ties, or via asynchronous communication. Congruent with these findings, broadcasting was perceived to be riskier than narrowcasting, and sharing with weak ties was perceived as riskier than sharing with strong ties. Contrary to what was hypothesised, asynchronous communication was perceived as significantly riskier than synchronous communication. Asynchronous communication was hypothesised to be less risky than synchronous communication due to the increased time communicators have to craft asynchronous messages (Walther, 2007). However, participants were less likely to transmit via asynchronous communication, and this context incurred greater risk. Potential explanations for the observed results are that online asynchronous communications have greater permanency (De Bruyn, 2004) and the sender receives fewer feedback cues than those received during faceto-face communication (Walther, Loh, & Granka, 2005).

There was a negative relationship between self-esteem and perceived social risk. As selfesteem increased, perceived social risk decreased. This decrease in perceived social risk may explain the relationship that was found between self-esteem and likelihood of transmission: those with high self-esteem did not perceive sharing to be as risky as those who had low self-esteem. This lowered risk perception may explain why those with high self-esteem were more likely to share the high arousal content than those who read the same content yet had low self-esteem. Analyses provided inconsistent support for this assertion; therefore, subsequent experiments were required to clarify this relationship.

To provide further evidence for the hypotheses supported by Study 1, and to explore the influence of perceived social benefit on transmission, a series of six further quantitative investigations were designed. Firstly, this series of studies aimed to explore a potential mediation effect of perceived social benefit on the relationship between arousal and transmission. Exploring the impact of perceived social benefit was a key focus of the further studies in this

series due to: (a) the need to establish this newly proposed variable within the transmission process, and (b) analyse the role of perceived social risk relative to perceived social benefit in order to determine whether these variables explain transmission when analysed simultaneously.

In addition to demonstrating the effect of measured need to self-enhance, perceived social risk, and perceived social benefit on likelihood of transmission, these variables also needed to be manipulated to establish a causal chain. Specifically, a series of experiments were required to demonstrate that the proposed mediating variables (perceived social risk and perceived social benefit) were caused by need to self-enhance, and that likelihood of transmission is an effect of these variables (Spencer et al., 2005).

4.2 Study 2

In addition to strengthening the evidence provided by Study 1, this subsequent study aimed to provide evidence for a newly identified variable in this area: perceived social benefit. To investigate the influence of perceived social benefit on transmission, a scale was required to measure this variable. Study 2 was concerned with the development of this measure.

4.2.1 Preliminary Scale Development

The literature was searched for factors that related to the benefits of transmission, resulting in a preliminary list of 17 possible items to measure individuals' perceptions of the social benefits associated with sharing WOM. The review of the literature demonstrated that the social benefits of sharing WOM can fall into three categories: sharing to benefit the self, sharing to benefit others, and sharing to benefit relationships with others. The following sections will describe these categories, make a case for which of these benefits are socially derived, and provide examples of the preliminary items that were adapted from the literature.

Sharing to benefit the self. As outlined in Chapter 2, individuals are inherently motivated to engage in behaviour that verifies and enhances their self-concept, which is the set of beliefs they hold about who they are (Markus & Wurf, 1987). Social interactions provide an opportunity to engage in self-verification (communicating to express self-identity) and self-enhancement (communicating in order to 'look good'; Banaji & Prentice, 1994). transmission provides individuals with an opportunity to self-verify. For example, the Facebook activities of many consumers have been shown to centre around communicating their self-concept to others through the brands that they interact with (Hollenbeck & Kaikati, 2012). Individuals are also aware that sharing WOM can be self-enhancing. People will often share experiences or recommendations that they perceive will foster impressions of expertise or connoisseurship, and their motivation to do this is greater when the communication is online rather than face-to-face (De Angelis et al., 2012; Lovett et al., 2013; Packard & Wooten, 2013).

Four items employed in previous research that examined the social motivations underlying luxury purchasing behaviour were adapted to measure the perceived benefits of WOM to self-verification (e.g., *sharing would help me communicate my self-identity*; Wilcox, Kim, & Sen, 2009; see Table 10 for items). The three items used to measure perceived social risk in previous research were reversed to measure the perceived social benefits of transmission to self-enhancement (e.g., *sharing would make me look good*; Eisingerich et al., 2015).

In addition to being self-enhancing and self-verifying, transmission can reduce social anxiety. Online communication can be more comfortable for individuals who have difficulty relating to others, because the nature of online communication is less synchronous and easier to compose than face-to-face communication (Caplan, 2002). While transmission may be beneficial to some individuals as it facilitates social interactions for those who struggle to relate to others, it
is unclear whether the computer-mediated nature of online transmission provides a perceptible social benefit to consumers in general. To explore this possibility, two items were adapted from the Generalised Problematic Internet Use scale (*I would feel confident sharing*; *I would feel comfortable sharing*; Caplan, 2002), and one item was derived from a measure of the sociability and usability of online brand communities (*I would enjoy sharing*; Jin, Park, & Kim, 2009).

Sharing to benefit others. Individuals share their experiences and opinions to the benefit of others. When consumers share their negative experiences, they warn others to avoid making similar choices, and transmitting positive WOM can guide purchasing decisions (Hennig-Thurau et al., 2004). It is unclear whether transmitting WOM to warn or guide others is purely altruistic, or whether individuals perceive that a reciprocal social benefit will occur if they transmit WOM to the benefit of others. To examine whether sharing for others' benefit is perceived as a social benefit related to transmission, an item was adapted from the knowledge sharing literature (*sharing would benefit others*; Kankanhalli, Tan, & Wei, 2005).

Sharing to benefit relationships with others. Transmission can benefit social relationships and feelings of community membership (Cheung & Lee, 2014). In online social networks, individuals' WOM frequency has a positive relationship to the strength of their relationships with others in the network, as well as to levels of reciprocal trust and influence (Chu & Kim, 2011). Therefore, the preliminary measure included five items that were adapted from the previous literature to measure participants' perceptions that transmission would benefit their relationships, social status, and feelings of belonging (e.g., *sharing would make me feel connected with others*; Ellison et al., 2007).

Sharing to Benefit the Self				
1.	I feel that sharing would benefit me	Eisingerich et al. (2015)		
2.	I feel I will gain approval if I share			
3.	Sharing would make me look good			
4.	I would enjoy sharing	Jin, et al., (2009)		
5.	I would feel confident sharing	Caplan (2002)		
6.	I would feel comfortable sharing			
7.	Sharing would reflect the kind of person I see myself	Wilcox et al. (2009)		
	to be			
8.	Sharing would help me communicate my self-identity			
9.	Sharing would help me express myself			
10.	Sharing would help me define myself			
Sharing to Benefit Others		·		
11.	Sharing would benefit others	Kankanhalli et al. (2005)		
Sharing to Benefit Relationships with Others				
12.	Sharing the story would benefit my relationships with	Wilcox et al. (2009)		
	others			
13.	Sharing would improve my social status			
14.	Sharing would help me to fit in			
15.	Sharing would make me feel as if I am contributing to	Ellison et al. (2007)		
	a community			
16.	Sharing would make me feel part of a community			
17.	Sharing would make me feel connected with others			

Table 10. Perceived Social Benefit: Preliminary Measure

4.2.2 Method

Participants. Participants were recruited using AMT. To be eligible to take part in the study, participants needed to have active email and Facebook accounts. The attention check items used in study one were employed, and 111 participants completed the procedure. Based on the eligibility and attention check items, the final sample consisted of 100 North American participants, 46% female, and with an average age of 32.6 years (ranging from 18-62 years). For taking part in the experiment, participants were compensated at a rate of US\$6/hr. The online study took approximately 10 minutes to complete, therefore, participants were paid US\$1.00

Procedure and Measures. The study was an online survey developed using Qualtrics Survey Development software. Participants were first exposed to a brief fictional online news story describing an organic dog food company's partnership with an animal shelter. Results of Study 1 demonstrated that this story elicits happiness, and is relatively shareable (i.e., participants were more likely to share this story than a story that was emotionally neutral). The preliminary perceived social benefit items were designed to relate to participants' general perceptions of transmitting content (rather than to the story that participants were exposed to in this study) to enhance the applicability of the items to a broad range of stimuli.

The preliminary measure of perceived social benefit was then employed, and participants were instructed to respond to the items (see Table 3) in reference to the online news story that they had read (e.g., *I would enjoy sharing the story*). The order of the items was randomised, and participants responded using a six-point scale (*strongly disagree – strongly agree*). Higher scores indicated greater perceptions of social benefit. Participants then completed the perceived social risk measure reported in Eisingerich et al. (2015). These items were scored on a six-point scale (*strongly disagree – strongly agree*), with higher scores indicating greater perceptions of social risk.

4.2.3 Results

Preliminary analyses were conducted to confirm sampling adequacy and the factorability of the data. Bartlett's test of sphericity was significant (χ^2 (253) = 253, p < 0.001), and the Kaiser-Meyer-Olkin value was .91 (exceeding the suggested cut-off of .6; Field, 2013) demonstrating sampling adequacy and that the items were highly factorable. Further, all 17 variables were correlated at 0.43 or higher. However, the correlations were not so highly correlated as to suggest multicollinearity (i.e., no correlations exceeded 0.9; Jolliffe, 2002).

As sampling adequacy and factorability was confirmed, a principle axis factor analysis was conducted to explore the underlying structure of the preliminary scale (Osborne & Costello, 2009). Two factors had eigenvalues above 1 (meeting Kaiser's criterion; Kaiser, 1958) and together these factors explained 73.84% of the variance.

Following the recommendation of Field (2013) and Jolliffe (2002), the rotated factor loadings (varimax) were inspected to determine which items should be retained. The varimax rotation method was selected as it is a commonly used approach that simplifies the factor interpretation, particularly when one factor is expected and there is no evidence of significant multicollinearity (Akhtar-Danesh, 2017; Browne, 2001; Lewis-Beck, Bryman, & Liao, 2003). The criteria for item retention was as follows: (1) a factor loading cut-off point of 0.6 (MacCallum, Widaman, Preacher, & Hong, 2001), (2) elimination of conceptually similar items (as we aimed to construct a brief scale), and (3) elimination of factors that did not cluster with those that involved well-established social benefit to the sharer (impression management and social bonding).

Nine items clustered onto Factor 1, and these items indicated perceptions of social benefit related to gaining social approval, expressing self-identity, and benefiting relationships with others (see Table 11). Items relating to sharing for enjoyment, comfort, or the benefit of others clustered onto Factor 2, or did not cluster onto either factor. A number of the items that clustered onto Factor 2 duplicated items which loaded onto Factor 1 (e.g., Item 16 vs Item 17). The remainder of the items that clustered onto Factor 2 were more tenuously indicative of perceptions of social benefit than those that clustered on Factor 1 (i.e., Items 4, 6, 5, and 11). Therefore, the items that clustered onto Factor 2 were not retained. The final measure, the Perceived Social

Benefits of Sharing Scale (PSBSS), consisted of nine items (these are shaded in Table 11), and was highly internally consistent (Cronbach's $\alpha = 0.95$).

Participants' scores on the PSBSS were not significantly related to age (r = 0.06, p = 0.54), and did not differ depending on gender (t(98) = -.37, p = 0.71). There was no significant relationship between participants' mean scores on the PSBSS and their mean scores on the perceived social risk measure (r = -0.02, p = 0.41) suggesting that the two are conceptually distinct. These findings suggest that perceptions of social benefit do not occur only when there is an absence of perceived social risk, nor does perceived social risk imply that there is an absence of perceived social benefit.

		Factor	
Item	1	2	
13. Sharing the story would improve my social status	.826		
14. Sharing the story would help me fit in	.822		
12. Sharing the story would benefit my relationships with others	.801	.345	
10. Sharing the story would help me define myself	.768	.376	
2. I feel I will gain approval if I share the story	.750		
1. I feel that sharing the story would benefit me	.731	.370	
3. Sharing the story will make me look good	.677	.367	
8. Sharing the story would help me communicate my self-identity	.672	.561	
16. Sharing the story would make me feel part of a community	.629	.515	
4. I would enjoy sharing the story	.305	.882	
6. I would feel comfortable sharing the story		.820	
5. I would feel confident sharing the story		.803	
7. Sharing the story would reflect the kind of person I see myself to be	.469	.699	
Sharing the story would make me feel as if I am contributing to a			
15. community	.532	.676	
17. Sharing the story would make me feel connected with others	.606	.630	
9. Sharing the story would help me to express myself	.566	.624	
11. Sharing the story would benefit others	.444	.560	

Table 11. Rotated Factor Loadings of the 17 Preliminary Items

Note. Loadings less than .2 have been suppressed. Items retained in the final Perceived Social Benefits of Sharing Scale are shaded.

4.2.4 Discussion

The factor analysis demonstrated that the perceived social benefits associated with transmission are related to the self (e.g., sharing to communicate self-identity, to look good in front of others), and to relationships (e.g., sharing to benefit relationships with others or feel a part of a community). Items relating to altruistic sharing and sharing for comfort and enjoyment did not cluster with those related to the self or relationships. While altruism, comfort, and enjoyment are positive outcomes associated with transmission, these may not be perceived to be *social* benefits that can be derived from WOM. These results regarding altruism, comfort, and enjoyment suggest that there is also scope to examine the non-social benefits of sharing which, in addition to altruism and comfort, may include financial benefits such as those derived from incentivised sharing (Walsh & Elsner, 2012).

Despite the contributions of this scale development study to the current and future research in the WOM space, this study was limited. In particular, the sample size was comparatively small for scale development purposes (Johnson & Brooks, 2010; Worthington & Whittaker, 2010). This smaller sample size and the relatively abbreviated approach to scale development that was adopted in Study 2 were informed by the practical boundaries of the current research. Therefore, there was scope for future work to confirm and enhance the validity of this scale. In particular, the predictive and convergent validity of the scale and the applicability of the items to the measurement of perceived social benefit associated with different types of WOM were required. While further studies in the current research demonstrated the predictive validity of this scale, there remains scope for future research to confirm the validity and reliability of these items, particularly around sharing different types of brand-relevant content (e.g., advertisements) or actual consumption experiences (e.g., product reviews).

4.3 Study 3

As Study 2 clarified the conceptualisation of perceived social benefit and provided a measure of this variable, the subsequent experiments outlined in this chapter aimed to build on Study 1 by providing further evidence related to RQs 1 and 2, and exploring RQ3. Study 3, therefore, aimed to replicate the negative relationship between the need to self-enhance and the likelihood of transmission when participants' need to self-enhance was manipulated, rather than measured, as per Study 1. Study 3 also examined whether perceptions of social benefit related to transmission are related to the likelihood of transmission, and test the potential mediation effect of perceptions of social benefit on the relationship between need to self-enhance and likelihood of transmission. Accordingly, it was hypothesised that:

H1: Perceived social benefit will be positively related to likelihood of transmission.
H2: Need to self-enhance will be negatively related to likelihood of transmission.
H3: Perceived social benefit will mediate the relationship between need to self-enhance and likelihood of transmission.

4.3.1 Participants

The sample was recruited using AMT. For taking part in the experiment, participants were compensated at approximately US\$6/hr. The online study took approximately 10 minutes to complete, therefore, participants were paid US\$1.00. Participants were required to have an active email and Facebook account to take part in the experiment, and the attention check items employed in the previous studies were included in the procedure, which was completed by 123 participants. Based on the eligibility and attention check requirements, the final sample consisted of 103 North American participants, was 59% female, and the average age was 32.75 years.

4.3.2 Manipulation and Measures

Stimuli. The stimuli developed for Study 1 was employed in this study. Participants were exposed to a story that produced happiness or anger. These happiness- and anger-eliciting stories have been shown to produce emotional arousal and are relatively shareable (as per the results of Study 1).

Need to Self-Enhance. The need to self-enhance was manipulated using an episodic priming method that has been used in previous studies in this area (De Angelis et al., 2012; Eisingerich et al., 2015). Participants' need to self-enhance was manipulated by requiring those in the high need to self-enhance group to think about a time they performed poorly on a task and describe this experience in detail. Participants in the low need to self-enhance group were required to describe their last trip to the supermarket.

This episodic priming procedure has been shown to be a valid and reliable manipulation of need to self-enhance. Recalling a time that they performed poorly on a task will provide a blow to participants' self-esteem, and this blow to self-esteem subsequently increases the need to self-enhance (De Angelis et al., 2012). Two items adapted from Eisingerich et al. (2015) were employed as a manipulation check (*'I like to hear that I am a great person'; 'I want to discover that I have great qualities';* 6-point scale).

Perceived Social Benefit. Perceived social benefit was measured using the PSBSS. As per Study 2, participants responded to the PSBSS items using a six-point scale (*strongly disagree* – *strongly agree*), and higher scores indicated greater perceptions of social benefit.

Likelihood of transmission. Participants' likelihood to transmit a story was measured using the nine items employed in Study 1. Participants were required to indicate how likely they were to transmit on a six-point scale (*very unlikely – very likely*). Scores on this measure were

averaged, with higher scores indicating a higher likelihood of transmission.

4.3.3 Procedure and Design

The experiment was conducted online using Qualtrics Survey Development software. Upon responding to the recruitment advertisement, participants clicked on a link that directed them to an information page about the study. As the need to self-enhance manipulation relied on mild deception, participants were informed that the study will be examining the role of 'past experiences' in sharing behaviour. After providing informed consent, participants were required to confirm that they have an active email and Facebook account before proceeding to the experiment.

Participants were randomly allocated to one of two groups: the high need to self-enhance group or the control group. After being randomly allocated to one of the groups, participants completed the episodic priming task. Those in the high need to self-enhance group were required to recall a time that they performed poorly at a task, while those in the control group recalled their last trip to the supermarket. Participants entered their responses to the recall prompts into a text box embedded in the online experiment.

After completing the episodic priming task, the need to self-enhance was measured. Participants were then exposed to the happiness-eliciting story used in Study 1 and completed the questionnaire items measuring their likelihood to transmit the story and perceived social benefit. Upon completion of the procedure, participants were debriefed regarding the nature and purpose of the mild deception involved in the study.

Therefore, the need to self-enhance (high vs control) served as a manipulated independent variable within a mixed design. Perceived social benefit was a non-manipulated mediating variable, and likelihood of transmission was analysed both between subjects (i.e.,

between the need to self-enhance groups) and as a repeated measurement to compare participants' likelihood of transmission across the communication contexts.

4.3.4 Results

Need to Self-Enhance. Despite the demonstrated utility of the need to self-enhance manipulation in the previous literature, the manipulation was ineffective. Those in the high need to self-enhance condition (M = 5.23; SD = .11) did not report a significantly higher need to self-enhance than those in the control group (M = 5.40; SD = .08), t(101) = 1.26, p = .21, 95% CI [-.10, .45]. Unsurprising given to the inefficacy of the manipulation, the high need to self-enhance and control groups did not differ in their likelihood of transmission, t(101) = .64, p = .52, 95% CI [-.37, .73], or perceptions of social benefit, t(101) = 1.17, p = .24, 95% CI [-.19, .73].

Perceived Social Benefit. Perceived social benefit was positively related to overall likelihood of transmission, r = .48, p < .001. This positive relationship was significant across each of the nine communication contexts embedded in the likelihood of transmission measure (see Table 12). These findings supported H1.

Table 12. Correlations Between Perceived Social Benefit and Likelihood of transmission by Context

Likelihood of transmission Item	Perceived Social Benefit
	.459*
publicly on your Facebook wall for all of your friends to see?	.000
with a large group consisting of your close friends and	.449*
acquaintances if they were sitting with you right now?	.000
privately with a close friend using email or a private message	.339*
on Facebook?	.000
privately with an acquaintance using email or a private	$.400^{*}$
message on Facebook?	.000
	.418*
with a close friend if they were sitting with you right now?	.000
	.390*
with an acquaintance if they were sitting with you right now?	.000
with a group of acquaintances if they were sitting with you	.435*
right now?	.000
	.439*
with a group of acquaintances online using Facebook or	.000
email?	
with a large group of your close friends if they were sitting	.427*
with you right now?	.000

Note. * indicates a significant correlation below 0.05 one-tailed.

Communication Context. Participants' likelihood of transmission differed depending on the communication context, F(1, 101) = 22.63, p < .001 (see Figure 5). A repeated measures analysis demonstrated that participants were significantly more likely to transmit to strong ties (M = 4.09; SD = 1.43) than to weak ties (M = 3.80; SD = 1.44), F(1, 101) = 19.93, p < .001, [.16, .41], and via synchronous (M = 4.18; SD = 1.43) rather than asynchronous communication (M = 3.62; SD = 1.55), F(1, 101) = 33.35, p < .001, [-.75, -.37]. Inconsistent with the findings of Study 1, likelihood of transmission did not differ significantly across narrowcasting (M = 3.96; SD = 1.49) and broadcasting (M = 3.91; SD = 1.36), F(1, 101) = .54, p = .46, [-.17, .08].





Note. Error bars indicate 95% CIs.

4.3.5 Discussion

Study 3 aimed to provide further evidence for the findings of Study 1 by demonstrating that manipulated need to self-enhance is negatively related to likelihood of transmission. As the manipulation was ineffective, this aim was not met. The following explanations for the inefficacy of the manipulation were developed.

Firstly, while AMT has been shown to be a timely method of data collection (Buhrmester, Kwang, & Gosling, 2011) there are disadvantages associated with this recruitment method. Participants recruited from AMT tend to take part in a larger number of studies than participants recruited by other means, as well complete a significant number of similar studies (Chandler, Mueller, and Paolacci, 2014). As Study 3 involved mild deception, the fact that the sample were potentially well-practiced at experiment participation may have lessened the impact of the manipulation. Secondly, the deviation from the methods used in previous studies may have reduced the efficacy of the manipulation. Earlier research that had successfully employed this manipulation recruited a student sample, and required participants to recall a time that they performed poorly in their academic studies. In Study 3 a wider sample was recruited, and required to recall a more general failure. This deviation may have led to more variability in regard to the severity of, and proximity to, the failure recalled which may have resulted in a less predictable impact on participants' need to self-enhance (e.g., failing to attend a planned gym session vs failing a subject at university). The greater specificity of the recall prompt used in previous studies may have increased the efficacy of the manipulation by constraining the range of failures recalled as well as participants' proximity to the failure.

This study demonstrated the utility of the PSBSS that was developed in Study 2. This scale was employed to measure a new variable, perceived social benefit, and these results demonstrated that these perceptions were related to likelihood of transmission. As perceptions of social benefit increased, so did the likelihood of transmission. This positive relationship was stable across the nine communication contexts.

The results of Study 3 provided some support for those of Study 1. Participants were more likely to share with strong ties and transmit via synchronous communication than they were to narrowcast or share via asynchronous communication. However, unlike the results of Study 1, participants were not significantly more likely to broadcast than they were to narrowcast WOM. The cause of this inconsistency is unknown. One potential explanation is that exposure to the PSBSS items may have primed positive perceptions of social benefit, and this may have had an unintended influence on participants' likelihood of transmission across different communication contexts. Further completed studies attempt to clarify this inconsistency (Studies 4-6). In summary, Study 3 adds to the literature and the series of studies that comprise this thesis in the following manner. Firstly, this study demonstrated that a new variable, perceived social benefit, influences likelihood of transmission, and that this relationship is independent of communication context. However, the inefficacy of the need to self-enhance manipulation constrained the ability of this study to meet the full aims of Study 3. This aim was revisited in further studies wherein the methodological issues of Study 3 were addressed (Studies 4 and 5).

4.4 Study 4

Given the outcomes of Study 3, Study 4 aimed to test an alternative manipulation of participants' need to self-enhance. In this study, the need to self-enhance was manipulated by requiring participants to complete a cognitive task before receiving feedback on their performance. This manipulation involved varying the difficulty of the task and the valence of the feedback provided to participants. Versions of this manipulation have been employed in the previous literature (De Angelis et al., 2012; Eisingerich et al., 2015).

In addition to examining the impact of manipulated need to self-enhance on likelihood of transmission, Study 4 aimed to re-evaluate the potential mediating effect of perceived social risk on the relationship between need to self-enhance and likelihood of transmission. Study 4 aimed to test this model while manipulating need to self-enhance. The following hypotheses were drawn from these aims;

H1: Manipulated need to self-enhance will be negatively related to likelihood of transmission: those in the high need to self-enhance group will report a greater likelihood of transmission than those in the low need to self-enhance group.
H2: Perceived social risk will be negatively related to likelihood of transmission.
H3: Perceived social risk will be positively related to manipulated need to self-enhance:

those in the high need to self-enhance group will report greater perceptions of social risk than those in the low need to self-enhance group.

H4: Perceived social risk will mediate the relationship between manipulated need to selfenhance and likelihood of transmission.

4.4.1 Participants

A sample of 167 participants were recruited using AMT. The eligibility and attention check requirements employed in the previous studies were used, and the final sample consisted of 149 participants. This sample was 61% female, with a mean age of 28 years. Participants were compensated at a rate of US\$6 per hour, and the procedure ran for approximately 15 minutes.

4.4.2 Manipulations and Measures

Need to Self-Enhance. A literature search revealed that there are two broad categories of need to self-enhance manipulations. The first category involves priming, such as the episodic priming manipulation that was employed unsuccessfully in Study 3. The second category involves providing negative (or positive) feedback to participants after they complete a task to either diminish (or boost) their self-esteem and therefore increase (or decrease) their need to self-enhance (Baumeister & Tice, 1985).

Due to the unsuccessful employment of the initial episodic priming need to self-enhance manipulation, two versions of a cognitive task were designed. One version was designed to be difficult participants to complete. The second task was a simplified version of the difficult task that was intended to be easy for participants to complete. Both cognitive tasks were framed as an 'intelligence test' and consisted of 20 items. The items were derived from cognitive tests that are freely available online (e.g. Brainmetrix.com). The items in the relatively difficult task were designed to be challenging, but possible to answer (e.g., *languages : meaning :: philology :: ?*).

The items in the relatively easy task were designed to be easy for a member of the general public to answer (*soap : wash :: broom : ?*). In both the easy and difficult tasks participants were provided with 30 seconds to select their response to each question using a multiple-choice answer format.

Following completion of the cognitive task, participants were given false feedback on their performance. Those who completed the difficult task were provided with negative feedback. These participants were told that, based on their speed and accuracy, they had received a low score on the test (a 'D' on an A to F scale), and that their performance was worse than 83% of the population. Those who completed the easy task were given positive feedback, and told that they had received a high score on the test (an 'A') and that they had performed better than 83% of the population. Therefore, the manipulation was intended to influence participants need to self-enhance via an impact on self-esteem from three sources: the difficulty of the task, the test score, and the comparison to the population.

Need to Self-Enhance. In addition to refining the need to self-enhance manipulation, Study 4 aimed to explore a different approach to the manipulation check. In Study 3, two items adapted from Eisingerich et al. (2015) were employed as a manipulation check (*'I like to hear that I am a great person'; 'I want to discover that I have great qualities';* 6-point scale). While these two items were derived from the previous literature, they represented a very brief and comparatively unvalidated measure of the need to self-enhance. Therefore, in Study 4 Rosenberg's (1965) 10-item self-esteem measure was employed to infer participants need to selfenhance as per Study 1. Participants responded to the items on a four-point scale, and their responses were summed. Higher scores indicated a lower need to self-enhance.

Likelihood of transmission. The likelihood of transmission measure that was adapted

from the literature for Study 1 was used to measure participants' likelihood of transmission the happiness eliciting story employed in previous studies. Participants indicated their likelihood to transmit the story that they read across nine communication contexts on a six-point scale. Responses were averaged, and higher scores indicated a greater likelihood of transmission.

Perceived Social Risk. The perceived social risk measure used in Study 1 was employed to measure participants' perceptions of social risk related to sharing the happiness eliciting story. Participants responded to the 18-item measure on a four-point scale, and their responses were averages. Higher scores indicated greater social risk.

4.4.3 Procedure and Design

The experiment was conducted online using Qualtrics Survey Development software. Upon responding to the recruitment advertisement, participants clicked on a link that directed them to an information page about the study. To increase the efficacy of the manipulation, mild deception was employed and participants were instructed that they were taking part in two separate studies. The first study was ostensibly concerned with cognitive performance, the second with word-of-mouth. After providing informed consent, participants were required to confirm that they had an active email and Facebook account, before proceeding to the experiment.

Participants were then randomly allocated to one of two groups: the high need to selfenhance group or the low need to self-enhance group. Participants were instructed that they were completing an 'intelligence test' before they completed the cognitive task. Those in the high need to self-enhance group completed the relatively difficult cognitive task and received negative feedback on their performance. Participants in the low need to self-enhance group completed the relatively easy cognitive task and received positive feedback on their performance.

Once they had completed the cognitive task, and received the negative or positive feedback, participants completed the manipulation check. They were then instructed that the first study was complete, and were directed to the second study. Participants were then exposed to the happiness-eliciting story, before need to self-enhance, likelihood of transmission, and perceived social risk were measured.

Therefore, the need to self-enhance (high vs low) served as a manipulated independent variable within a mixed design. Perceived social risk was a non-manipulated, mediating variable, and the likelihood of transmission was analysed both between subjects (i.e., between the need to self-enhance groups) and as a repeated measurement to compare participants' likelihood of transmission across the communication contexts.

4.4.4 Results

Manipulation Check. The manipulation was ineffective. Those in the high need to selfenhance group (M = 4.92; SD = .86) did not report significantly higher need to self-enhance than those in the low need to self-enhance group (M = 5.27; SD = .78), t(148) = 1.03, p = .31, 95% CI [-11.26, 5.73]. Therefore, the effect of manipulated need to self-enhance on perceptions of social risk or likelihood of transmission was unable to be tested (H1-H4).

In addition to manipulating need to self-enhance, this variable was also measured using Rosenberg's (1965) scale. Therefore, despite the ineffective manipulation the influence of measured (rather than manipulated) need to self-enhance on perceptions of social risk and likelihood of transmission was able to be evaluated. The findings were partially inconsistent with those of Study 1. Participants' need to self-enhance was independent of their likelihood of transmission, r = -.001, p = .49, therefore, H1 was not supported. However, participants'

perceptions of social risk were positively related to their need to self-enhance – this finding is congruent with findings of Study 1, and supports H3 (see Figure 6).



Figure 6. Correlation Between Need to Self-Enhance and Perceptions of Social Risk

Perceived Social Risk. H2 was not supported. Participants' perceptions of social risk were not related to likelihood of transmission, r = -.05, p = .26, though this non-significant relationship was in the expected (negative) direction. This finding is incongruent with the findings of Study 1.

Communication Context. Participants' likelihood of transmission differed depending on the communication context, F(1, 143) = 31.05, p < .001 (see Figure 7). A repeated measures analysis demonstrated that participants were significantly more likely to transmit to strong ties (M = 3.95; SD = 1.32) than to weak ties (M = 3.50; SD = 1.27), F(1, 143) = 43.59, p < .001, [.31, .57], and via synchronous (M = 3.92; SD = 1.35) rather than asynchronous communication (M = 3.33; SD = 1.39), F(1, 143) = 49.82, p < .001, [-.39, -.78]. Inconsistent with the findings of Study 1 but consistent with those of Study 3, the likelihood of transmission did not differ significantly

across narrowcasting (M = 3.71; SD = 1.24) and broadcasting (M = 3.61; SD = 1.32), F(1, 43) = 2.76, p = .09, [-.17, .08]. However, the difference was in the expected direction as per the results of Study 1.



Figure 7. Likelihood of Transmission Across Communication Contexts

4.4.5 Discussion

Study 4 aimed to test an alternative to the episodic priming manipulation of need to selfenhance employed in Study 3. A further aim was to examine the influence of manipulated need to self-enhance on perceptions of social risk and likelihood of transmission. The manipulation used in Study 4 was adapted from the previous literature but was ineffective in this procedure. Therefore, the aforementioned aims were not met. Further, no significant relationships were observed between perceived social risk or need to self-enhance and likelihood of transmission. These findings are inconsistent with the findings of Study 1. Despite these inconsistencies and the inefficacy of the new need to self-enhance manipulation, Study 4 did provide further

Note. Error bars indicate 95% CIs.

evidence for the negative relationship between need to self-enhance and perceived social risk observed in Study 1.

One potential explanation for the inefficacy of the manipulation was the fact that the sample was derived from AMT. As previously outlined, the fact that this sample have completed a large number of studies (and potentially similar studies) may have reduced the impact of the manipulation. Based on the results of Studies 3 and 4, Study 5 was designed which involved delivering a manipulation of need to self-enhance to a more naïve sample in a face-to-face context.

4.5 Study 5

Study 5 involved a revised version of the episodic priming manipulation of need to selfenhance that was employed in Study 3. The aim of Study 5 was to test the effectiveness of this revised manipulation focusing on an academic failure with a student sample in order to establish the influence of manipulated need to self-enhance on perceptions of social risk and likelihood of transmission. It was hypothesised that:

H1: Manipulated need to self-enhance will be negatively related to likelihood of transmission: those in the high need to self-enhance group will report a greater likelihood to transmit than those in the control group.

H2: Perceived social risk will be positively related to likelihood of transmission.
H3: Perceived social risk will be positively related to manipulated need to self-enhance: those in the high need to self-enhance group will report greater perceptions of social risk than those in the control group.

H4: Perceived social risk will mediate the relationship between manipulated need to selfenhance and likelihood of transmission.

4.5.1 Participants

Ninety-two university students were recruited from the RMIT Behavioural Business Lab participant pool who had expressed an interest in taking part in experiments for cash payment at a rate of AUD\$20 per hour. The laboratory-based study took 30 minutes to complete, and participants were thus paid AUD\$10 for participating in the experiment. The eligibility and attention check requirements were as per the earlier studies in this series, and resulted in a final sample of 84 participants that was 56% female, with an average age of 24 years.

4.5.2 Manipulation

Participants' need to self-enhance was manipulated using a revised version of the episodic priming task employed in Study 3. The episodic priming manipulation was framed as an essay writing task in which participants were required to write approximately 200 words about an experience that involved failure. This essay writing task was designed to deliver a blow to participants' self-esteem through activating memories of a past failure (Tafarodi, Marshall, & Milne, 2003). Describing a past failure threatens self-esteem, and this threat produces an increase in the need to self-enhance (Tesser, 2000). Those in the high need to self-enhance group were required to respond to two essay writing prompts adapted from the previous literature ('*describe a time when you performed poorly in your studies due to your own lack of ability, effort, or mistakes*' and '*describe how you felt about your poor performance';* De Angelis et al., 2012).

Those in the control group were required to write about the last time they shopped at the supermarket (*'provide a brief description of your shopping activity the last time you shopped at the supermarket*' and *'describe how you usually feel when you shop at the supermarket*'; De Angelis et al., 2012). This particular essay writing task was designed to have no impact on self-esteem or need to self-enhance.

4.5.3 Measures

Need to Self-Enhance. In an ongoing effort to refine the measurement of this variable, eight items were employed to confirm the effectiveness of the episodic priming manipulation and to measure the need to self-enhance (see Table 13). Six items were derived from the previous literature (De Angelis et al., 2012). Two items were added to fully capture the dimensions of self-esteem evident in Rosenberg's (1965) scale that may not have been successfully measured in the briefer need to self-enhance measure employed in Studies 3 and 4. This refined measure of the need to self-enhance prompted participants to indicate how they currently felt as a result of having reflected on the past experience they described in the essay writing task (e.g., *satisfied with yourself vs unsatisfied with yourself*), to allow for the more specific measurement of state, rather than trait, need to self-enhance. This enhanced precision of the manipulation check items to the manipulation. Participants responded to these items on a 7-point scale that was highly internally consistent (Cronbach's $\alpha = .93$), with higher scores indicating a greater need to self-enhance.

Table 13. Need to Self-Enhanc	e Questionnaire Items
-------------------------------	-----------------------

Reflecting on the experiences and feelings that you wrote about in the essay writing task;				
how do you feel about yourself?				
1. Unsatisfied with yourself - Satisfied with yourself*				
2. Proud of yourself - Not proud of yourself				
3. Bad about yourself - Good about yourself*				
4. An unsuccessful person - A successful person*				
5. Confident about yourself - Not confident about yourself				
6. A worthless person - A person of worth*				
7. A person with poor qualities - A person with good qualities*				
8. Worse than most other people - Better than most other people*				

Note. Items marked with an asterisk were reverse scored.

Likelihood of transmission. Participants' likelihood of transmission was measured using the nine items employed in Study 1. Participants were required to indicate how likely they were to transmit on a six-point scale (*very unlikely – very likely*). Scores on this measure were averaged, with higher scores indicating a higher likelihood of transmission.

Perceived Social Risk. Perceptions of social risk were measured using the scale adapted from the literature for use in Study 1. Participants indicated their perceptions of risk, concern about disapproval, and fear of embarrassment resulting from sharing a story across the communication contexts outlined in Study 1 (e.g., '*I am afraid that I may be embarrassed or look stupid by sharing a story with a close friend*'). Participants responded on a four-point scale, and scores on this scale were summed. Higher scores indicated greater perceptions of social risk.

4.5.4 Procedure

The experiment took place in a computer laboratory at the RMIT City Campus. Participants were seated individually at a desktop computer, and they completed an experiment that was created using Qualtrics survey development software. In the experiment, participants were randomly allocated to one of two groups: the high need to self-enhance group, or the control group. Those in the high need to self-enhance group completed the essay writing task that concerned a past failure, while those in the low need to self-enhance group completed the essay writing task about the last time they shopped at the supermarket. All participants were then exposed to the happiness-eliciting story before likelihood of transmission and perceptions of social risk were measured.

Therefore, the need to self-enhance (high vs control) served as a manipulated independent variable within a mixed design. Perceived social risk was a non-manipulated, mediating variable, and likelihood of transmission was analysed both between subjects (i.e., between the need to self-enhance groups) and as a repeated measurement to compare participants' likelihood of transmission across the communication contexts.

4.5.5 Results

Need to Self-Enhance. The need to self-enhance manipulation was effective. Those in the high need to self-enhance group (M = 3.93; SD = 1.65) had significantly higher scores on the need to self-enhance measure than those who were in the control group (M = 3.02; SD = 0.96), t(68) = -3.10, p = .003, 95% CI [-1.49, -.32].

Likelihood of transmission. The manipulation produced a significant effect on overall likelihood of transmission, t(83) = 83, p = .03, 95% CI [.05, 1.03]. Those in the high need to self-enhance group had lower mean likelihood of transmission scores (M = 3.81; SD = 1.08) than those in the control group (M = 4.27; SD = 1.18). Therefore, H1 was supported.

Perceived Social Risk. H2 was not supported. Perceived social risk was not related to likelihood of transmission (r = -.06, p = .32), however, the non-significant relationship was in the expected (negative) direction (see Figure 8). The non-significance of this relationship was stable

regardless of the communication context of transmission (e.g., the audience size, audience type, or synchronicity of communication). These findings are inconsistent with those of Studies 1 and 4.



Figure 8. Correlation Between Perceptions of Social Risk and Likelihood of Transmission

The high need to self-enhance group (M = 18.27; SD = 11.82) did not differ significantly from the control group (M = 13.96; SD = 9.71) on their scores on the perceived social risk measure, t(48) = -1.40, p = .167, 95% CI [-6.10, 2.96]. Therefore, H3 was not supported (see Figure 9). Further, due to the lack of any significant relationship between perceived social risk and need to self-enhance or likelihood of transmission, H4 was also not supported.



Figure 9. Perceptions of Social Risk by Group

Note. Error bars indicate 95% CIs.

Communication Context. A factorial repeated measures ANOVA was conducted to test for differences in likelihood of transmission across the communication contexts between the groups. There was a main effect for communication context on likelihood of transmission, F(3, 81) = 3.62, p < .001. Planned contrasts revealed that, congruent with the findings of Studies 1-4, participants were significantly more likely to transmit to strong ties (M = 4.01; SD = 1.32) than to weak ties (M = 3.31; SD = 1.32), F(1, 83) = 54.00, p < .001, [.51, .96], and via synchronous (M= 3.88; SD = 1.26) rather than asynchronous communication (M = 3.12; SD = 1.24), F(1, 83) =56.08, p < .001, [.56, .96]. However, likelihood of transmission did not differ significantly across narrowcasting (M = 3.62; SD = 1.17) and broadcasting (M = 3.48; SD = 1.26), F(1, 81) = 2.72, p= .10, [-.29, .03].

There was a main effect of need to self-enhance on likelihood of transmission across audience size (broadcasting vs narrowcasting), audience type (strong vs weak ties) and synchronicity (synchronous vs asynchronous), F(1, 83) = 4.45, p = .04. The difference between

the high need to self-enhance and control groups was significant for broadcasting (t(83) = 2.47, p = .01, 95% CI [.12, 1.18]), sharing with weak ties (t(83) = 1.40, p = .01, 95% CI [.11, 1.10]), and synchronous communication (t(83) = 2.22, p = .03, 95% CI [.06, 1.13]), but not for narrowcasting (t(83) = 1.55, p = .12, 95% CI [-.11, .89]), strong ties (t(83) = 1.40, p = .16, 95% CI [-.17,.97]), or asynchronous communication (t(83) = 1.76, p = .08, 95% CI [-.06, .99]). Therefore, those in the high need to self-enhance group were significantly less likely than those in the control group to transmit the story that they read via broadcasting, to weak ties, and using synchronous communication. However, there was no significant difference between the groups on likelihood of transmission via narrowcasting, sharing with strong ties, or using asynchronous communication (see Figure 10).





Note. Error bars indicate 95% CIs.

4.5.6 Discussion

The revised manipulation was successful in producing a significant difference in need to self-enhance between the experimental groups. Completing the episodic priming task increased the need to self-enhance of those in the high need to self-enhance condition. The successful employment of this manipulation demonstrated that manipulated, rather than measured, need to self-enhance has an impact on likelihood of transmission. Congruent with the negative relationship demonstrated in the previous studies in this thesis, those in the high need to self-enhance condition were less likely to transmit than those in the control group. Consistent with the results of Study 4, participants were more likely to share with strong ties and transmit via synchronous communication than they were to share with weak ties or share via asynchronous communication. However, participants were not significantly more likely to broadcast than they were to narrowcast WOM.

Adding to the understanding of the influence of need to self-enhance on likelihood of transmission, Study 5 demonstrated that need to self-enhance constrains likelihood of transmission across certain communication contexts. Those in the high need to self-enhance condition were less likely than those in the control group to broadcast, share with weak ties, or share via synchronous communication. However, need to self-enhance had no influence on transmitting via narrowcasting, sharing with strong ties, or via asynchronous communication. These findings are somewhat congruent with previous studies. The results of Study 1 suggested that broadcasting and sharing with weak ties (for example, sharing on Facebook for all of your friends to see) was riskier than narrowcasting or sharing with strong ties. The susceptibility of those with an elevated need to self-enhance to the increased social risk of broadcasting and sharing with weak ties increased social risk of transmission increases

so, perhaps, does the impact of the individual's need to self-enhance.

However, perceptions of social risk did not predict likelihood of transmission. This result was incongruent with previous findings and did not support perceived social risk as a mediator of the relationship between need to self-enhance and likelihood of transmission. Further, synchronous communication was perceived to be less risky in Study 1, yet those in the high need to self-enhance group were only less likely to transmit via asynchronous communication. The inconsistent results of Study 5 highlighted the unequivocal nature of this relationship. One potential explanation was that the measurement of perceived social risk requires refinement. The current measure was adapted from the literature and measures perceived social risk in general (e.g. 'there is a risk I could be embarrassed if I share a story') rather than in relation to a particular piece of content ('there is a risk I could be embarrassed if I share this story'). It was possible that perceptions of social risk are influenced by a number of factors that were not yet well understood, including the nature of the content itself. Further work is required to clarify the relationship between content-related factors, the need to self-enhance, perceived social risk, and likelihood of transmission. Study 7 partially addressed this limitation by including a qualitative investigation of perceived social risk to gain a clearer understanding of the facets of this variable, and refinement of the current quantitative measurement of perceived social risk.

In summary, Study 5 confirmed the utility of a revised manipulation of need to selfenhance. This allowed for the negative relationship between need to self-enhance and likelihood of transmission to be further established. In addition to contributing to the strength of the current findings, the results of Study 5 add to the literature by demonstrating that the need to selfenhance has a greater impact on likelihood of transmission via broadcasting and with weak ties. As much online transmission involves sharing to a large audience of weak ties (e.g., highly

visible sharing on social media), this has implications for social campaign design. As well as considering the role of perceived social benefit (as per Study 3), marketers designing content intended to be spread via social media should consider the role of the individuals' need to self-enhance. If social content provides a boost to self-esteem, and therefore reduces the need to self-enhance, this may increase the likelihood of transmission. The theoretical and managerial implications of this study, and the other studies in this series, will be discussed in further detail in Section 4.8 and Chapter 6.

4.6 Study 6

Study 6 aimed to provide further evidence for the utility of the revised need to selfenhance manipulation that was developed for use in Study 5. Another aim was to build upon the understanding of perceived social benefit that was established by Study 3. Therefore, the relationship between manipulated need to self-enhance, perceived social benefit, and likelihood of transmission was examined. It was hypothesised that perceived social benefit would mediate the negative relationship between manipulated need to self-enhance and likelihood of transmission that had been demonstrated in earlier studies.

4.6.1 Participants

The sample consisted of 164 students from the University of Technology Sydney who took part in the experiment in exchange for course credit. The eligibility and attention check procedures were consistent with the previous studies in this series, and yielded a final sample of 145 participants. This final sample was 27% female, with an average age of 20 years. Participants were excluded from the procedure if they indicated that they did not have an active email or Facebook account.

4.6.2 Manipulation and Measures

Need to Self-Enhance. Participants' need to self-enhance was manipulated using the episodic priming task employed in Study 5. The episodic priming manipulation was framed as an essay writing task, in which participants were required to write approximately 200 words about a past experience. Those in the high need to self-enhance group were required to respond to two essay writing prompts adapted from the previous literature ('*describe a time when you performed poorly in your studies due to your own lack of ability, effort, or mistakes*' and '*describe how you felt about your poor performance*'; De Angelis et al., 2012).

Those in the control group were required to write about the last time they shopped at the supermarket (*'provide a brief description of your shopping activity the last time you shopped at the supermarket*' and *'describe how you usually feel when you shop at the supermarket*'; De Angelis et al., 2012).

Need to Self-Enhance. The eight need to self-enhance items used in Study 5 were employed to measure participants' need to self-enhance. These items prompted participants indicate how they currently felt as a result of having reflected on the past experience they described in the essay writing task (e.g., *satisfied with yourself - unsatisfied with yourself*). Participants responded to these items on a 7-point scale, with higher scores indicating a greater need to self-enhance.

Likelihood of transmission. Participants' likelihood of transmission was measured using the likelihood of transmission measure that was employed in previous studies in this series. Participants were required to indicate how likely they were to transmit on a six-point scale (*very unlikely – very likely*). Scores on this measure were averaged, with higher scores indicating a higher likelihood of transmission.

Perceived Social Benefit. Perceptions of social benefit were measured using the PSBSS. Participants responded on a four-point scale, and scores on this scale were summed. Higher scores indicated greater perceptions of social benefit.

4.6.3 Procedure

The online experiment was designed using Qualtrics survey development software. Participants were given access to a link that led to the online experiment, at which point informed consent was sought. If this consent was provided, and the exclusion criteria was met, participants proceeded to the main portion of the online experiment.

In the main portion of the online experiment, participants were allocated to one of two groups: the high need to self-enhance group, or the control group. Those in the high need to selfenhance group completed the essay writing task that concerned a past academic failure, while those in the control group completed the essay writing task about the last time they shopped at the supermarket.

All participants were then exposed to the happiness-eliciting story about a partnership between an organic dog food company and an animal shelter that was employed in Study 1. Participants then indicated their likelihood to transmit this story, before perceptions of social risk were measured.

As per Study 5, the need to self-enhance (high vs control) served as a manipulated independent variable within a mixed design. Perceived social risk was a non-manipulated mediating variable, and the likelihood of transmission was analysed both between subjects (i.e., between the need to self-enhance groups) and as a repeated measurement to compare participants' likelihood of transmission across the communication contexts.

4.6.4 Results

Need to Self-Enhance, Perceived Social Benefit, and Likelihood of Transmission.

The need to self-enhance manipulation was effective. There was a significant difference in need to self-enhance scores between the high need to self-enhance group (M = 3.79; SD = 1.20) and the control group (M = 2.97; SD = 0.99), t(143) = 4.463, p < .001, 95% CI [-1.18, -.45].

A mediation analysis using *PROCESS* (Model 4; Hayes, 2012) was conducted to test the prediction that perceived social benefit would mediate the relationship between need to self-enhance and likelihood of transmission (see Figure 11). The independent variable was need to self-enhance, the dependent variable was likelihood of transmission, and perceived social benefit was the mediating variable. Incongruent with the previous findings, the need to self-enhance did not predict likelihood of transmission, nor did perceived social benefit mediate the relationship between need to self-enhance and likelihood of transmission. While there was a significant positive effect of perceived social benefit on likelihood of transmission (b = .06, p < .001, Ba CI [.05, .08]), there was no direct effect of need to self-enhance on likelihood of transmission (b = .03, p = .67, BCa CI [-1.44, 1.32]), and no indirect effect on likelihood of transmission through need to self-enhance and perceived social benefit (ab = .003, BCa CI [-.11, .16]).

Figure 11. Mediation Model



Note. Pathways marked with an asterisk are significant at < .05.

Accordingly, correlational analyses confirmed that there was a significant positive relationship between perceived social benefit and likelihood of transmission, r = 0.54, p < 0.001 (see Figure 12). Congruent with Study 3, this significant relationship between perceived social benefit and likelihood of transmission was stable across each communication context (see Table 14).

Figure 12. Correlation Between Perceived Social Benefit and Likelihood of Transmission



 Table 14. Correlations Between Perceived Social Benefit and Likelihood of transmission by

 Context

Likelihood of Transmission Context		Perceived Social Benefit
Broadcasting	Pearson Correlation	.582**
	<i>p</i> -value	.000
Narrowcasting	Pearson Correlation	.454**
	<i>p</i> -value	.000
Synchronous	Pearson Correlation	.454**
	<i>p</i> -value	.000
Asynchronous	Pearson Correlation	.542**
	<i>p</i> -value	.000
Strong Ties	Pearson Correlation	.386**
	<i>p</i> -value	.000
Weak Ties	Pearson Correlation	.569**
	<i>p</i> -value	.000

Note. * indicates a significant correlation below .001, one-tailed.

However, there was no significant difference in mean scores on the likelihood of transmission measure between the high need to self-enhance group (M = 3.11; SD = 1.19) and the control group (M = 3.26; SD = 1.10), t(143) = .80, p = .42, 95% CI [-.22, .53] (see Figure 13). The difference between the groups was non-significant regardless of the communication context (e.g., broadcasting vs narrowcasting).


Figure 13. Likelihood of Transmission by Group



There was no significant difference in mean scores on the perceived social benefit measure between the high need to self-enhance group (M = 26.75, SD = 9.16) and the low need to self-enhance group (M = 25.66; SD = 10.48), t(143) = .66, p = .50, 95% CI [-4.32, 2.15].

Communication Context. A factorial repeated measures ANOVA was conducted. There was a main effect for communication context, F(5, 143) = 65.79, p < .001. The results of planned contrasts demonstrated that participants were significantly more likely to transmit via narrowcasting (M = 3.39; SD = 1.22) than via broadcasting (M = 2.92; SD = 1.16), F(1, 143) = 60.32, p < .001, [-.59, -.35], to strong ties (M = 3.61; SD = 1.31) than to weak ties (M = 2.98; SD = 1.22), F(1, 143) = 65.58, p < .001, [-.48, .79], and via synchronous (M = 3.52; SD = 1.29) rather than asynchronous communication (M = 2.78; SD = 1.22), F(1, 143) = 70.34, p < .001, [.56, .91]. There was no significant interaction between need to self-enhance and communication context on likelihood of transmission, F(1, 143) = .63, p < .42 (see Figure 14).



Figure 14. Likelihood of Transmission by Group Across Communication Contexts

Note. Error bars indicate 95% CIs.

In summary, participants' need to self-enhance did not influence likelihood of transmission or general perceptions of social benefit. There was a significant positive relationship between perceptions of social benefit and likelihood of transmission, however, this relationship was not influenced by need to self-enhance.

4.6.5 Discussion

The results of this study provided some support for the findings of the previous experiments. Study 6 further demonstrated the effectiveness of the revised manipulation of need to self-enhance that was established in Study 5. This finding was useful as the utility of this manipulation was now established in a laboratory setting (Study 5) as well as an online context (Study 6).

Congruent with Studies 1-5, participants were more likely to share with strong ties and transmit via synchronous communication than they were to share with weak ties or via

asynchronous communication. Providing further support for the findings of Study 1, participants were also more likely to narrowcast than they were to broadcast WOM. There was no interaction between need to self-enhance and communication context on likelihood of transmission. That is, participants in the high need to self-enhance and control groups did not differ in their likelihood of transmission across the communication contexts.

Need to self-enhance did not influence likelihood of transmission. Despite the efficacy of the need to self-enhance manipulation, the groups did not differ in their likelihood to transmit the story that they read. Accordingly, the mediating role of perceived social benefit in the relationship between manipulated need to self-enhance and likelihood of transmission was not testable. Further, need to self-enhance did not have an effect on perceptions of social benefit.

Perceived social benefit was positively related to likelihood of transmission. Therefore, these results suggest that as individuals' perceptions of social benefit increase so does their likelihood of transmission. These findings are congruent with the previous studies, and further highlight the theoretical and managerial implications outlined in the discussion of the results of Study 3.

The non-significant findings regarding need to self-enhance, perceived social benefit, and likelihood of transmission are inconsistent with the previous studies. The cause of this inconsistency is uncertain; however, the online context and length of the procedure may have been contributing factors. The revised need to self-enhance manipulation resulted in a procedure that was three times longer than the earlier online studies. This, coupled with the fact that the procedure took place online (rather than under laboratory supervision as per Study 5), may have negatively affected participants' level of fatigue and attention to the procedure (Boksem, Meijman, & Lorist, 2005).

The results of this study provided further evidence for utility of the need to self-enhance manipulation and the relationship between perceived social benefit and likelihood of transmission. However, this study did not confirm the relationships between need to self-enhance, perceived social benefit, and likelihood of transmission that were observed in Study 3. To re-establish these relationships further research was required. Study 7 was designed to meet that need through the measurement of both perceived social risk and perceived social benefit within the same procedure.

4.7 Study 7

Study 7 had two aims. First, the previous studies in this series examined perceived social risk and perceived social benefit in isolation. As the previous studies provided mixed results (particularly in relation to perceived social risk), the need to look at both risk and benefit simultaneously was explored within this procedure. Therefore, this study aimed to test whether the relationship between the need to self-enhance and likelihood of transmission operated via perceptions of the overall value of transmission (i.e., perceived social benefit relative to risk). Second, this study aimed to explore whether evaluations of perceived social risk and benefit differ depending on the communication context. It was hypothesised that perceptions of overall value would mediate the relationship between the need to self-enhance and the likelihood of transmission.

4.7.1 Participants

The sample consisted of 392 students recruited via Prolific, which is an online participant recruitment system (Prolific.ac). Participants responded to an advertisement placed on Prolific, and were paid GBP£2.50 for taking part in the experiment. The eligibility and attention check procedures were as per the previous studies in this series, and resulted in a final sample of 364

participants. This final sample was 41% female, with an average age of 26.7 years. Participants were excluded from the study if they indicated that they did not have an active email or Facebook account.

4.7.2 Manipulation

Need to Self-Enhance. The episodic priming manipulation employed in Study 5 was used with the following addition: those in a low need to self-enhance group were asked to write about an academic success they had experienced (*'describe a time when you experienced success in your studies due to your own ability, effort, or positive attributes* ' and *'describe how you felt about your success.* '). This addition of a low need to self-enhance group aimed to strengthen the manipulation, and allow for comparisons to be drawn not only between a high need to selfenhance and control group, but also to a group who had experienced a boost to their self-esteem.

4.7.3 Measures

State Need to Self-Enhance and Likelihood of Transmission. Need to self-enhance was measured using the items employed in Studies 5 and 6. Participants' likelihood of transmission was measured using the items employed Studies 1-6, with the addition of three further items included in order to capture further possible permutations of communication context (see Table 15). The previous iteration of this measure did not measure the combinations of audience size, audience type, and synchronicity that relate to items 10, 11, and 12 in Table 15, and were therefore added for this study. As per the previously employed measure, Scores on these items were averaged to produce measures of participants' likelihood of transmission for narrowcasting, broadcasting, strong ties, weak ties, synchronous, and asynchronous communication. Participants' scores on all items were also averaged, with higher scores indicating a higher

likelihood of transmission overall. This version of the likelihood of transmission measure was

highly internally consistent (Cronbach's $\alpha = .96$).

 Table 15. Likelihood of Transmission Questionnaire Items

How likely would you be to:	Context			
1. Share publicly on your Facebook wall for all of your friends to see?	Broadcast; mixture of tie strength; asynchronous.			
2. Share this with a large group which consists of your close friends and acquaintances if they were sitting with you right now?	Broadcast, mixture of tie strength, synchronous.			
3. Share privately using email or Facebook Messenger with a close friend?	Narrowcast; strong tie; asynchronous.			
4. Share this with an acquaintance using email or Facebook Messenger?	Narrowcast; weak tie; asynchronous.			
5. Share this with a close friend if they were sitting with you right now?	Narrowcast; strong tie; synchronous.			
6. Share this with an acquaintance if they were sitting with you right now?	Narrowcast; weak tie; synchronous.			
7. Share this with a large group of acquaintances if they were sitting with you right now?	Broadcast, weak ties, synchronous.			
8. Share this with a large group of acquaintances online using Facebook or email?	Broadcast, weak ties, asynchronous.			
9. Share this with a large group of your close friends if they were sitting with you right now?	Broadcast; strong ties; synchronous.			
Added for Study 7:				
10. Share this with a large group of your close friends using Facebook or email?	Broadcast, strong ties, asynchronous.			
11. Share this with a small group of close friends and acquaintances if they were sitting with you right now?	Narrowcast, mixture of tie strength, synchronous.			
12. Share this with a small group of close friends and acquaintances using Facebook or email?	Narrowcast, mixture of tie strength, synchronous.			

Note. No significant difference was found between likelihood to transmit to weak ties, or a mixture of strong and weak ties. In the main analyses, these items were collapsed.

Perceived Social Benefit. Perceptions of social benefit were measured using the PSBSS.

Participants also indicated the social benefit they felt would be involved in transmitting content

(e.g., news articles, images, YouTube clips) via broadcasting, narrowcasting, asynchronous communication, synchronous communication, strong ties, and weak ties (e.g., *'it could beneficial to share content with a large group of people'*). These items were scored on a six-point scale (*strongly disagree-strongly agree*), and scores on this scale were averaged. Higher scores indicated greater perceptions of social benefit (see Table 16), and this measure was highly internally consistent (Cronbach's $\alpha = .96$).

Table 16. Perceived Social Benefit of Communication Context

1. It could be beneficial to share content with a large group of people
2. It could be beneficial to share content with one person
3. It could be beneficial to share content with a close friend
4. It could be beneficial to share content with an acquaintance
5. It could be beneficial to share content with someone face-to-face
6. It could be beneficial to share content with someone online (e.g., via social media)

Perceived Social Risk. In this procedure, the measurement of perceived social risk was refined. While the three items used in previous studies were derived from the literature, these items have not been extensively validated and served as a very brief measure of perceived social risk – particularly in comparison to the perceived social benefit measure developed in Study 2. Therefore, the perceived social risk measure was expanded and revised for this procedure. Twelve perceived social risk items were developed using the existing measure that had been adapted from the literature (Eisingerich et al., 2015) and the results of a qualitative study that was conducted to understand the social risk involved in transmission.

This qualitative study aimed to refine the measurement of perceived social benefit, and was completed with a sample of 68 North American participants recruited via AMT. Participants took part in an online survey in which they were asked to consider the last piece of online

content (e.g., news articles, YouTube clips, images) that they viewed, considered sharing, and did share. Participants were then prompted to respond to an open-ended text entry question in the online survey to describe the possible social risks they thought were involved in sharing that content. This process was repeated for the last piece of online content (e.g., news articles, YouTube clips, images) that they viewed, considered sharing, and did not share. Based on participants' responses to these open-ended questions, nine items were developed in order to capture further elements of perceived social risk that were not measured by the initial three items from the previous literature (see items 1-3 in Table 17; Eisingerich et al., 2015). This revised and expanded measure was highly internally consistent (Cronbach's $\alpha = 0.94$).

In addition to the general measure of perceived social risk that is outlined at Table 18, a communication context-specific measurement of perceived social risk was undertaken. Participants were asked to indicate how risky they felt it would be to transmit content via broadcasting, narrowcasting, asynchronous communication, synchronous communication, to via broadcasting, narrowcasting, asynchronous communication, synchronous communication, strong ties, and weak ties (see Table 18). Responses were scored on a six-point scale (*strongly disagree-strongly agree*), and scores were averaged. This scale was highly internally consistent (Cronbach's $\alpha = 0.92$).

Table 17. Revised Perceived Social Risk Measure

1.	It could be risky to share content
2.	People could disapprove of me when I share content
3.	I could be embarrassed or look stupid if I share content.
4.	I could bore people if I share content
5.	I could share too much content
6.	I could look bad if I share content
7.	People could question my motives if I share content
8.	People could not like the content I share
9.	People could think that the content I share is not important enough to share
10.	People could form the wrong impression of when I share content
11.	People could be offended by the content I share
12.	People may not find the content I share interesting

Table 18. Revised Perceived Social Risk Measure

1. It could be risky to share content with a large group of people
2. It could be risky to share content with one person
3. It could be risky to share content with a close friend
4. It could be risky to share content with an acquaintance
5. It could be risky to share content with someone face-to-face
6. It could be risky to share content with someone online (e.g., via social media or email)

4.7.4 Procedure

The online experiment randomly allocated participants to one of three episodic priming groups: the high need to self-enhance group, the control group, or the low need to self-enhance group. After completing the essay writing task, participants were exposed to either the happiness-eliciting or anger-eliciting stories that were used in the earlier studies in this series. Therefore, a 3 (need to self-enhance; low, control, high) x 2 (story; happiness-eliciting, anger-

eliciting) mixed design was employed. The happiness and anger-eliciting stories were both used in this study to re-assess the impact of emotional valence (positive – happy, vs negative – angry) on the likelihood of transmission. Participants indicated their likelihood to transmit the story, before perceptions of social benefit and risk were measured (the order of the presentation of the perceived social benefit and risk measures was randomised). As per the previous studies in this series, the likelihood of transmission was analysed both between subjects (i.e., between the arousal groups) and as a repeated measurement to compare participants' likelihood of transmission across the communication contexts.

4.7.5 Results

Mediation Analyses. A mediation analysis was conducted using *PROCESS* (Model 6; Hayes, 2012) to test the mediation model proposed in Figure 15. The independent variable was episodic priming group (low, control, and high), and the sequential mediating variables were measured need to self-enhance, and perceived social benefit relative to risk. Participants' scores on the perceived social risk measure were subtracted from their scores on the perceived social benefit measure. The resulting score indicated overall value of transmission (perceived social risk relative to benefit). The dependent variable was likelihood of transmission.

There was a significant indirect effect of episodic priming group on likelihood of transmission through state need to self-enhance and overall value, b = -0.02, BCa CI [- 0.38, -0.005]. While the episodic priming group did not directly predict likelihood of transmission, b = -0.02, BCa CI [- 0.14, 0.18], or perceived social benefit relative to risk, b = .03, BCa CI [- 0.16, -0.22], there was a partial mediation of the likelihood of transmission by episodic priming group via overall value. Episodic priming group predicted state need to self-enhance, b = .34, BCa CI [- 0.14, -0.54]. There were significant pathways between state need to self-enhance, likelihood of

transmission, b = -.11, BCa CI [- 0.19, - 0.25], and overall value, b = 0.15, BCa CI [- 0.25, - 0.48]. Overall value predicted likelihood of transmission, b = 0.32, BCa CI [- 0.24, - 0.41]².





Note. Pathways marked with an asterisk are significant at < 0.05.

Communication Context. Likelihood of transmission did not differ significantly between the anger-eliciting and happiness-eliciting stories, t(362) = 1.01, p = 0.31, 95% CI [-0.13, 0.42]. Therefore, throughout subsequent analyses, the story groups were collapsed.

A repeated measures ANOVA showed that the likelihood of transmission differed across the communication contexts F(5, 1815) = 107.12, p < 0.00. Repeated contrasts demonstrated that participants were significantly more likely to transmit via narrowcasting (M = 3.63; SD = 1.34) than via broadcasting (M = 3.32; SD = 1.47), F(1, 363) = 78.37, p < 0.001, to strong ties (M =3.64; SD = 1.38) than to weak ties (M = 3.37; SD = 1.38), F(1, 363) = 79.63, p < 0.001, and via synchronous (M = 3.55; SD = 1.49) rather than asynchronous communication (M = 3.79; SD ==1.43), F(1, 144) = 128.42, p < 0.001.

² When included in an equivalent model that entered PSB and PSR as separate parallel mediators, state need to selfenhance predicted perceived social benefit, b = .34, BCa CI [- 0.41, - 0.13], but not perceived social risk b = 0.13, BCa CI [- 0.06, 0.08]. Both perceived social benefit, b = 0.42, BCa CI [- 0.30, - 0.54], and perceived social risk, b =-0.23, BCa CI [- 0.34, - 0.09] predicted likelihood to transmit.

Accordingly, a further repeated measures analysis demonstrated that the likelihood of transmission differed when the communication contexts were combined F(7, 2541) = 95.05, p < 0.001 (see Figure 16). Participants were more likely to broadcast to strong ties synchronously (M = 3.73; SD = 1.66) than they were to broadcast to strong ties asynchronously (M = 3.04; SD = 1.72), F(1, 363) = 84.13, p < 0.001. Broadcasting to weak ties synchronously (M = 3.52; SD = 1.54) was more likely than broadcasting to weak ties asynchronously, (M = 3.05; SD = 1.68), F(1, 363) = 49.55, p < 0.001. Narrowcasting to strong ties synchronously (M = 3.41; SD = 1.70), F(1, 363) = 152.84, p < 0.001. Narrowcasting to weak ties synchronously (M = 3.86; SD = 1.47) was more likely than narrowcasting to weak ties synchronously (M = 3.14; SD = 1.56), F(1, 363) = 127.14, p < 0.001.

Interestingly, broadcasting to weak ties synchronously (M = 3.52; SD = 1.54) was not significantly less likely than narrowcasting to strong ties asynchronously (M = 3.41; SD = 1.70F(1, 363) = 1.79, p = 0.18. Broadcasting to weak ties asynchronously (M = 3.05; SD = 1.68) was also not significantly less likely than broadcasting to strong ties asynchronously (M = 3.04; SD = 1.72), F(1, 363) = .0.69, p = 0.79.



Figure 16. Likelihood of Transmission by Communication Context



Perceived Social Risk and Benefit. Individually, perceived social risk was negatively related to likelihood to share, r = -0.18, p = 0.001, and perceptions of social benefit were positively related to likelihood of transmission, r = .36, p < .001.

Overall value was positively related to likelihood of transmission, r = 0.39, p < 0.001. As shown in Figure 17, overall value differed across the communication contexts, F(1, 363) = 30.61, p < 0.001. Broadcasting (M = 0.03; SD = 1.99) was perceived to be of lower overall value than narrowcasting (M = 1.17; SD = 1.72), F(1, 363) = 152.05, p < 0.001. Transmitting to weak ties (M = 0.56; SD = 1.72) was perceived to be perceived to be of lower overall value than transmitting to strong ties (M = 1.93; SD = 1.81), F(1, 363) = 239.53, p < 0.001. Asynchronous communication (M = 0.57; SD = 1.75) was perceived to be perceived to be of lower overall value than synchronous communication (M = 1.19; SD = 1.88), F(1, 363) = 51.94, p < 0.001.



Figure 17. Perceived Social Risk, Benefit, and Overall Value by Communication Context

Note. Error bars indicate 95% CIs.

4.7.6 Discussion

Study 7 employed a refined measure of perceived social risk, and clarified the results of the earlier studies by demonstrating that the overall value of transmission mediated the relationship between state need to self-enhance and the likelihood of transmission. Participants with a high state need to self-enhance perceived more risk relative to benefit, which decreased the likelihood of transmission.

Perceptions of social risk and benefit were aligned with the likelihood of transmission across communication contexts. The riskier, less beneficial contexts (broadcasting, weak ties, asynchronous communication) were also the contexts that had a lower likelihood of transmission. Accordingly, broadcasting to strong ties synchronously was more likely than broadcasting to strong ties asynchronously, broadcasting to weak ties synchronously was more likely than broadcasting to weak ties asynchronously, narrowcasting to strong ties synchronously was more likely than narrowcasting to strong ties asynchronously, and narrowcasting to weak ties synchronously was more likely than narrowcasting to weak ties asynchronously.

However, broadcasting to weak ties synchronously was not significantly less likely than narrowcasting to strong ties asynchronously, nor was broadcasting to weak ties asynchronously less likely than broadcasting to strong ties asynchronously. These findings highlight the importance of synchronicity in determining the likelihood of transmission – despite the relative increased likelihood of transmission observed in relation to narrowcasting (rather than broadcasting) and strong (rather than weak) ties, this increased likelihood can be lessened when the communication is asynchronous. This increased likelihood suggested that, in addition to perceived social risk and benefit, there may be further factors specific to the synchronicity of the communication that influence transmission behaviour, such as the permanency of online asynchronous communication (De Bruyn, 2004; Wright, 2014).

4.8 Summary of Studies 1-7

To address the future directions outlined in Figure 1 (in particular RQs 1-3), a series seven studies were designed. These studies were completed, and the implications of the results are discussed and summarised below (see Tables 19 and 20). The completion of these studies, interpretation of the findings, and analysis of the limitations clarified the methodological requirements of two further studies. This section summarises the findings of Studies 1-7 in regard to the key variables, highlights the limitations of these initial studies, and outlines the

justification for Studies 8 and 9. Study 8 was a further experimental study, and is outlined in

Section 4.9. Study 9 was a two-phase qualitative investigation, which is described in detail in

Chapter 6.

Table 19. Summary of Key Relationships

					Key	,		
					Positive Relationship			
					Negative Relationship			
					No	Significant l	Relationship	
					Not	applicable		
			Need	to Self-	Enho	ince		
Likelihood of Transmission	Study 1	Study 2	Study 3	Study	4	Study 5	Study 6	Study 7
Perceived Social Risk	Study 1	Study 2	Study 3	Study	4	Study 5	Study 6	Study 7
Perceived Social Benefit	Study 1	Study 2	Study 3	Study	4	Study 5	Study 6	Study 7
Overall	Study 1	Study 2	Study 3	Study	4	Study 5	Study 6	Study 7
Value								
	Likelihood to Transmit							
Need to Self-Enhance	Study 1	Study 2	Study 3	Study	4	Study 5	Study 6	Study 7
Perceived Social Risk	Study 1	Study 2	Study 3	Study	4	Study 5	Study 6	Study 7
Perceived Social Benefit	Study 1	Study 2	Study 3	Study	4	Study 5	Study 6	Study 7
Overall	Study 1	Study 2	Study 3	Study	4	Study 5	Study 6	Study 7
Value								

Table 20. Summary of Studies 1-7

Study	Туре	Sample	Sample Size	Manipulated Variables	Measured Variables	Significant Results
1	Experiment	AMT	147	Arousal	Need to self-enhance	Need to self-enhance:
					Perceived social risk (unrefined measure) Likelihood of transmission	 Moderated the positive relationship between arousal and likelihood of transmission: high arousal stories were more likely to be transmitted, but only when there was a low need to self-enhance Was negatively related to likelihood of transmission Was positively related to perceived social risk Perceived social risk was: Positively related to need to self-enhance Greater for broadcasting (rather than narrowcasting), transmitting to weak ties (rather than strong ties), and asynchronous
2	Survey	AMT	100	N/A	Perceived social benefit	 communication (rather than synchronous communication) Participants were more likely to: Narrowcast (rather than broadcast) Transmit to strong ties (rather than weak ties) Transmit via synchronous (rather than asynchronous) communication Perceived social benefits associated with
					Perceived social risk (unrefined measure) Likelihood of transmission	transmission involved the self and relationships with others, can be measured via a nine-item scale, and were positively related to the likelihood of transmission
3	Experiment	AMT	103	Need to self-enhance (ineffective manipulation)	Need to self-enhance Perceived social benefit Likelihood of transmission	 Perceived social benefit was positively related to likelihood of transmission and this relationship was stable across: Audience size (broadcasting vs narrowcasting) Audience type (strong vs weak ties) Synchronicity (synchronous vs asynchronous communication) Overall, participants were more likely to: Transmit to strong ties (rather than weak ties) Transmit via synchronous (rather than asynchronous) communication

Study	Туре	Sample	Sample Size	Manipulated Variables	Measured Variables	Significant Results
4	Experiment	AMT	149	Need to self-enhance (ineffective manipulation)	Need to self-enhance Perceived social risk (unrefined measure) Likelihood of transmission	 Need to self-enhance was positively related to perceived social risk, and participants were more likely to: Transmit to strong ties (rather than weak ties) Transmit via synchronous (rather than asynchronous) communication
5	Experiment	RMIT students	84	Need to self-enhance	Need to self-enhance Perceived social risk (unrefined measure) Likelihood of transmission	 Overall, participants were more likely to Transmit to strong ties (rather than weak ties) Transmit via synchronous (rather than asynchronous) communication Participants in the high need to self-enhance condition were less likely than those in the control group to transmit WOM that was: Broadcasted To weak ties Synchronous
6	Experiment	UTS students	145	Need to self-enhance	Need to self-enhance Perceived social benefit Likelihood of transmission	 Perceived social benefit was positively related to likelihood of transmission and the relationship between perceived social benefit and likelihood of transmission was stable across: Audience size (broadcasting vs narrowcasting) Audience type (strong vs weak ties) Synchronicity (synchronous vs asynchronous communication)
7	Experiment	Prolific	364	Need to self-enhance	Need to self-enhance Perceived social benefit Perceived social risk (refined measure) Likelihood of transmission	 The need to self-enhance was negatively related to the likelihood of transmission and perceptions of the overall value of transmission, and participants were more likely to: Broadcast to strong ties synchronously than broadcast to strong ties asynchronously Broadcast to weak ties synchronously than broadcast to weak ties asynchronously Narrowcasting to strong ties synchronously than narrowcasting to strong ties asynchronously Narrowcasting to weak ties synchronously than narrowcasting to weak ties asynchronously than narrowcasting to weak ties asynchronously.

4.8.1 Need to Self-Enhance

Study 1 demonstrated that arousal was positively related to the likelihood of transmission. However, participants' need to self-enhance moderated this relationship: when the need to self-enhance was low, there was a positive association between arousal and the likelihood of transmission. When the need to self-enhance was high, there was no significant association between arousal and the likelihood of transmission. Further, participants' need to self-enhance was positively related to their perceptions of social risk related to transmission. As the need to self-enhance increased, so too did perceptions of social risk. The positive relationship between the need to self-enhance and perceptions of social risk was further supported by the results of Study 4.

Studies 5 and 7 demonstrated that manipulated (rather than measured, as per Study 1) need to self-enhance leads to a decrease in the likelihood of transmission. In addition to this, Study 5 built on the understanding of this relationship by demonstrating that the need to selfenhance decreased the likelihood of transmission by broadcasting, to weak ties, and via synchronous communication. Participants' need to self-enhance did not influence their likelihood of transmission via narrowcasting, to strong ties, or via asynchronous communication.

Taken together, the current findings suggest that individuals with a high need to selfenhance engage in protective self-enhancement in the transmission process, through the avoidance of transmission in response to threatened self-esteem. While this finding is congruent with much of the psychology literature (e.g. Landau & Greenberg, 2006), it is incongruent with some previous findings related to WOM. For example, when self-esteem is threatened, individuals can be more likely to generate WOM if they are able to craft a message that is selfenhancing (De Angelis et al., 2012). A potential explanation for this inconsistency in response to a self-esteem threat between transmission and generation is that individuals have greater control over the message when generating WOM which, in comparison to transmission, may provide a greater opportunity to actively enhance the self-concept.

In order to synthesise the findings of the completed studies in regard to the relationship between the need to self-enhance and the likelihood of transmission, a single paper meta-analysis (SPM) was conducted. The SPM methodology is a meta-analytic approach that is adapted to the synthesis of a series of linked studies that examine a common phenomenon, rather than the analysis of studies appearing across multiple papers (McShane & Böckenholt, 2017). Out of the seven completed studies, three could be included in the SPM: Studies 5, 6, and 7. Studies 5, 6, and 7 could be included in the SPM as this methodology accommodates discretely manipulated experimental factors, but not continuous measured variables (McShane & Böckenholt, 2017), and Studies 5, 6, and 7 were the studies in which the need to self-enhance was successfully manipulated.

In Study 5, those in the high need to self-enhance group were significantly more likely to transmit than those in the control group. Conversely, in Studies 6 and 7 there was no significant difference in likelihood of transmission between the high need to self-enhance and control groups. However, in Study 7 there was a significant relationship between measured need to self-enhance and the likelihood of transmission that was mediated by overall value, a variable that cannot be included in a SPM as it is a continuous measured variable rather than a discretely manipulated experimental factor. Accordingly, while an SPM of these studies estimates the effect at 0.17, the 95% CI for the effect estimate ranges from -0.05 to 0.40 (see Figure 18). Thus, participants in a relative control could be marginally less likely to transmit than those in a high need to self-enhance group, or up to 0.40 times more likely to transmit.



Figure 18. SPM Results for the Need to Self-Enhance and Likelihood of Transmission

Note. Thin and thick lines indicate 50% and 95% CIs, respectively. The X axis of this graph indicates the magnitude and direction of the pooled effect estimate.

While the results of the SPM do not provide support for the previously discussed relationship between the need to self-enhance and the likelihood of transmission, the results of this analysis should be interpreted with caution due to two factors. Firstly, the results of other studies in this series (e.g., Study 1) that demonstrate the negative relationship between measured need to self-enhance and the likelihood of transmission were omitted from the SPM. Secondly, the I^2 value of the SPM was estimated at 87.20 (95% CI = 72.50, 94.10) suggesting very high heterogeneity (Higgins & Thompson, 2002). This estimate of heterogeneity pertains to the amount of between-study variation that can be attributed to method factors, which are factors involved in the implementation of the study that are not directly related to the theory that is being tested (e.g., the subject pool, time of day, unaccounted for moderators; McShane & Böckenholt,

2017). High heterogeneity, as estimated by the I^2 in the current SPM, can suggest that the noncomparability of the studies under investigation can reduce the accuracy of the results of the meta-analysis (Melsen, Bootsma, Rovers, & Bonten, 2014). This non-comparability may have been due to the differing samples and settings (online and laboratory) involved in Studies 5, 6, and 7, or by unaccounted for moderators in these analyses (McShane & Böckenholt, 2017).

Regardless of the high estimated heterogeneity, the results of the SPM highlight the inconsistencies observed in the completed studies regarding the manipulated need to selfenhance and the likelihood of transmission. While an element of this inconsistency is a result of the refinements to the study design (e.g., refinements to the manipulations, measures) throughout the series of completed studies, further work was needed to clarify the role of the need to selfenhance in the transmission process. This clarification was a focus of both Studies 8 and 9.

4.8.2 Perceived Social Risk and Benefit

In addition to the positive relationship between the need to self-enhance and perceptions of social risk, Study 1 suggested that perceived social risk had an influence on the likelihood of transmission across different communication contexts. The results of Study 1 demonstrated that perceptions of social risk were negatively related to participants' likelihood of transmission. Further, broadcasting was perceived to be riskier than narrowcasting, sharing with weak ties was perceived as riskier than sharing with strong ties, and asynchronous communication was perceived as significantly riskier than synchronous communication.

The potential role of perceptions of social benefit in determining the likelihood of transmission was first proposed by the current project. Accordingly, Study 2 was devoted to the conceptualisation and measurement of this variable. Once a measure of perceived social benefit was developed, Studies 3 and 6 aimed to demonstrate the utility of this measure and commence

the exploration of the relationship of perceived social benefit to the need to self-enhance and likelihood of transmission. While no significant links have been observed between perceptions of social benefit and the need to self-enhance, Studies 3 and 6 established a relationship between perceptions of social benefit and likelihood of transmission. The results of these studies were consistent in demonstrating that perceptions of social benefit were positively related to likelihood of transmission: as perceptions of social benefit increased, so too did the likelihood of transmission. This relationship was stable regardless of the transmission context.

Study 7 clarified the mediating role of the overall value (perceived social risk relative to benefit) in the relationship between the need to self-enhance and likelihood of transmission. As the need to self-enhance increased, perceptions of social benefit decreased, which reduced the likelihood of transmission. While perceived social risk alone did not mediate the relationship between the need to self-enhance and likelihood of transmission, the amount of risk relative to the amount of benefit did: as individuals see less benefit relative to risk, they are less likely to transmit, and their need to self-enhance will determine this ratio. The greater the need to self-enhance, the lower the perceptions of social benefit relative to risk.

4.8.3 Communication Context

Participants were more likely to broadcast (rather than narrowcast), transmit to strong ties (rather than weak ties), and transmit via synchronous (rather than asynchronous) communication. These findings are congruent with those regarding overall value: as transmission becomes riskier, and less beneficial, the likelihood of transmission via the context decreases.

The results pertaining to communication context were more amenable to SPM than the previously discussed results relating to the need to self-enhance (see Figure 19). The results of Studies 1, 3, 4, 5, 6, and 7 were analysed using the SPM methodology, and across these six

studies, the pooled effect estimate for broadcasting vs narrow casting was -0.219 (95% CI = - 0.441-0.003). This indicates that participants were 0.219 times less likely to broadcast rather than narrow cast. Additionally, participants were 0.48 times more likely to transmit synchronously rather than asynchronously (95% CI = 0.25, 0.70), and 0.29 times more likely to transmit to strong rather than weak ties (95% CI = 0.07, 0.51). However, similar to the SPM analysis pertaining to the need to self-enhance, I^2 was estimated at 90.03% (95% CI = 86.96%, 92.37%) suggesting heterogeneity was very high. While the high heterogeneity suggested by the I^2 estimate may decrease the accuracy of the results of the meta-analysis (Melsen et al., 2014), this concern can be balanced with the relative consistency regarding the effects under investigation in the series of completed studies.



Figure 19. SPM Results for Communication Context and Likelihood of Transmission

Note. Thin and thick lines indicate 50% and 95% CIs, respectively. The X axis of this graph indicates the magnitude and direction of the pooled effect estimate.

4.8.4 Limitations

Studies 1-7 provided evidence for the relationships between the need to self-enhance, perceived social risk, perceived social benefit, and likelihood of transmission. However, the expected relationships were not observed consistently across each study. Specifically, Studies 4 and 6 provided no evidence for a relationship between the need to self-enhance and likelihood of transmission. Further, Studies 4 and 5 did not support the effect of perceived social risk on transmission. While the refined measurement of perceived social risk in Study 7 allowed for the demonstration of the mediation of the relationship between the need to self-enhance and likelihood of transmission by perceptions of social risk relative to benefit, further clarification is needed. In order to resolve these inconsistent findings in regard to the potential mediating role of perceived social risk and benefit, Study 8 aimed to address the following methodological issues.

Studies 3, 4, 5, 6, and 7 involved measuring *general* perceptions of social risk and benefit (e.g., '... risky to share *a* story...'). While this procedure was congruent with that of previous literature (Eisingerich et al., 2015), it is possible that perceptions of social risk are inextricably linked to the nature of the WOM that is transmitted. For example, transmitting a heart-warming story regarding an animal shelter (i.e., the happiness-eliciting story employed in the current series of studies) may be inherently less risky than transmitting a story with a political focus. To explore this possibility, Study 8 was designed to involve the measurement of *specific* perceptions of social risk associated with transmitting the experimental stimulus (e.g., '... risky to share *this* message...').

The initial series of studies also employed versions of the same stimulus: a fictional online news article about an organic dog food company's relationship with a dog shelter. In the real world, individuals have a greater amount of choice involved in transmission. That is, they

can choose to transmit information that is congruent with their identity, and is closely related to their interests (Dobele et al., 2007). It is possible that the greater choice associated with real-world transmission allows those with a high need to self-enhance to more effectively engage in acquisitive enhancement than the participants in Studies 1-7 were able to. For example, those with a high need to self-enhance may not be less likely to transmit (as per the results of Studies 1-7) when they are able to be selective regarding the type of message. Therefore, to partially address this limitation, Studies 8 and 9 involved messages that participants chose themselves, and were related to products (Study 8) or brands more broadly (Study 9).

Finally, in the initial series of seven studies self-reported likelihood of transmission was measured. The strength of the relationship between this variable and actual transmission behaviour is unknown, and participants' self-reported likelihood of transmission may not be a perfect predictor of actual transmission behaviour (Armitage & Conner, 2001). Further, this constrained the examination of the role of the need to self-enhance, perceived social risk, and perceived social benefit in determining WOM communication selection.

Real-world communication contexts may increase the influence of the need to selfenhance, perceived social risk, and perceived social benefit on actual transmission behaviour. When an individual is engaged in a social interaction (e.g., transmitting WOM), this provides an opportunity for social benefits and risks that have real consequences for self-enhancement (Tesser, 1988). Measuring self-reported indications of likelihood of transmission, without providing an actual opportunity to engage in a social interaction, may not capture the complexity of transmission behaviour in the real world. The self-reported measurement of the likelihood of transmission is one possible explanation for the inconsistent and non-significant results observed in the completed studies, and was partially remedied in Studies 8 and 9 through the measurement

of actual transmission behaviour. The aims, background, methodology, and results of Studies 8 and 9 are outlined in Section 4.9 and Chapter 5 respectively. Chapter 6 then discusses the results of the entire series of nine studies with reference to each of the research questions posed in Chapter 2.

4.9 Study 8

Study 8 was an experimental investigation. This study aimed to explore the impact of the need to self-enhance on participants' choice between engaging in transmission or generation. A further aim was to explore how the need to self-enhance impacts these types of WOM (transmission vs generation) due to the overall value associated with each. As this research was the first to conceptualise and measure overall value, and explore the impact of overall value on choice between generation and transmission, no directional hypotheses were developed. Rather, Study 8 aimed to build on the previous findings of Studies 1-7 by measuring actual WOM behaviour, specific perceptions of social risk and benefit, and focusing on product, rather than content, related WOM.

4.9.1 Participants

The initial sample consisted of 424 university students who took part in the experiment in exchange for course credit. Participants were required to have an active Twitter account, because sharing a message from their personal Twitter account was involved in the procedure. This eligibility requirement was screened at the beginning of the procedure, and participants' sharing was checked via an uploaded screenshot of their Twitter account. Based on this eligibility and screening, the final sample consisted of 346 participants, sample was 58% female, with an average age of 20 years.

4.9.2 Measures

State Need to Self-Enhance and Perceived Social Risk and Benefit. Participants' need

to self-enhance was measured using the items employed in Study 7. Perceived social risk and

perceived social benefit were measured using items adapted from Study 7. Participants were

asked to indicate their perceptions of social risk and benefit both in relation to a message that

they generated as part of the procedure, as well as to the transmittable message that participants

were shown (see Table 21).

Table 21. Perceived Social Risk and Benefit Measures

Per	ceived Social Risk
1.	It could be risky to share that content
2.	People could disapprove of me because I shared that content
3.	I could be embarrassed or look stupid because I shared that content
4.	I could bore people if I share that content
5.	I could share too much if I share that content
6.	I could look bad if I share that content
7.	People could question my motives if I share that content
8.	People could not like that content if I share it
9.	People could think that this content is not important enough to share
10.	People could form the wrong impression of because if I share that content
11.	People could be offended if I share that content
12.	People may not find that content interesting if I share it
Per	ceived Social Benefit
1.	Sharing that content could benefit me
2.	I could gain approval if I share that content
3.	Sharing that content could make me look good
4.	Sharing that content could benefit my relationships with others
5.	Sharing that content could help me communicate my self-identity
6.	Sharing that content could help me define myself
7.	Sharing that content could improve my social status
8.	Sharing that content could help me fit in

9. Sharing that content could make me feel part of a community

Note. Participants were asked the above items in relation to a message that they generated during the procedure, as well as in relation to a transmittable message. The order of presentation of the perceived social risk and benefit measures was randomised. The perceived social risk

(Cronbach's $\alpha = 0.91$) and perceived social benefit (Cronbach's $\alpha = 0.95$) measures adapted for this study were highly internally consistent.

4.9.3 Procedure

Study 8 was an online experiment designed using Qualtrics survey development software. After providing informed consent and indicating that they had an active Twitter account, participants were randomly allocated to one of two groups: the high need to self-enhance group, or the low need to self-enhance group. The need to self-enhance was manipulated using the episodic priming procedure employed in earlier studies in this research. As per Study 7, those in the high need to self-enhance group completed the essay writing task employed in earlier studies that involved recalling poor academic performance, while those in the low need to self-enhance group were asked to write about an academic success that they had experienced. As Study 7 demonstrated that a comparison between a low and high need to self-enhance group was stronger than comparisons between these groups and a control group, Studies 7 and 8 proceeded with this version of the manipulation (high vs low, rather than high vs control).

In this procedure, the timing of the need to self-enhance manipulation was varied in order to explore whether the time elapsed between the manipulation and the measurement of the outcome variables would influence the results. Approximately half of the sample were exposed to this manipulation at the beginning of the procedure, while half completed the manipulation after the next stage of the experiment, which involved exposure to a product. This study, therefore, employed a 2 (need to self-enhance: high vs low) by 2 (manipulation timing: before vs after product exposure) design.

All participants were exposed to a four minute and 30 seconds long video advertisement about a product. This video advertisement was sourced from Kickstarter.com, which is an online crowdfunding platform for products that are in development or launching into the market. The

product selected was a backpack manufactured using recycled materials.³ This product was selected through a pilot test with 66 participants recruited via Prolific. In this pilot test, participants' attitude toward and sharing intentions for (e.g., *how likely would you be to tell others about this product*) ten different products from Kickstarter.com were measured. The selected product was associated with the most positive attitudes and greatest sharing intentions among participants in the pilot test.

Following completion of the need to self-enhance manipulation and exposure to the product, all participants were required to generate a message about the product. Participants were instructed to write a message about the product that they would be happy to share on their Twitter account. This generated message was required to be a maximum of 140 characters in length to adhere to the character limit of Twitter sharing. Perceived social risk and benefit associated with sharing the message that participants had generated was then measured. See Figure 20 for three examples of participants' generated messages.

³ Information about this product can be found at the following link: https://www.kickstarter.com/ projects/threadinternational/a-better-backpack

Figure 20. Participant Generated Messages

A Better Backpack by Thread International youtu.be/2tv4r5D5vKQ via @YouTube

This backpack is not just a backpack. Behind this backpack is a story of people making a difference and striving for a better world.



 nttp://bit.ly/zMioris Get a better all-day backpa

 ⊗ youtube.com

 11

Participants were then exposed to a transmittable message about the product (*A better backpack, made from 100% recycled canvas. It has been designed to help you through your day and remind you what can be done with the products you waste*). This message was designed to be an appropriate length for sharing via Twitter, and as close to neutral in tone as possible. Perceived social risk and benefit associated with sharing the transmittable message was then measured.

Following participants' generation of a message about the product and exposure to the transmittable message, they were provided with a choice between sharing the product video that they were exposed to and the message that they generated, or sharing the product video and the

transmittable message via their personal Twitter account. Participants were then required to upload a screenshot image of their Twitter post as proof of their sharing behaviour. The procedure is summarised at Figure 21.

Figure 21. Study 8: Procedure



Note. Participant eligibility involved having an active Twitter account, the order of the perceived social risk and benefit measures were randomised, and approximately half of the participants completed the need to self-enhance manipulation and measurement before exposure to the product, while approximately half completed this manipulation and measurement after product exposure.

4.9.4 Results

Need to Self-Enhance. The need to self-enhance manipulation was effective. Compared to those in the low need to self-enhance group (M = 2.61; SD = 1.07), those in the high need to self-enhance group had significantly higher average scores on the need to self-enhance measure (M = 3.93; SD = 1.23), t(344) = -10.56, p < 0.05. There was no significant difference between the need to self-enhance groups in the overall value of transmission, overall value of generation, or their perceptions of social risk related to transmission or generation (all p's > .05).

Overall, participants were significantly more likely to choose transmission rather than generation, $\chi^2(1, 346) = 39.68$, p < 0.05: 67% of the sample chose to share the transmittable message, 33% of the sample chose to share the message that they had generated. While there was no significant relationship between need to self-enhance group and choice between generation and transmission, $\chi^2(1, 346) = 3.49$, p = 0.06, this association was approaching significance. The increased likelihood to choose transmission, rather than generation, was more pronounced in the high need to self-enhance group – 72% of those in the high need to self-enhance group.

Participants who completed the need to self-enhance manipulation before exposure to the product did not differ significantly from those who saw the manipulation after exposure to the product in their choice between transmission or generation, perceptions of overall value of transmission or generation, or perceptions of social risk related to transmission or generation (all p's > .05). However, those who completed the need to self-enhance manipulation before exposure to the product had significantly greater perceptions of the social benefit of transmission (M = 3.89; SD = 1.08) than those who completed the manipulation after exposure to the product (M = 3.56; SD = 1.21), t(344) = 2.48, p < 0.05. Those who completed the need to self-enhance

manipulation before exposure to the product also had significantly greater perceptions of the social benefit of generation (M = 3.81; SD = 1.03) than those who completed the manipulation after exposure to the product (M = 3.52; SD = 1.16), t(344) = 2.42, p < 0.05 (see Figure 22).



Figure 22. Perceptions of Social Risk, Benefit, and Overall Value by Timing Group

Note. Error bars indicate 95% CIs. Labels marked with an asterisk indicate significant differences between the timing groups at < .05.

Overall Value of Generation and Transmission. The overall value of transmission and generation was calculated as per the procedure followed in Study 7. Participants' scores on the perceived social risk of transmission measure were subtracted from their scores on the perceived social benefit of transmission measure, and this process was repeated for the perceived social risk and benefit measures that related to generation. Overall value of transmission (M = 0.63; SD = 1.57) was significantly greater than the overall value of generation (M = 0.46; SD = 1.51), t(344) = -3.29, p < 0.05.

When analysed separately, perceptions of social risk were significantly greater for generation (M = 3.21; SD = 1.00) than for transmission (M = 3.08; SD = 1.05), F(1, 345) = 13.22, p < 0.001. However, perceptions of social benefit did not differ significantly between transmission (M = 3.72; SD = 1.15) and generation (M = 3.61; SD = 1.11), F(1, 345) = 1.56, p = 0.21.

Mediation Analyses. A mediation analysis was conducted using *PROCESS* (Model 6; Hayes, 2012) to test the mediation model proposed in Figure 23. The independent variable was need to self-enhance group (low and high), and the mediating variables were measured need to self-enhance, the overall value of generation, and the overall value of transmission. The dependent variable was choice between generation and transmission (coded as 1= generation; 2 =transmission). Timing of the need to self-enhance manipulation (before vs after exposure to the product) was included as a covariate, to control for any impact of this timing on the analysis.

There was no significant direct effect of need to self-enhance group on choice between transmission or generation, b = 0.52, BCa CI [-0.18, 1.22], or overall value of generation, b = -0.24, BCa CI [-0.29, 0.78], or transmission, b = 0.23, BCa CI [-0.57, 0.09]. However, need to self-enhance group did predict measured need to self-enhance, b = -1.32, BCa CI [1.08, 1.57], and measured need to self-enhance predicted the choice between generation and transmission, b = .52, BCa CI [0.02, 1.10]. There were also significant pathways between the need to self-enhance and overall value of generation, b = -0.20, BCa CI [-0.34, -0.06], and transmission, b = 0.10, BCa CI 0.01, 0.17]. Overall value of generation predicted choice, b = -0.45, BCa CI [-0.72, -0.18] as did the overall value of transmission, b = 0.46, BCa CI [0.20, 0.72].




Note. Pathways marked with an asterisk are significant at < .05.

4.9.5 Discussion

Study 8 aimed to explore the role of the need to self-enhance and overall value (perceived social risk relative to social benefit) on participants' choice between generation and transmission. Study 8 was employed to further the understanding of the differences between generation and transmission, and provide an opportunity to examine the role of key variables that were established in the previous studies (the need to self-enhance, overall value) in actual sharing behaviour.

A greater number of participants in this sample chose to share via their personal Twitter account a transmittable message about a product rather than share a message that they had generated themselves about the same product. This increased likelihood to choose transmission could be explained by perceptions of the overall value (perceived social risk relative to benefit) associated with sharing the messages: perceptions of the overall value of the transmittable message were more favourable than those associated with the messages that participants generated. This difference in the overall value of transmission and generation was attributable to increased perceptions of social risk involved in sharing the messages that participants generated. However, generation and transmission were not associated with different perceptions of social benefit.

The overall value of transmission and generation also mediated the relationship between the need to self-enhance and participants' choice between generation and transmission. The need to self-enhance was associated with an increased likelihood to choose transmission, rather than generation, and this relationship was due to the impact of the need to self-enhance on perceptions of overall value. The need to self-enhance was negatively related to the overall value of generation – as the need to self-enhance increased, perceptions of the overall value of generation decreased. Conversely, as the need to self-enhance increased, so too did perceptions of the overall value of value of transmission.

This increased likelihood to choose transmission when there was a high need to selfenhance, and the accompanying impact on perceptions of the overall value, may have been related to participants' confidence in their generated WOM. When there is a high need to selfenhance, individuals may doubt their ability to craft a worthy message (i.e., generate), making transmitting someone else's message a safer means to engage in WOM. Indeed, when selfesteem is threatened and, therefore, the need to self-enhance is high, individuals can experience increased self-doubt (Hermann, Leonardelli, & Arkin, 2002). This increased self-doubt leads to avoidance behaviours, risk aversion, and a propensity to engage in protective, rather than acquisitive, self-enhancement (Wood, Giordano-Beech, Taylor, Michela, & Gaus, 1994; Sommer & Baumeister, 2002).

The implication of avoidance behaviour and protective self-enhancement in response to a self-esteem threat is consistent with participants' perceptions of social risk and benefit in Study

8. Transmission and generation did not differ in the social benefit offered, it was the increased risk associated with generation that drove the difference in participants' perceptions of overall value. Choosing transmission, therefore, was a means for participants to avoid risk – potentially due to a perception that their own message was unworthy, or that it would be more damaging to the self-concept if their own message was not well-received by their social network.

The results of Study 8 have implications for the interpretation of previous studies in this research. While a high need to self-enhance generally decreases the likelihood of transmission, when sharing is required, as it was in Study 8, transmission may be a more likely choice than generation. The results of this procedure also had methodological implications. The need to self-enhance manipulation did seem to influence perceptions of social benefit associated with both types of WOM differently depending on the proximity of the manipulation to the measurement of this variable. This suggests that the timing of the manipulation is an important consideration – the strength of the effect of this manipulation may wane, and this should be factored into designs that aim to manipulate this variable.

Limitations. While the findings of Study 8 provide evidence for transmission and generation being distinctly different behaviours that are impacted differently by the need to self-enhance and overall value of transmission and generation, Study 8 had the following limitations. Study 8 was a contrived experimental procedure that involved forced sharing. While this allowed for a high degree of control over participants' behaviour, and the observation of actual sharing, this design lacked ecological and external validity. Further research is required to understand how participants would naturally behave in relation to a choice between generation, transmission, or to not engage in WOM at all if they came across the product shown online.

Further, as participants were required to generate their own message, it could be that the messages that participants generated were specifically less beneficial and riskier than the message that they could transmit, and this difference in overall value could have been more salient to those with a high need to self-enhance. While participants' generated messages were examined to ensure that they were well-crafted, at least at face value, participants' feelings about the messages that they generated could have been influenced by the effort exerted in generating the message. The effort that participants exerted in generating these messages may have been less than that which would be involved in real-world generation due to the contrived nature of the procedure.

Therefore, further research is required in order to: (a) clarify the different ways in which consumers choose between transmission and generation, and (b) shed light on natural, real-world WOM behaviour. Study 9 addressed the latter need for further research into real-world transmission in order to address RQ 4, but also to understand the idiosyncrasies and contextrelated implications that are challenging to observe within experimental settings.

CHAPTER 5

Qualitative Investigation of Negative Transmission

This chapter details the investigation of negative brand-relevant transmission, which aimed to explore the role of valence in the transmission process in a more flexible and in-depth manner than the earlier, quantitative and experimental, work allowed (see Chapter 4). In Studies 1-7, no effect of valence was found: participants were not significantly more likely to transmit negative or positive messages. However, the WOM generation literature, and the interpersonal communication literature, suggests that WOM valence determines not only the persuasiveness of the WOM, but also the propensity of individuals to share the WOM (Babić Rosario et al., 2016; Bebbington et al., 2017).

The previous literature also suggests that the role of valence may be different for transmission, as individuals may aim to avoid transmitting negative WOM via their online social networks due to the potential negative social consequences this can involve (Berger, 2011). Therefore, Study 9 aimed to address this inconsistency, and explore RQ 4 in detail.

5.1 Study 9: Background

As discussed in Chapter 2, brands have been able to benefit from the viral phenomenon – creating a message that will spread quickly to many via social media has led to notable marketing successes. However, the two-way dialogue facilitated by social media platforms means that brands only have limited control over the message, and it can go viral for the wrong reasons (Kaplan & Haenlein, 2010). This limited control can lead to 'online firestorms' of negative publicity, which can have acute and prolonged effects on consumer behaviour and consequently brand value (Pfeffer, Zorbach, & Carley, 2014; Luo, 2009; Kucuk, 2019). Research from the WOM and brand hate literature provides some insight into these online firestorms, but

the specific motivations for passing on negative brand-related messages on social media have not been fully explored.

Previous research regarding online sharing has focused heavily on WOM, which involves sharing previous and actual experiences with a product or brand (King, Racherla, & Bush, 2014), typically in the form of product reviews. Negative product reviews tend to be driven by a need to vent, seek justice, or warn other customers after a service failure (De Matos & Rossi, 2008). A negativity bias has also been observed regarding online product reviews: negative, rather than positive, WOM about a product or brand has been shown to be more persuasive (Babić Rosario et al., 2016).

In addition to the proliferation of online review sites and the increasing importance of online reviews in determining consumer behaviour (Floyd, Freling, Alhoqail, Cho, & Freling, 2014), the Internet provides a space for consumers to voice their general dislike of brands. The brand hate literature also focuses on the role of service failure and negative emotion, but relates this to the creation of anti-brand websites that provide an outlet for highly motivated detractors to form communities dedicated to criticising a brand (Krishnamurthy & Kucuk, 2009). These anti-brand websites are created to turn other consumers against the brand, or change the behaviour of the brand in question (Krishnamurthy & Kucuk, 2009). Online, anti-brand communities of consumers can form together to share negative sentiment, highlight their own negative experiences, and devise strategies to damage the brands that are the subject of their hatred (Hollenbeck and Zinkhan, 2010; Krishnamurthy and Kucuk, 2009).

Brand hate is precipitated by product or service failures, by corporate transgressions, or both (Zarantonello et al., 2016). The use of anti-branding websites as a platform to communicate brand hate leads to negative outcomes for brands, including boycotts and reductions in positive

brand sentiment (Zarantonello et al., 2016). Consumers in anti-branding communities can co-opt existing brand meanings as a result of increased consumer power, facilitated by the amplification provided by online communication (Krishnamurthy & Kucuk, 2009).

Compared to anti-brand websites and communities, social media can provide a similar platform for anti-brand sentiment. Since the emergence of the anti-brand website literature, consumers' use of, and brands' presence on, social media has become increasingly common (Tsimonis & Dimitriadis, 2014; Felix et al., 2017). Unlike anti-brand websites, which are created and frequented by a small portion of the market, a large proportion of consumers use social media, and most brands will have some form of social media presence – 2.34 billion people use social media; however, most brands will not garner anti-brand sites (Krishnamurthy & Kucuk, 2015). Therefore, when negative brand-relevant content is transmitted via social media, this can result in increased reach.

On social media, via platforms such as Facebook, Twitter, and Instagram, negative WOM and brand hate do occur – individuals can complain about service failures, or promote anti-brand websites via these platforms (Sparks & Browning, 2010). However, anecdotal evidence suggests that service failure or true brand hate have not been present in all instances in which negative brand-relevant content has become viral. In these cases, the consumer serves to mainly transmit (engage with: like, comment, retweet, react, or share a post) content (news articles, images, YouTube clips) in a manner that is critical of the brand. That is, individuals engage in the social transmission of brand-relevant content, a process that involves the propagation of information that is characterised by a gradual transformation of the original message (Lui-Thompkins, 2012; Bebbington et al., 2017).

Unlike negative WOM or anti-brand website activity, no service failure or genuine brand hate is needed to precipitate the transmission of negative brand-relevant content. Instead, those who transmit negative content about a brand on social media can have a tenuous relationship to the brand in question, and may be unlikely to devote the time and energy required to maintain anti-brand community membership. Rather, social media provides individuals with an opportunity to voice their opinions regarding a brand's actions - regardless of the relationship between the transmitter and the brand - for their social network to see.

Therefore, to understand the factors that underlie the transmission of negative brandrelevant content, the factors that drive negative WOM and brand hate, but also those who drive social transmission in the social media context in general, need to be considered. That is, understand why – even in the absence of service failure or brand hate – individuals may be motivated to spread or increase the visibility of negative brand-relevant content on social media.

Study 9, therefore, aimed to explore negative transmission as a form of anti-branding that is reliant on social media. In exploring negative transmission as a form of anti-branding this research aimed to address RQ4, as well as three further subquestions that were developed upon completion of the first phase of this research:

RQ 4: What motivates the transmission of negative brand-relevant content?

RQ 4a: What are they key brand and consumer-related drivers of negative transmission?

RQ 4b: Is brand hate necessary for negative transmission to occur? *RQ 4c:* What are the consequences of negative transmission from a social and psychological perspective? In order to address the above research questions, an exploratory investigation was completed. The key contributions of this work are theoretical, in that the drivers of a specific, and increasingly frequent, form of anti-branding are clarified. Study 9 also has managerial implications for brand management on social media.

5.2 Method

This research identified negative transmission as a specific, and comparatively less explored, form of anti-branding. In order to understand the key drivers of negative transmission, and how these drivers may differ from other forms of anti-branding, a two-phase exploratory investigation was conducted. The first phase was an analysis of actual negative transmission via Facebook comments left on news and brand posts. The second phase of the research involved a series of 13 in-depth interviews.

The goal of the first phase was to specifically investigate the comments of Facebook users regarding a series of brand incidents. Immmersion in this data provided netnographic insights which facilitated an analysis that provided a framework for the second stage of the research. In the second phase of the research, in-depth interviews were conducted. These interviewees, who were moderate to high frequency users of Facebook, were prompted to discuss and explore their (and others') specific behaviours, reactions, and motivations related to negative transmission via social media.

5.3 Phase 1: Netnographic Analysis.

This analysis focused on the comments left by Facebook users during the negative transmission process. The use of netnography, which is a form of ethnographic research that is applied in the observation of online communities, allowed for initial insights into the Facebook comments captured during the data collection (Kozinets, 2002). This netnographic approach was

passive and observational, rather than involving an active participation in the online communication (Costello, McDermott, & Wallace, 2017). The research was implemented using a grounded theory perspective (Glaser & Strauss, 1967), and aimed to capture the responses that accompany individuals' transmission in order to uncover and analyse the motivations for facilitating the spread of negative information about a brand.

5.3.1 Identification of Data Sources.

There were three main levels of considerations involved in identifying data sources, these being the social media platforms, the types of industries, and the specific brands in these contexts. First, the social media platform was considered. While different industries and brands will focus more or less on particular media platforms depending on their audience and marketing goals (Hanna, Rohm, & Crittendon, 2011; Killian & McManus, 2015), Facebook was selected as it is the most heavily used platform by both brands and consumers (Tuten & Solomon, 2017). Second, the industries that are most invested in developing and engaging with an audience via Facebook were determined. According to data from Socialbakers.com, an online platform that tracks brands' social media statistics, the industries that are associated with the highest engagement (as a function of interactions between brand and Facebook users) are fast moving consumer goods (FMCG), food retail, services, fashion, retail, and e-commerce. Third, the specific brands within these industries that would be analysed were selected by: (a) examining the follower numbers of brands within the aforementioned industries using data from Socialbakers.com, and (b) screening potential brands for recent controversy.

Brands that had experienced relatively recent (January 2017 – March 2018) controversy were selected to allow for the analysis of transmissions during periods of crisis and during periods of relative stability. Controversy was operationalised as consisting of an action (or

inaction) of the brand that had generated both online discussion and press coverage (Pfeffer et al., 2013). The intensity of the controversy was not quantified during the brand selection process. That is, the amount of online discussion, scale of press coverage, and resulting damage to the brand was not analysed to assist in the purposeful sample selection. Instead, the presence of any newsworthy controversy was used to finalise the brands that were to be examined further. This approach meant that the controversies experienced by the brands in this group were not necessarily comparable in intensity. However, this allowed for comparisons to be made regarding the consumer transmission behaviours and brand responses associated with a wide range of controversies. In consideration of these criteria, the brands outlined in Table 22 were selected.

Brand/s	Industry	Facebook Follower Count
Pepsi	Fast Moving Consumer	6,533,956
	Goods	
Woolworths	Food Retail	1,021,481
United Airlines	Services	1,115,568
Lorna Jane	Fashion	1,070,170
Target	Retail	1,021,479
Amazon	eCommerce	27,775,742

Table 22. Selected Brands by Industry and Facebook Follower Count

5.3.2 Data Collection

Data was collected from two sources. Firstly, comments left on posts made by each brand on their Facebook pages during March 2018 were collected. Secondly, comments left on a Facebook post by a news outlet that had covered the selected brands' most recent controversy were collected. The news divisions of both the British Broadcasting Corporation (BBC) and the Australian Broadcasting Corporation (ABC) were selected as these media outlets are guided by editorial policies that aim to ensure accurate and impartial reporting (bbc.co.uk; abc.net.au). The data was then transferred to a spreadsheet to allow for analysis and coding. A total of 485 comments across the six brand's Facebook posts and news posts were explored.

5.3.3 Data Analysis

Through the insights drawn from the examination of the data, and the review of the previous literature, coding was developed to classify the data. This coding was therefore developed using both deductive and inductive approaches. Firstly, a deductive approach was taken, which involved applying existing brand hate and anti-branding classifications to the data to understand how these generalisations apply to the negative transmission process (Hyde, 2000). Prior to data analysis, codes relating to the intensity of brand hate (cool vs hot; Kucuk, 2019), and existing antecedents of anti-branding (corporate social irresponsibility, product/service failure; Zarantonello et al., 2016) were developed and applied to the data where possible to identify the brand-related factors involved in the negative transmission process.

Secondly, an inductive approach was taken using a grounded theory perspective (Glaser & Strauss, 1967). The textual data was manually analysed line-by-line, and the concepts that emerged were categorised using an open-coding technique (Goulding, 2002). This inductive approach led to the development of classifications based on the consumer-related motivations for negative transmission that emerged from the data, which were either self-focused or socially-focused. The below sections outline the outcomes of this data analysis concerning the above deductive and inductive coding approaches (see Figure 24) and the findings of this first phase of the research are discussed using the key headings noted for both brand-related and consumer-related perspectives.

Figure 24. Inductive and Deductive Classifications



5.3.4 Results

Brand-Related Factors: Corporate Social Irresponsibility and Product/Service Failure.

Corporate Social Irresponsibility (CSI) and Product/Service Failure (PSF) have been demonstrated as antecedents of both brand hate and anti-branding behaviour in the form of antibrand websites and community membership (Kucuk, 2019; Johnson & Matear, 2010). These antecedents were present in the negative transmission context, with CSI and PSF motivating many of the cases that were analysed (e.g., CSI1). The frequency of CSI and PSF in the data analysed could, however, be attributed to the fact that the sampling approach involved the selection of news posts that highlighted brand-related controversies which tended to relate to CSI or PSF. While this coding was, therefore, partially redundant, it allowed for CSI and PSF to be confirmed as antecedents of negative transmission. Further, PSF was, in some cases, a motivator of negative transmission related to CSI. Negative transmission was used as an opportunity to vent and complain about PSF, regardless of the content of the message that was being transmitted (e.g., PSF1).

- CSI1. Lorna Jane is graded a D for their exploitation of manufacturing workers. Perhaps all their child labourers will be inspired by this and start a Class Action? (Lorna Jane).
- PSF1. I wish Amazon would use delivery drivers with the ability to read instructions for leaving parcels... It is such a shame because, apart from this, they are quite good, but, if you can't rely on deliveries, even when they send out plenty of emails about the delivery, I must grade them as RUBBISH...!!! (Amazon; on a news post related to Amazon being fined for misleading pricing).

Brand-Related Factors: Brand Hate. Varying intensities of brand hate were evident in the data. Congruent with the previous literature, cool hate involved feelings of disgust toward the brand (Kucuk, 2019), which was explicitly stated in some cases (as exemplified by BH1 and BH2, listed below). Cool hate is also characterised by distancing efforts, which were apparent in several cases. The distancing associated with cool hate has been theorised to be more attitudinal than behavioural, with consumers discussing their feelings with close friends and family (Kucuk, 2019). Via negative transmission, this distancing associated with cool hate was shared beyond close social circles. Negative transmission, therefore, allowed for the amplification of distancing efforts associated with cool brand hate (e.g., BH3, BH4).

- BH1. Greedy sleazy disgusting (Woolworths).
- BH2. Your staff are bullies and your management think it's ok! Disgusting (Woolworths).
- BH3. I am so horrified and disgusted. Just truly heartbreaking. I am booking flights now for myself and family for 3 different holiday periods and United won't be an option (United Airlines).

BH4. I'll be boycotting United from here until you get it together (if ever). I'm so disgusted by your treatment of that poor dog you killed. After all the other issues I've had with you and your awful disability services, this was the last straw (United Airlines).

Hot brand hate, characterised by feelings of intense anger and anxiety (Zarantonello et al., 2016), was also evident. Unlike cool brand hate, these feelings were not explicitly stated, though intense negative emotions were apparent. Hot hate leads to aggressive and disruptive behaviour (Fetscherin, 2019), and this was evident in cases where consumers called for others to act against the brand (e.g., BH5, BH6).

- BH5. Apologize? Did that bring back the puppy to life? Next they put toddlers up there...they have no seats and may be too noisy...so what? If thos (sic) would have been my puppy I would not have allowed this anyway. Stay away from that horrible airline! (United Airlines).
 - BH6. The person who did this should go to prison for a long time I hope they lock them up with no air and water - US people buycott united airlines make them know how you feel (United Airlines).

Despite the clarity regarding the existence and intensity of brand hate in certain cases, many comments could not be classified in relation to this construct. There were two potential explanations for the inefficacy of this deductive coding in the classification of the entire dataset. Firstly, the static nature of the data, and the observational approach taken, meant that making inferences about the internal emotional states of the individuals who generated the comments analysed was not always possible. Secondly, while brand hate has been considered to be a necessary antecedent to anti-branding behaviour (Krishnamurthy & Kucuk, 2009), this may not be the case for negative transmission.

While more extreme anti-branding activities (e.g., creating anti-brand websites) may require the presence of brand hate (Hollenbeck & Zinkhan, 2006; Krishnamurthy & Kucuk, 2009), negative transmission may be a more casual form of anti-branding that is not always primarily driven by extreme negative emotions toward the brand. The following sections explore consumer-related motivators that may work alongside – or potentially replace – brand hate to drive negative transmission.

Consumer-Related Factors: Self. Negative transmission was frequently motivated by the self, evidenced by the engagement in self-verification and self-enhancement. Self-verification occurred via negative transmission to express strong personal ideologies or beliefs (Hogg, 2005; e.g., SV1, SV2). Further, negative transmission was often linked back to the individual who was transmitting the message, through the use of transmission to convey their personality, interests, and self-view (Ma & Agarwal, 2007; e.g., SV3, SV4).

- SV1. Pokies should never of (sic) been put into pubs and community clubs but it shows who's running the country, Big Business. (Woolworths).
- SV2. This is one suing case I'm happy is going ahead in the court system. Regardless of whether she is paid that sum or a smaller amount, I'm glad she's speaking out. Bullying should NEVER be tolerated. (Lorna Jane).
- SV3. Blame lies with owner also! Would you put a child up in the hold? Dogs need oxygen and attention too, as a dog owner, and parent I'm horrified at the way people are blaming the airline. If I was the owner I'd have taken my dog and myself off the plane, and found alternative transport. (United Airlines).

SV4. I am happy to hear this new (sic) about amazon, I do not shop online. And that is way (sic), you really do not known (sic) what you are getting. I budget my money and only buy what I need. (Amazon).

Negative transmission was also driven by self-enhancement. Particularly, through the use of downward social comparisons (Vogel, Rose, & Roberts, 2014). Many commenters used the content of the message that they were transmitting to highlight their superiority to others. When using negative transmission to engage in self-enhancement, the focus shifted away from the brand, and onto the individual people involved. This self-enhancement via downward social comparison involved the use of disparaging language toward the subject/s of the message that was being transmitted, and implicit suggestions that the transmitter would act differently to those involved in, or commenting on, the controversy (e.g., SE1-SE7).

- SE1. Heaven forbid a business works to maximise their profits. If you're dumb enough to play pokies, then you obviously don't need your money........ (Woolworths).
- SE2. It's just laughing at you for being stupid enough to let a spyware into your home/office (Amazon).
- SE3. Haha if you put your dog in that bin you are as dumb as the flight attendant. Maybe you shouldn't own a dog... (United Airlines)
- SE4. I would rather be thrown off the aircraft than put my dog in a potential life or death situation. Who in their right mind would even do that?! Lack of common sense astounds me (United Airlines).
- SE5. Good for her BUT what about the idiot that hired her in the first place ?? The company should sue him/her for hiring a person clearly not suited to fulfill the companies (sic) objectives. (Lorna Jane)

SE6. This is just STUPID!! The offending moment is when she handed a drink to the people that defend us and keep us safe!?? Are you kidding me? What is wrong with you people. Get a life! (Pepsi).

Consumer-Related Factors: Social. There were two social motivations for engaging in negative transmission. Firstly, negative transmission was an opportunity to engage in debate with other consumers. As with self-enhancement, when debate driven social motivation was involved in the negative transmission, these comments became less about the brand, and more closely related to the individuals involved. That is, transmitters did not argue about the brand itself (e.g., attacking vs defending the brand), the transmitters were focused on arguing directly with one another (e.g., SO1 and accompanying replies a. and b.).

SO1. Seriously they're making such a big deal out of pets flying while they bother nobody. Toddlers and babies in the other hand... (United Airlines).

- a. maybe just maybe the 'fuss' as you put it is down to health and safety procedures (like in this case where the dog died) and not crying and noise babies make
- b. For ppl(sic) like you who can't deal with children on the plane I'll suggest taking a boat to wherever you're going

Interestingly, more positive social interactions via negative transmission were rare. While transmission has been demonstrated to be a means to maintain and strengthen existing social bonds (Powell et al., 2017), directly engaging with these social bonds was not prioritised in most of the cases analysed. An exception to this was when humour or direct relevance to an existing social bond could be drawn, which was evidenced in the negative transmission of a message related to a malfunctioning Amazon product (e.g., SO2-4)

SO2. (tagged Facebook friend) has this happened with yours?

SO3. (tagged Facebook friend) - just as well I got you the Google one instead!
SO4. Omg (tagged Facebook friend)! This would be great if it were Google, it would laugh at your jokes.

5.3.5 Summary

The analysis of the Facebook comments accompanying negative transmission allowed for the exploration of brand-related antecedents and consumer-related motivations of this particular type of anti-branding behaviour. However, due to the limitations of the data collected – in particular, the inability to discern the internal states that precipitated the negative transmission and the psychological and social consequences of this behaviour – the analysis highlighted the need to address the remaining two research questions:

RQ 4b: Is brand hate necessary for negative transmission to occur? **RQ4c:** What are the consequences of negative transmission from a social and psychological perspective?

5.4 Phase 2: Interviews

A series of 13 depth interviews were conducted to build further support for the findings of the netnographic phase of the research, and to further explore individuals' motivations for transmitting negative brand-relevant content. These interviews were guided by an interpretive methodology, which was congruent with the exploratory nature of this research (Arghode, 2012). Each interview ran for approximately one hour, and the length of the interview was guided by the participants' ability and willingness to provide further information based on the interview prompts (Castillo-Montoya, 2016).

The interviews involved informal and conversational discussion (Reissner, 2018), about the participant's social media use and transmission behaviour. The interviewer guided this

discussion by prompting participants to discuss their general use of social media and their experiences with, and motivations for, transmission (both positive and negative) in relation to brands.

In addition to the discussion of participants' social media use and transmission behaviour, projective techniques were used to explore the motivations for transmission behaviour which participants' may have found difficult to articulate (Baveja, 2017). Five Facebook comments analysed in the netnographic phase of this research were presented to participants, with identifying information removed. Participants were then prompted to describe the commenters' motivations for each transmission, with the intention that these ambiguous Facebook comments would allow participants to project any covert motivations to the stimuli (Donoghue, 2000).

5.4.1 Identification of Informants

A purposeful sampling approach was employed to select participants who were daily Facebook users and who frequently interacted with brands (see Table 23). Members of the research team identified individuals who were known to them, and who engaged in negative transmission in relation to brands, organisations, and public figures. Eleven participants were located in Australia, and two were located in New Zealand. Out of the 13 interviews, 10 were conducted via Skype, and three were conducted face-to-face.

Participant*	Age	Gender	Transmission Frequency
Robert	60	Male	Daily
William	45	Male	Daily
Steven	60	Male	2-3 times a week
George	60	Male	Daily
Mary	45	Female	2-3 times a week
Jason	40	Male	4-6 times a week
Daniel	30	Male	Daily
Karen	50	Female	2-3 times a week
Barbara	60	Female	Once a week
Amanda	29	Female	Once a week
Matthew	50	Male	Daily
Michael	63	Male	Once a week
James	30	Male	Daily

 Table 23. Participant Information

Note: Transmission frequency was based on how often participants shared content (e.g., news articles, posts by brands or public figures); * Names changed

5.4.2 Data Analysis

The interview transcripts were analysed, and coded, using an interpretive approach, which was appropriate for the exploratory nature of this phase of the research (Goulding, 1998). A thematic analysis was conducted to understand and classify the interview data, through a process of immersion, coding, and the identification of themes (Green et al., 2007). An inductive approach was taken in the coding process, using a grounded theory perspective (Glaser & Strauss, 1967). The interviews were audio recorded and transcribed, and the data were manually analysed line-by-line. The concepts that emerged were categorised using an open-coding technique (Goulding, 2005), and the data analysis occurred concurrently with the completion of the interviews. Data collection was stopped when saturation was judged to have been achieved (Bowen, 2008).

5.4.3 Results

The coding of the raw data resulted in the development of three broad themes: social factors, the self, and brand-related factors. Across the interviews, social media was described as a 'tool' that is used by individuals: the first two subsections will explore how participants use social media as a tool to extract social value and self-verification/self-enhancement through their transmission behaviour. The final section will focus on the brand-related factors involved in participants' transmission, particularly the implications of brand love and hate as well as general emotions toward the brand/s involved in their transmission. These factors are summarised at Figure 25.





Social Factors. Congruent with the first phase of this research, participants' general social media use and transmission behaviour was strongly motivated by social factors. Maintaining and strengthening personal connections was a key motivator for most respondents'

use of social media in general. Particularly, brand-relevant transmission was seen as a way to

maintain and strengthen existing bonds, through targeted transmission to social ties that the transmitter believed would appreciate the content:

It's about the connections, it's about seeing an article and tagging somebody. Like I've read an article and say, oh, I know my mate will like that, so I'll put his name and it'll pop up. (William)

The use of transmission to maintain and strengthen existing bonds was a key driver of positive brand-relevant transmission. Transmitting positive information that was relevant to a brand, organisation, or public figure was most frequently tied to social outcomes, including informing/entertaining others and the continuity of offline conversations:

Like there's a particular brand of shoes that - called FRANKIE4 Footwear that are very comfortable but they're quite expensive - a few of us were talking about them at work. So, I noticed that night they had an online sale so I sort of - you know you put people's names in and copy people's names that they might be interested. (Mary)

I tend to share stuff that makes me laugh, to be honest, and I assume would make others laugh or informative stuff; particularly with the mountain biking. If there is an event coming up or something going on, then yeah, then I'll share that sort of content, if I'm honest. (Matthew)

In addition to informing/entertaining others and the continuity of offline conversations, participants also reported using positive transmission to develop and exert influence on their social network, generally to promote information that they felt would benefit others:

I mean there are people out there that perhaps are not well informed, or turn a blind eye. Whatever it may be...being able to tell people via Facebook was one way of doing it. (Robert) I had one friend decide to go buy an electric car straight after seeing it, it's like right if [Jason's] on board, I'm buying one as well, I've been umming and erring about this and we had a good chat and he was able to go buy one. (Jason)

Despite the importance of social connections in driving participants' social media use in general, and particularly their transmission of positive brand-relevant content, maintaining and strengthening social connections was not cited by participants as being central to negative transmission. Maintaining and strengthening social connections was not discussed by participants in reference to their negative transmission behaviour, nor was it discussed during the projective phase of each of the interviews (i.e., in reference to others' negative transmission). This was congruent with the first phase of this research.

The social aspect of negative transmission was limited to engaging in debate. That is, negative transmission was social in that many participants engaged in negative transmission to encourage debate and conversation on the topic at hand:

Yeah, I felt good, because I thought it gave [people] something to think about. I just thought that hopefully it would stir up some more comments. (William)

If anything, I kind of like it because it shows that at least I'm having an impact, if I'm talking about something that someone's so angry about that they want to write something back, at least we're having a conversation. Because these are things that we need to have a conversation with because otherwise those conversations would be had in a closed echo chamber that they're engaged in and not out in the open like they should be. (Jason)

Interestingly, despite participants describing debate and discussion as a motivator of negative transmission, many participants unwittingly contradicted themselves when discussing how important others' reactions to their transmission would be. Most participants felt that it was

unlikely that their negative transmission would gain a reaction from others, and that others' reaction to their transmission behaviour was ultimately unimportant:

Yeah, I suppose after I had done it then that was it. It's out there, that's what I think, like it or leave it. That's just what I think. I didn't need people to like it or comment on it. It's just I wanted to say that, so I said it, sort of thing. (Steven)

Therefore, while debate was cited as being a motivator for negative transmission, participants did not have a strong need to gain a specific reaction from others as a result of their negative transmission. This may be particularly true when negative transmission is driven by self-related factors, rather than social motivations.

The Self. While negative transmission was less social than positive transmission, it was more closely tied to self-related motives. Congruent with the first phase of this research, participants' responses demonstrated that they use negative transmission to engage in both self-verification and self-enhancement. Participants' negative transmission tended to relate to topics that were central to their self-concept, and therefore served to verify or reinforce the way that they see themselves. Each participant, when allowed to speak generally about their social media use, included tangential information that demonstrated key aspects of their self-concept. For example, James consistently returned to the concept of authenticity in his discussion of many aspects of social media, and how he wanted to be perceived by others:

I want to be authoritative, but I want to do it authentically... it's hugely important to me. (James)

When prompted to discuss his negative transmission behaviour, the examples that he gave were congruent with this aspect of his self-concept, and were related to his perception of brands' inauthenticity:

Because I feel brands who succumb to political correctness, they are being controlled by third-parties. They're not being true. They're not being authentic. (James)

A further example is Robert, who spoke at length about the importance of helping others. He outlined key efforts he had taken both on and offline to assist people in need, and described this as an important part of how he saw himself. When prompted to discuss his negative transmission behaviour, he described negative transmission as a means to advocate for, and assist, others:

Big corporations that abuse people, use people. Oh yeah there's a heap of them out there. I would put things out in regard to the companies that aren't paying people the right wages. They're not getting paid their super [retirement savings]. Give advice as to who they go to, Fair Work Australia. Or they make a complaint here or there....Getting ripped off. I don't like that. Do it personally or I'd put it online to educate people. (Robert)

For the participants quoted above, negative transmission was self-verifying in that it allowed them to communicate attributes that were particularly central to their self-concept. In addition to being self-verifying, negative transmission was seen as self-enhancing, however, participants avoided explicit discussion of this. When discussing their own transmission behaviour, participants seemed hesitant to state that their negative transmission was done to appear favourable in front of others:

I didn't want to kind of go, big note myself. (Mary)

I do feel good doing that and helping other people. But I don't want a pat on the back for it. (Robert)

But it [transmission] wasn't like to get endorsed or to feel good. (William) Participants' comments suggested that openly engaging in self-enhancement efforts via transmission was unfavourable. However, negative transmission provided an opportunity for covert, potentially more socially acceptable, self-enhancement, particularly via the potential for a downward social comparison to be made:

As low as I feel, at least I'm not as bad at my job as she is at hers... I very rarely get angry at people online, I kind of jump straight to pity. That might almost be even worse for them I'd say in that you know what, I'm not angry at you, I just feel really sorry for you. (Jason)

It's just like - is there really that many dumb people in the word? So, I felt good, because I thought, okay [public figure], he needs to be challenged - let's put a discussion out here. (William)

Therefore, participants' negative transmission often allowed for a downward social comparison to be made, allowing for self-enhancement to occur without making overt statements of their superiority. Participants often alluded to being the 'voice of reason' when engaging in negative transmission, and even suggested that they would purposefully avoid transmission related to brands or subjects on which they lacked a high level of expertise compared to other transmitters:

That's the thing, probably a lot of people that you - that do follow you on Facebook probably don't have that level of knowledge that you have and that level of understanding. (James)

Sounds a bit arrogant. In that matter, I just thought, well, I know more about it than most people so, I'm just sharing what I think. That - I don't mean to come across as arrogant, but it's just that if there's a discussion about which Kardashian is the best, I'm not going to enter into it, because I have no idea. But the things I'll enter into a discussion about, I'll do because I feel as though I've got something to contribute. (William) Participants also spoke about their negative transmission as though it was a 'guilty pleasure'. That is, that negative transmission can have negative consequences but is ultimately enjoyable due to their ability to assert superiority and engage in downward social comparison through their transmission behaviour:

This is kind of that negative thing but it's more in a funny, sarcastic, trolling negative thing... So, it can be maybe ego defence and help you get over a bad mood, but it's not necessarily putting you into a good mood if you know what I mean. (Jason)

I would know that when I'm doing that [negative transmission] on a weekend if [spouse] sees me in the corner, she'll just be cringing... But that's life. It's good banter. (William)

The use of downward social comparison to self-enhance was also recognised (more freely and explicitly) through the projective techniques employed in the interviews. Most participants highlighted that other negative transmitters do so to feel good about themselves by highlighting their superiority to others:

I think something like this makes them feel better about themselves because they don't use online shopping therefore they're not going to get misled on pricing. So I think it probably makes them - it validates their reasons for not shopping online. (Mary)

I get the sense that this person's trying to be the voice of reason and just saying you know what, we all like to beat up on brands, we all like to beat up on airlines, but they weren't the ones that told her to put the dog in the overhead compartment. The owner has to take some level of responsibility for what happened... I suspect they're trying to show some level of superiority and leadership again, this is what I would have done, this is how I would have done it because I'm smarter, I'm better, I'm more logical in these situations. This is an issue with an individual, not an issue with an airline... (Jason)

That they're a caring person or that they wouldn't have allowed it to happen, so therefore there's a bit of negativity to the person who has allowed it to happen. Well, the fact that he's obviously looking down on the people is elevating his position, yeah, in his own mind anyway. (Steven)

It's to show everybody that I know best. They're going for that moral stance. That I'm here, and I don't gamble, and you've got to be dumb if you play the pokies. So, they're making a - they're judging other people. (William)

Therefore, while participants were hesitant to articulate that their own negative transmission was driven by self-enhancement, they perceived others' negative transmission as strongly motivated by a need to draw downward social comparisons in order to self-enhance. Further, negative transmission as a form of coping was particularly strongly suggested by participants in relation to the projective stimuli. Through the projective stimuli, participants recognised that negative transmitters engage in these downward social comparisons to feel better about themselves, many suggesting that these transmitters may be struggling or challenged by life outside of social media, and are engaging in this downward social comparison to cope with a negative self-view. Many participants assumed that the negative transmitters in the projective stimuli were experiencing, or have experienced, something similar to the subjects of the negative brand-relevant content that they shared, and that their negative transmission was a method of coping with this. This coping took two forms: venting and the aforementioned downward social comparison:

What their motive is to be arrogant, to provoke reaction, to get the feminists or what you, the feminazis kind of on the bandwagon, because maybe they're bored and lonely at home. (James)

I get the impression that someone has commented because they've had an issue within their circle of friends or family and someone's got a gambling problem perhaps. (Steven) There's a venue to grind their axe on something, on a topic that they don't agree with (Matthew)

I suspect they're someone who has recently had some issues with HR or lost their job. They might feel better having said it. (Mary)

Oh, *it's probably a bit of therapy, hey. It's a bit of therapy. Because it's blaming somebody else. So, maybe there's been an issue in the past perhaps. (William)*

Participants, therefore, saw others' negative transmission as a method of coping with a negative self-view, particularly a negative self-view that was precipitated by environmental factors and past experiences.

Brand-Related Factors. When discussing their positive transmission behaviour, participants highlighted that, while it was important that the transmission is related to a brand that they feel favourably toward and engage with, that it is rarely the brand itself that drives positive transmission. Rather, helping others and allowing for the maintenance of social connections, were the main drivers. Some participants highlighted that, even for the brands that they love, positive transmission is not something that they engage in without the aforementioned social value:

I don't see myself as a champion of brands at all. The brands are almost one upmanship with friends, sort of thing. (Steven)

I think they have a big marketing budget, they probably don't need my help if I'm honest. It would have to be something particularly positive. It would have to be helping a charity or giving something significant away I think before I'd probably share and get involved, if I'm honest. They have, as I said, a big marketing budget and a big department I would imagine that just deals with that, so... I wouldn't get paid to help them, so I wouldn't do it necessarily. (Matthew)

Negative transmission was, for most participants, something that they would engage in more freely despite the social value of the transmission, provided that it had value for the self-concept (see above discussion of social factors and self-concept). Interestingly, no participants reported true brand hate, or necessarily any intense emotions toward the brands involved in their negative transmission. Some participants discussed negative transmission related to brands that they loved, liked, or had mixed feelings about, including businesses that they would continue to patronise:

I do [love the brand], yep. Everywhere we have been in Australia in the car so far, I only love that Caltex Woolworths and I do. That's why being a fan of their products, I wanted an answer to my question as to why I was having to pay more? (Matthew)

I think it's better to be sharing stuff when you're on the inside and you're sold out to the brand, rather than pissing on the competitor, because then you just look bitter and twisted. Like I said I like to take photos, I have a Sony camera, everyone knows that I have a Sony camera, in the community, and I'm the first person to share negative stuff about Sony cams. I don't regularly share stuff about the competitor's cameras that are bad, because people just say well you're just being a Sony fanboy and that's because you've sold out to these guys. (Jason)

Well, no because I probably just wouldn't interact with it, to be honest. If it's a particular brand that I'm not interested in, I probably wouldn't even watch them on social media or comment if you like. (Steven)

For the participants, their own transmission behaviour, and the transmission discussed in the projective portion of the interview, was not about the brand. Hatred for, and even strong emotions toward the brands involved were rarely discussed. When emotion was discussed, either in relation to their own or others' sharing, the emotional intensity was muted and fairly fleeting:

I felt good, because I felt as though I was the voice of reason. I was sharing some thoughts. Was that [brand hate] a driver? No, I don't think it was. I felt maybe a little bit negatively. I just thought that was really disappointing. I didn't do it because I don't like them. (William)

I want to make my comment, but I'm not out to openly bring your company down if you like. (Matthew)

From a brand perspective, the brand's reactions to negative transmission were somewhat unimportant to participants. While some participants suggested that negative transmission is an effective means of receiving a response from brands, the specific reactions from the brand were not important to many participants, or necessarily expected:

That's why I picked their Facebook page was because I was fairly sure I was going to get a fairly timely response. An email would get ignored, a letter would probably just disappear, but social media is there. They know it's out there and they know other people have seen it, so they've got to respond to it. (Matthew).

I don't know how I would have gone if I'd got some really, really angry nasty comments [about the brand, in response to negative transmission]. That's not why I posted it if I'm honest. I probably wouldn't have interacted with them and I would have probably understood had they'd been removed [by the brand] if I'm honest. (Matthew) But again...as soon as that comments goes then it's just onto the next thing. Nobody had any answers. Well, there was nothing on the Facebook shared, there was no other further comments, so that wasn't - there were no real consequences. I felt good, because I felt as though I was the voice of reason. I was sharing some thoughts. (William)

5.5 Discussion

Negative transmission is a form of anti-branding. Brands use social media to build brand identity (Gensler et al., 2013) and negative transmitters diminish brands' efforts via the negative transformation of brand-relevant content. While the results of the current research supports the previous anti-branding literature, it also extends the existing understanding by: (a) proposing negative transmission as a type of anti-branding that is distinct from previously examined forms, and (b) uncovering the unique motivators of this specific anti-branding behaviour, which extend beyond company-related factors such as CSI and PSF. Consumers are empowered, technologically and socially, by social media (Labrecque, vor dem Esche, Mathwick, Novak, & Hofacker, 2015), and this empowerment encourages negative transmission that is triggered by established antecedents of anti-branding behaviour – CSI and PSF (Kucuk, 2019). This research establishes negative transmission as a more casual and opportunistic form of anti-branding than anti-brand community membership (Romani, Grappi, Zarantonello, & Bagozzi, 2015) that allows for the amplification of cool brand hate beyond close social ties.

In addition to the amplification of cool brand hate, negative transmission was also associated with a lack of brand hate, or strong feelings toward the brand. This amplification of cool hate is somewhat in contrast to the previous anti-branding literature, which has focused on brand hate and intense negative emotions as motivators for engaging in anti-brand communities (Zarantonello et al., 2016). The results of the current research suggest that, as well as not

requiring brand hate, negative transmission can be a form of anti-branding that targets brands that the transmitter feels ambivalent, or even positively toward. One potential explanation for this is that consumers can be more likely to act when a brand transgresses and they have an existing positive relationship with that brand (Grégoire, Tripp, & Legoux, 2009). Additionally, this could be due to the broader motivators of negative transmission: this type of anti-branding is not always primarily driven by consumers' feelings about the brand. Instead, it served social and self-related motives.

This study also allowed RQ 1a to be addressed further. Studies 1-7 focused on impression management, however, these studies were focused on the need to self-enhance. Study 2, and the development of perceived social benefit as a construct, provided some evidence for the positive relationship between self-verification and transmission - that those who view transmission behaviour as a means to communicate their self-concept are more likely to transmit. However, the findings of Studies 1-7 lacked clarity in regard to the specific role of self-verification in the transmission process, in regard to its role as a key motivator alongside the need to self-enhance. Because self-verification is highly idiosyncratic (Swann, Polzer, Seyle & Ko, 2004), and therefore more difficult to manipulate in an experimental procedure than the need to self-enhance (Spencer et al., 2005) the qualitative approach undertaken in Study 9 allowed for a more flexible exploration of the role of self-verification.

Negative transmission was used self-verify which addressed RQ 1a, and is congruent with how consumers use social media in general (Dolan, Conduit, & Fahy, 2016). In contrast, anti-branding communities tend to prioritise anonymity (Krishnamurthy & Kucuk, 2015). The fact that anti-branding community membership is more closely tied to the brand, and negative transmission is more closely related to social and self-related factors, suggests that the platform

that is used (anonymous anti-brand sites vs social media) determines the nature of, and motivations for, the anti-branding behaviour.

From a social perspective, negative transmission was a method for engaging in debate with other transmitters, and maintaining a sense of superiority to others was important in this process. While a full analysis of the drivers of positive transmission is beyond the scope of the current research, it is worth noting that positive and negative transmission differed in *how* they were social, with positive transmission being related to the maintenance of existing social bonds, and negative transmission being related to debate. The observed difference in social motivations between positive and negative transmission may be explained by findings from the WOM literature. Those who make critical arguments can be perceived as more intelligent, but less trustworthy ('brilliant but cruel'; Amabile, 1983). Therefore, negative transmission may be a means to assert intelligence and superiority, but this may be avoided when maintaining existing social bonds.

A key driver of negative transmission, which was present at each phase of this study, was the use of negative transmission to create a downward social comparison. This may be due to individuals' inherent need to engage in self-enhancement, which can be increased via social media, the need to cope with a negative self-view, or recover from a threat to self-esteem (Chou & Edge, 2012; Rudman, Dohn, & Fairchild, 2007). The utility of the downward social comparison in the negative transmission process may be driven by the fact that explicit attempts to self-enhance via social media are deemed socially unacceptable. Like the 'humblebrag', in which veiled attempts at self-enhancement are tempered with self-deprecation (Sezer, Gino, & Norton, 2018), negative transmission is a covert method for individuals to look and feel good via social media. Brands may just be 'caught up' in this process, unwitting components of individuals' use of social media as a tool to verify and enhance the self-concept.

Participants often de-emphasised the brand in transmission that allowed for a downward social comparison, and focused on the individuals involved – either individuals who worked for the company, or other transmitters. Individuals who decrease focus on the brand in this context may do so as they find it easier to engage in a downward social comparison when another individual is the focus of the comparison, rather than the brand as a whole. This could be particularly true when the negative transmitter lacks a strong relationship with the brand, and/or when the brand lacks a strong personality (Malär, Krohmer, & Hoyer, 2011). De-emphasis of the brand when engaging in a downward social comparison further highlights the difference between negative transmission and more targeted community-based anti-branding behaviour which is primarily driven by, and directed at, the brand.
CHAPTER 6

Discussion and Conclusion

Chapters Four and Five presented the findings of nine studies: a series of eight quantitative studies (Studies 1-8) and a two-phase qualitative investigation (Study 9). In this concluding chapter, the findings of these nine studies are integrated and discussed in relation to each of the research questions posed in Chapter 2. Throughout this integration and discussion of the current findings, the theoretical contributions of this research are highlighted. Then, the managerial implications of these findings are explored, before the limitations of this research and future directions in this area are outlined.

6.1 Discussion of Findings and Theoretical Contributions

This research extends the understanding of transmission by integrating, establishing and exploring the role of key drivers of this behaviour. The current findings add nuance to the literature in this area, by establishing the role of the need to self-enhance in the transmission of high arousal content, as well as uncovering the impact of the need to self-enhance on perceptions of social risk and benefit, the likelihood of transmission across different communication contexts, and the role of this variable in the negative transmission process. Key contributions to the existing understanding of transmission are summarised in Figure 26, which outlines the theoretical pathways that were proposed in Chapter 2, and tested in the current research.

Figure 26. Final Conceptual Framework



In addition to adding clarity and nuance to previous findings, a further contribution of this research is the integration of audience size, audience type, and synchronicity. This research is the first to examine these communication context factors together, demonstrating not only how the likelihood of transmission differs depending on these factors, but also establishing how these factors influence the overall value of transmission. This research is also the first to examine the perceptions of the overall value of transmission, a key contribution made possible by the proposal, conceptualisation, and exploration of perceived social benefit in this thesis.

The following sections discuss the current findings and key contributions related specifically to each research question posed in Chapter 2 in further detail, and this information is summarised at Table 24.

6.1.1 RQ 1: How does impression management influence transmission behaviour?

Impression management involves the consolidation (self-verification) and enhancement (self-enhancement) of the self-concept (Rosenberg & Egbert, 2011). The current research contributes to the understanding of impression management and WOM by demonstrating that self-verification (Study 2, Study 9) and the need to self-enhance (Studies 1, 4, 5, and 7) influence transmission behaviour, and that negative transmission, specifically, can be used by consumers as a method of self-enhancement (Study 9).

While the findings that self-verification and self-enhancement motivate transmission are broadly congruent with the extant WOM and interpersonal communication literature (e.g., Hollenbeck & Kaikati, 2012; Barasch & Berger, 2014; Saenger, Thomas, & Bock, 2020), the current findings add significant nuance to the theoretical comprehension of transmission. Specifically, these findings build on the existing understanding of the motivators of this type of WOM behaviour by demonstrating that: (a) opportunistic anti-branding in the absence of brand hate can be means to engage in self-verification, b) protective self-enhancement constrains the transmission of arousing messages, and c) downward social comparisons are implicated in the transmission of negative brand-relevant information. These theoretical contributions are explored in further detail below.

Self-verification was demonstrated to be a component of the perceived social benefits associated with transmission (RQ 1a; Study 2). Therefore, individuals perceive transmission to be a means to communicate their self-concept to others, and those who perceive these social benefits (including the potential for self-verification) more strongly are more likely to transmit (Studies 3, 6, and 7). These findings are congruent with the social media literature in general – individuals use social media platforms to create and communicate a version of their self-concept, and the distinction between the online and actual self is becoming increasingly blurred for many consumers (Krämer & Winter, 2008; Pan, Lu, Wang, & Chau, 2017). As transmission occurs primarily through these online communication channels, self-verification is a core driver of this type of WOM.

The thesis further contributes to the existing understanding of self-verification and social networks by not only confirming the role of self-verification in the transmission process (Studies 2 and 3), but also by establishing self-verification as a key motivator of negative transmission behaviour, particularly when this negative transmission occurs in the absence of brand hate (Study 9). This research establishes that self-verification can drive opportunistic anti-branding in the form of negative transmission related to brands that the transmitter has a tenuous relationship with (Study 9), and that a high need to self-enhance can decrease perceptions of the social benefit of transmission in regard to self-verification (Study 7).

In addition to impacting perceptions of the social benefits of transmission (discussed further below in relation to RQ 3) the need to self-enhance moderated the relationship between arousal and the likelihood of transmission (Study 1, RQ 1b). For both positive and negative messages, higher arousal led to a greater likelihood of transmission (Study 1). However, when exposed to an arousing message, a low need to self-enhance facilitated the likelihood of transmission (Study 1). Therefore, those with a high need to self-enhance are less likely to transmit, even when the message is arousing (Studies 1, 4, 5, and 7).

The importance of the need to self-enhance in the transmission process is congruent with previous research into generation. Previous studies of the impact of self-enhancement on generation, however, have explored how the need to self-enhance influences the type of WOM that individuals will generate. For example, previous work has examined how self-enhancement motivation shapes the message that individuals will create, with a high need to self-enhance resulting in an increased likelihood to generate messages that convey the positive traits or the connoisseurship of the sharer (De Angelis et al., 2012; Weingarten & Berger, 2017). As demonstrated in this thesis, however, transmission behaviour is distinct from generation, and does not involve the generation of a self-enhancing message that is centred around the sharer. The findings of this thesis established that, when predicting transmission behaviour, the focus may be shifted from how self-enhancement determines the message itself to how the need to self-enhance influences the likelihood of transmitting pre-existing messages via different communication contexts.

The findings of the thesis also clarify that those with a high need to self-enhance engage in protective self-enhancement, as they avoid transmission in order to protect their threatened

self-esteem. As discussed in Chapter 4, the suggestion that transmission behaviour is governed by protective self-enhancement is congruent with much of the psychology literature (e.g. Landau & Greenberg, 2006), however, this conclusion diverges from previous findings that suggest that generation can be a means to engage in acquisitive self-enhancement (De Angelis et al., 2012).

Study 8 partially addressed the differences between these types of WOM by providing evidence that the need to self-enhance can increase the likelihood of choosing transmission, rather than generation. This increased likelihood to choose transmission when there is a high need to self-enhance is related to the increased social risk associated with generation. A high need to self-enhance may reduce individuals' confidence in their generated WOM, or result in generation having stronger consequences for the self-concept. This increased risk leads to an avoidance of generation and, therefore, a process of protective self-enhancement.

While further investigation of the factors that drive choice between generation and transmission remains an avenue for future research, Study 9 clarified when transmission is used to actively self-enhance. This study specifically demonstrated that, particularly negative, transmission also can be used to engage in acquisitive self-enhancement. Individuals who transmit negative messages about brands often do so in order to assert superiority and engage in downward social comparisons, both of which allow for the enhancement of the self-concept (Suls, Martin, & Wheeler, 2002). In this study, this opportunity for downward social comparisons and, therefore, self-enhancement, motivated the transmission of negative brand-relevant information in the absence of strong negative feelings toward the brand. While this is congruent with previous findings that suggest that individuals use their online social networks to self-enhance (Mehdizadeh, 2010; Taylor, Strutton, & Thompson, 2012), the current findings add depth to the understanding of the role of self-enhancement in the transmission process,

specifically by demonstrating that individuals can use negative brand-relevant transmission as a covert method of self-enhancement that is more socially acceptable than overt methods.

6.1.2 RQ 2: How does the likelihood of transmission differ across communication contexts?

The results contribute to the theoretical understanding of the role of communication context by integrating and demonstrating the impact of audience size (broadcasting vs narrowcasting), audience type (strong vs weak social ties), and the synchronicity of the communication (synchronous vs asynchronous) in the transmission process. Further, the current research establishes the influence of communication context on perceptions of social risk and benefit.

Overall, Studies 1-7 provided evidence that individuals are less likely to broadcast, transmit to weak ties, and transmit via asynchronous communication than they are to narrowcast, transmit to strong ties, and transmit via synchronous communication. This contribution is notable as while the generation literature provides insight in regard to the influence of audience size, audience type and synchronicity on the type of messages that are generated, these communication context factors have not been: (a) examined in an integrated manner, and (b) applied to the transmission process. Further, the current research demonstrates for the first time that perceptions of the overall value (i.e., perceptions of social benefit relative to perceptions of social risk) of transmission were more favourable for narrowcasting, transmitting to strong ties, and transmitting via synchronous communication. The specific contributions of the current research in relation to audience size, audience type, synchronicity, and overall value are explored in further detail as follows.

This research is congruent with the previous literature that suggests that broadcasting WOM is riskier than narrowcasting, due to the heterogeneity of larger audiences and the increased self-focus associated with broadcasting (De Angelis et al., 2012; Berger & Iyengar, 2013;) However, the findings of the current research contribute to this understanding of the broadcasting vs narrowcasting element of communication context by highlighting the role of perceived social benefit, establishing that narrowcasting is not only less socially risky, but also more socially beneficial than broadcasting. These findings are congruent with those that relate to social tie strength – the current research establishes that transmitting to strong (rather than weak) ties is less socially risky, but also more socially beneficial.

The findings regarding audience size and tie strength are consistent with the previous literature that suggests that individuals tailor the WOM that they generate to match their relationship to the audience (Berger 2014; De Bruyn & Lilien, 2008; Steffes & Burgee, 2009; Baker, Donthu, & Kumar, 2016). However, the previous literature provides multiple perspectives on the importance of self-enhancement in this process. There is evidence to suggest that self-enhancement is more important when communicating with strong ties, as relationships with strong ties are more central to an individual's self-concept (Wilcox & Stephen, 2012). Conversely, self-enhancement has been shown to be less important when communicating with strong, rather than weak, ties (Chen & Berger, 2013). This decreased focus on self-enhancement is attributed to the more frequent and numerous interactions that strong ties have, which lessens the importance of each individual communication event for potential self-enhancement opportunities (Berger, 2014; Dubois, Bonezzi, & De Angelis, 2017).

The findings of the thesis contribute to the understanding in this area by consolidating both perspectives: broadcasting to weak ties is perceived to be high in social risk, but also low in

social benefit, while narrowcasting to strong ties is comparatively low in social risk, but provides stronger social benefits. The low risk, high benefit nature of narrowcasting to strong ties demonstrates that transmitting to strong ties is likely to be less risky as there is a stronger existing relationship between the transmitter and the audience and, therefore, less social pressure related to the transmission. This transmission to strong (rather than weak) ties may also be more beneficial as it provides an opportunity to reap the social benefits associated with transmission from an audience that is more central to the transmitter's self-concept.

In the current research, asynchronous communication was hypothesised to be less risky than synchronous communication due to the increased time communicators have to craft asynchronous messages (Walther, 2007). However, participants were less likely to transmit via asynchronous communication, and this context incurred greater social risk relative to benefit. This may be due to the sender receiving fewer feedback cues during asynchronous (rather than synchronous) communication (Walther et al., 2005). The immediacy of the feedback received by the transmitter via synchronous communication may allow for the risks, and associated benefits, to be more easily and readily assessed. Further, online asynchronous communications have greater permanency than offline synchronous communications (De Bruyn, 2004), which may increase perceptions of social risk relative to benefit.

However, the decrease in overall value of asynchronous transmission did not account for the finding that the likelihood to broadcast to weak ties synchronously was not greater than the likelihood to narrowcast to strong ties asynchronously, and that broadcasting to weak ties asynchronously was not less likely than broadcasting to strong ties asynchronously. It is therefore possible that transmitting messages in online environments, and the permanency associated with online communication, not only result in this increased social risk relative to

benefit, but also that communication permanency is a further factor that influences transmission behaviour. However, the latter was not directly explored in the current research.

Overall, while audience size (broadcasting vs narrowcasting), audience type (strong vs weak ties), and the synchronicity of the communication (asynchronous vs synchronous), has been explored individually in the interpersonal communication and WOM generation literatures (Berger & Iyengar, 2013; DuBois, Bonezzi, & De Angelis, 2016), the current research establishes the role of communication context as a whole in the transmission process, as well as demonstrates that the difference in the likelihood of transmitting across these contexts is due to the perceived overall value of each.

6.1.3 RQ 3: What are the perceived social benefits of transmission, and how does perceived social benefit relative to perceived social risk influence the likelihood of transmission?

A major theoretical contribution of this thesis is the proposal and conceptualisation of perceived social benefit, and the establishment of the role of this variable in the transmission process. Study 2 outlined the conceptualisation of this variable and detailed the development of a perceived social benefit scale. Further studies reported in this thesis built on the conceptual and methodological contributions of Study 2, demonstrating that perceptions of social benefit are positively related to the likelihood of transmission, and established that this positive relationship is stable regardless of audience size, audience type, and the synchronicity of the communication (Studies 3 and 6). Study 7 determined that the need to self-enhance is influenced by perceived social benefit. Compared to those with a low need to self-enhance, those with a high need to self-enhance perceive transmission to be less socially beneficial (Study 7).

In addition to establishing the role of perceived social benefit, the thesis contributes to the theoretical understanding of perceived social risk. Previous research suggests that increased

perceived social risk will determine the type of WOM that is generated, and that this risk is amplified when broadcasting generated WOM (Eisingerich et al., 2015). The current research adds to the theory in this area by: (a) establishing that there is a negative relationship between perceived social risk and the likelihood of transmission, and (b) that this risk increases when broadcasting (rather than narrowcasting), transmitting to weak ties (rather than strong ties), and via asynchronous (rather than synchronous) communication (Study 1).

The thesis also establishes the role of overall value (perceptions of risk relative to benefit) in the transmission process. This conceptualisation of overall value as consisting of perceptions of social risk relative to benefit is complimentary to the conceptualisation of perceived value in the generation process, which is consumers' perceptions of the benefits of a product or service relative to the costs involved (De Matos & Rossi, 2008). In addition to establishing this conceptualisation of overall value, the findings also demonstrate that the overall value of transmission is positively related to the likelihood of transmission, and mediates the negative relationship between the need to self-enhance and the likelihood of transmission (Study 7).

As the need to self-enhance increases, perceptions of the overall value of transmission become less favourable. That is, as the need to self-enhance increases, transmission is perceived as both riskier and less beneficial. However, transmission can be perceived as higher in overall value in specific circumstances; transmission is higher in overall value than generation, and the increased risk associated with generation (in comparison to transmission), is particularly salient to those with a high need to self-enhance (Study 8).

The findings related to the need to self-enhance and overall value support a 'rich get richer' (Zywica & Danowski, 2008) explanation for the role of need to self-enhance and perceived social risk and benefit in the transmission process. Online social interactions have been

shown to result in individuals who have strong existing offline social relationships augmenting these relationships via online communication (rich get richer), or individuals who have poor offline social relationships using online communication to compensate for their lack of offline social support (poor get richer; Zywica & Danowski, 2008). The current findings suggest that a similar process may be involved in transmission: those with a low need to self-enhance see more social benefits, relative to risk, and this drives an increased likelihood of transmission. That is, those who do not have a chronically high need to self-enhance, or who have not been subject to a blow to self-esteem, are more likely to perceive that they will benefit from transmission (Study 7), or WOM in general (Study 8). Therefore, the rich (in regard to self-esteem and, therefore, a low need to self-enhance) get richer (in regard to the perceived social benefits) via transmission behaviour.

6.1.4 RQ 4: What motivates the transmission of negative brand-relevant content?

This thesis positions negative transmission as a form of anti-branding, which consumers use to undermine brands' identity building efforts on social media (Gensler et al., 2013). The results of Study 9 contribute to the anti-branding and WOM theory by: (a) establishing negative transmission as a type of anti-branding that is distinct from previously examined forms, and (b) uncovering the unique motivators of this specific anti-branding behaviour which extend beyond company-related factors such as corporate social irresponsibility (CSI) and product or service failure (PSF). The thesis also highlights the technological and social empowerment that is provided by social media (Labrecque et al., 2015), and demonstrates how social media encourages negative transmission that is triggered by established antecedents of anti-branding behaviour – CSI and PSF (Kucuk, 2019), as well as social and self-related factors. The results of Study 9 clarify negative transmission as a more casual and opportunistic form of anti-branding

than previously examined forms (Romani et al., 2015), specifically facilitating the amplification of cool brand hate beyond close social ties.

The results of Study 9 also establish that negative transmission can occur in the absence of brand hate, or strong feelings toward the brand. This finding contributes to the anti-branding literature, diverging from previous research in this area which suggests that brand hate and intense negative emotions are the key drivers of anti-branding (Zarantonello et al., 2016). The findings of Study 9 suggest that the platform used to transmit negative brand-relevant content may determine the motivations for the negative transmission. Anti-brand community membership is strongly driven by brand hate (Krishnamurthy & Kucuk, 2015), however Study 9 suggests that negative transmission is less strongly tied to anti-brand sentiment and more closely related to social and self-related motives. This divergence in the motivations of anti-brand community membership and negative transmission may be due to the level of anonymity and, therefore, social consequences associated with each platform

When negative transmission was related to brands that the transmitter felt ambivalent, or even positively toward, the negative transmission was driven by social and self-related motives. The results of Study 9 demonstrated that negative transmission can be used to engage with other social media users, and to maintain and enhance the self-concept. This finding is congruent with the previous literature related to social media use (Dolan et al., 2016), and WOM generation (De Angelis et al., 2012), as well as the findings of the current research that relate to transmission in general (i.e., Studies 1-7).

In Study 9, negative transmission was a means to engage in debate with other transmitters, and asserting superiority through this debate was important to transmitters. This study also confirmed the results of earlier studies conducted as part of this research (Studies 3, 6,

and 7, in particular) by demonstrating that transmission, particularly positive transmission, is beneficial for social relationships, and clarifying that the social value associated with positive transmission is particularly tied to maintaining and deepening existing social ties (rather than generating new social ties). While Study 9 did not aim to compare positive and negative transmission, the findings provided insight into how positive and negative transmission differ. Specifically, positive transmission is related to the maintenance and extension of existing social bonds, and negative transmission is related to debate. The observed difference in how negative and positive transmission are social may be related to transmitters' perceptions of how the receiver will perceive their transmission. The WOM literature suggests that those who mount critical arguments can be perceived as more intelligent, but less trustworthy (Amabile, 1983), and exerting such superiority, and diminishing perceptions of trustworthiness, may be of less value when transmitting to existing social ties.

Exerting superiority was a central motivator of negative transmission in both phases of Study 9. Specifically, negative transmission was used to draw a downward social comparison between the transmitter and the subject of the brand-relevant content, or between the transmitter and other transmitters that they interact with. This downward social comparison may be an acquisitive form of self-enhancement. What is not clear from the findings of Study 9 is what drives this behaviour: the transmitter's inherent need to engage in self-enhancement, which can be increased via social media, their need to cope with a negative self-view, or recover from a threat to self-esteem (Chou & Edge, 2012; Rudman, Dohn, & Fairchild, 2007). Based on the results of Study 9, it is also unclear how these findings regarding acquisitive self-enhancement via a downward social comparison can be reconciled with the findings of Studies 1-7. In contrast to the results of Study 9, the findings of Study 7 suggest that a high need to self-enhance is

associated with the avoidance of transmission, therefore serving as a protective, rather than acquisitive form of self-enhancement.

In relation to negative transmission, specifically, the use of a downward social comparison may be prompted by perceptions that explicit attempts to self-enhance via social media are deemed socially unacceptable. This thesis demonstrates individuals can be hesitant to engage in overt forms of self-enhancement on social media, and that engaging in a downward social comparison via negative transmission provides a more covert method of self-enhancement. When engaged in a downward social comparison, many participants in Study 9 de-emphasised the brand, and focused on the individuals involved - either the subjects of the brand-relevant content (e.g., employees of the brand), or other transmitters. This de-emphasis of the brand may be due to the comparative ease with which a transmitter can draw a social comparison to another individual, rather than a brand as a whole. This behaviour could be particularly likely when the negative transmitter lacks a strong relationship with the brand, and/or when the brand lacks a strong personality (Malar et al., 2011). These findings contribute to the understanding in this area by providing a further differentiation between negative transmission and more targeted community-based anti-branding behaviour which is primarily driven by, and directed at, the brand.

Research Question	Findings	Theoretical Contributions
RQ 1: How does impression	Self-verification (Study 9) and the need to self-enhance (Studies 1, 4, 5, 7	Overall, the findings that relate to RQ 1 (and the
management influence transmission	and 8) influence transmission behaviour, and transmission can be used to	associated sub-questions) build on the existing
behaviour?	self-enhance (Study 9).	understanding of the role of self-enhancement in the
RQ 1a. How does self-verification	Negative and positive transmission is used to demonstrate and potentially	WOM process by demonstrating that:
influence WOM transmission?	verify aspects of the self-concept (Study 9)	• Opportunistic anti-branding in the absence
RQ 1b. Do impression management	Yes - the need to self-enhance moderates the relationship between arousal	of brand hate can be means to engage in
concerns moderate the relationship	and the likelihood of transmission (Study 1); those with a high need to	self-vernication.
between arousal and WOM	self-enhance are less likely than those with a low need to self-enhance to	 A high need to sen-enhance can decrease perceptions of the social henefit of
transmission?	transmit, even if the content is highly arousing (Studies 4, 5, and 7); the	transmission in regard to self varification
	need to self-enhance influences the likelihood of transmission via less	A high paged to galf anhange deepergase the
	to social banefit) associated with transmission for those with a high need to	 A high need to sen-enhance decreases the likelihood of transmission due to the
	self-enhance (Study 7)	influence of the need to self enhance on
RO 1c Does impression management	Ves - the negative relationship between the need to self-enhance and the	number of the need to sen-emilance on
determine WOM transmission across	likelihood of transmission is particularly strong for transmission via	has been explored for the first time in the
different communication contexts?	broadcasting, to weak ties, and synchronous communication (Study 5).	current thesis.
		• Protective self-enhancement constrains the transmission of arousing messages.
		• The need to self-enhance can influence
		choice between transmission and generation,
		with a high need to self-enhance resulting in transmission being more likely than
		generation.
		 Downward social comparisons are
		implicated in the transmission of negative
		brand-relevant information - individuals can
		use negative brand-relevant transmission as
		a covert method of self-enhancement that is
		more socially acceptable than overt
		methods.

Table 24. Summary of Findings and Theoretical Contributions by Research Question

Research Question	Findings	Theoretical Contributions
RQ 2: How does the likelihood of transmission differ across communication contexts?	Transmission is more likely via broadcasting, transmitting to weak ties, and via transmitting via synchronous communication than narrowcasting, to strong ties, and transmitting via synchronous communication (Studies 1, 6, and 7); perceptions of the overall value of transmission were more favourable for narrowcasting, transmitting to strong ties, and transmitting via synchronous communication than for broadcasting, transmitting to weak ties, and transmitting via asynchronous communication.	The findings integrate and demonstrate the impact of audience size (broadcasting vs narrowcasting), audience type (strong vs weak social ties), and the synchronicity of the communication (synchronous vs asynchronous) in the transmission process. Further, the current research demonstrates for the first time that perceptions of the overall value of transmission differ across communication contexts.
RQ 3. What are the perceived social benefits of transmission, and how does perceived social benefit relative to perceived social risk influence the likelihood of transmission?	 Perceptions of social benefit are positively related to the likelihood of transmission (Studies 3, 6, and 7). The positive relationship between perceived social benefit and likelihood of transmission is stable across: Audience size (broadcasting vs narrowcasting) Audience type (strong vs weak ties) Synchronicity (synchronous vs asynchronous communication) The need to self-enhance is influenced by perceived social benefit: compared to those with a low need to self-enhance, those with a high need to self-enhance perceive transmission to be less socially beneficial (Study 7); the influence of social benefit is particularly central to the transmission of positive brand-relevant transmission (Study 9). 	 A major theoretical contribution of this research is the proposal, conceptualisation, and investigation of perceived social benefit and, by extension, the establishment of the role of perceptions of overall value in the transmission process. The findings establish that: Those who do not have a chronically high need to self-enhance through low self-esteem, or who have not been subject to a blow to self-esteem, are more likely to perceive that they will benefit from transmission. Therefore, the rich (in regard to self-enhance) get richer (in regard to the perceived social benefits) via transmission behaviour, in a process similar to previous research related to online social networks. The low risk, high benefit nature of narrowcasting to strong ties is likely less risky as there is a stronger existing relationship between the transmitter and the audience and, therefore, less social pressure related to the transmission. Overall value can depend on the type of WOM - transmission can be less risky than generation, particularly when there is a high need to self-enhance as individuals may doubt their ability to craft a worthy message (i.e., generate).
RQ 3a. Is the relationship between impression management and WOM transmission driven by perceived social risk and perceived social benefit?	Yes - overall value (perceptions of social risk relative to benefit) mediates the relationship between the need to self-enhance and the likelihood of transmission. Those with a high need to self-enhance perceive transmission to be more socially risky, and less socially beneficial, than those with a low need to self-enhance, and the overall value of transmission is positively related to the likelihood of transmission (Study 7). However, the overall value of transmission can be more favourable for transmission compared to generation, and this difference in overall value is driven by an increased risk associated with generation (Study 8).	
<i>KQ 3D. Does the communication context</i> <i>influence perceived social risk/and or</i> <i>perceived social benefit associated with</i> <i>WOM transmission?</i>	Yes - broadcasting, transmitting to weak ties, and transmitting via synchronous communication is perceived to be socially riskier, and less socially beneficial than narrowcasting, to strong ties, and transmitting via synchronous communication (Study 1).	

Research Question	Findings	Theoretical Contributions
RQ 4. What is the role of valence in	Negative transmission is an opportunistic and casual form of anti-branding	The findings build on the previous research into
transmission behaviour?	that allows for the amplification of cool brand hate beyond close social ties	negative WOM by:
	and for covert self-enhancement via downward social comparisons (Study	• Establishing negative transmission as a type
	9).	of anti-branding that is distinct from
		previously examined forms.
		• Uncovering the unique motivators of this
		specific anti-branding behaviour, which
		extend beyond company-related factors such
		as CSI and PSF.
		• Highlighting a divergence in the motivations
		of anti-brand community membership and
		negative transmission, that may be due to
		the level of anonymity and, therefore, social
		consequences associated with each type of
		anti-branding.

6.2 Managerial Implications

In addition to the extensive theoretical contributions noted, the outcomes of this thesis suggest a number of practical implications for marketers seeking to design and manage social media marketing efforts and stimulate consumer transmission behaviour. These implications essentially cluster around: (a) levels of arousal required, (b) self-enhancement requirements, (c) favourable communication contexts for encouraging transmission, and d) the management of negative transmission. Overall, the key implications of this research suggest that marketers should create content that boosts consumers' self-esteem, is inherently social, facilitates and encourages narrowcasting to strong ties, and leverages consumer propensity to engage in debate and downward social comparisons. Each of these implications are outlined in detail in this section.

The positive relationship between arousal and the likelihood of transmission has been demonstrated by both the present work and by previous research (e.g., Berger & Milkman, 2012). This highlights the importance of developing content that produces high levels of arousal. The current research extends this understanding by demonstrating that while arousal is key in driving transmission, an individual's need to self-enhance, their perceptions of social risk and benefit, and the communication context must also be considered. Considering these factors is important, because viral and social media marketing campaigns are implemented in online environments that can increase individuals' need to self-enhance (Chou & Edge, 2012). As demonstrated by the current research, such an increase in the need to self-enhance influences consumers' perceptions of social risk, benefit, and eventual likelihood of transmission across different communication contexts, even when the transmittable content is arousing.

The impact of the need to self-enhance has managerial implications because, while traitlevel need to self-enhance may be enduring, state-level need to self-enhance is subject to situational fluctuations (Heatherton & Polivy, 1991). Marketers may use this propensity for fluctuations in consumers' need to self-enhance to their advantage in order increase the likelihood of transmission of emotionally arousing brand-relevant content. One potential approach is to create content that boosts self-esteem and, therefore, actively decreases the need to self-enhance. The efficacy of this approach is demonstrated by the successful viral marketing efforts of the personal care brand Dove, which focused on creating messages that built selfesteem in women (Singh & Sonnenberg, 2012). Alternatively, content that allows for a downward social comparison to be made by the transmitter may provide a boost to self-esteem, and increase the likelihood of transmission.

The results of this thesis also suggest that transmission can actually be more likely, and higher in overall value, than generation. For marketers, this means that when sharing WOM is encouraged (e.g., incentivised), transmission may be a more attractive option for consumers than requiring them to generate WOM. This may also have the benefit of allowing marketers to maintain control over the message itself, which is often an aim of digital marketing strategies (Thomas, Peters, Howell & Robbins, 2012; Kim, Yoon, & Choi, 2019).

In addition to creating content that boosts self-esteem, marketers should consider encouraging transmission via particular communication contexts. Marketers have embraced the one-to-many capability of social media, as it is this potential for exponential growth that underlies the power of the viral phenomenon (Kaplan & Haenlein, 2011). Accordingly, transmission that is broadcast to a wide audience on social media, consisting of both strong and weak ties, may contribute the most strongly to the spread of viral marketing campaigns.

However, narrowcasted WOM can be more effective at generating engagement with, and acceptance of, a message (Aral & Walker 2011, Ang 2014) and, as established in this thesis, is associated with more favourable perceptions of overall value for the transmitter. Therefore, while marketers are often drawn to a strategy that facilitates social media transmission because of perceptions of rapid sharing through large audiences, this view is predicated on a broadcast mentality. A broadcast reliant strategy may fail to consider that smaller, sharper, narrowcasted transmissions to strong ties can be more effective in leveraging the viral phenomenon due to the increased perceived social benefit, decreased perceived social risk, and the persuasiveness of information received from strong (rather than weak) social ties (Baker et al., 2016).

Social media platforms allow the narrowcasting of brand-relevant content to strong ties that are still visible to the rest of the social media users' network (e.g., tagging a friend in the Facebook comments related to a post). To leverage this increased perceived social benefit and likelihood of transmission via narrowcasting to strong ties, marketers may provide calls to action in brand-relevant content that highlight opportunities to engage in such transmission.

While prompting the audience to 'tag a friend in the comments!' is becoming an increasingly popular strategy on social media, better practice would involve the creation of campaigns which are more inherently social. An example of this approach is Facebook's 'friendship anniversaries', which mark the anniversary of Facebook friendships with a brief clip of the friends' shared image posts (Facebook.com). Facebook uses these clips to highlight the 'meaningful, shared histories' (Cassini Davis, 2015, n.p.) between friends. As such posts tend to focus on the highlights of peoples' relationships (Chou & Edge, 2012), these clips may have the dual benefit of being both inherently social and self-enhancing.

While Study 9 demonstrated consumer hesitancy around transmitting positive brandrelevant content on behalf of brands, potentially due to their scepticism toward social media marketing efforts (Lee, Kim, & Ham, 2016), they would freely engage in this behaviour when they could use the branded content to continue offline conversations with friends, and build on their existing social relationships. While participants' responses clarify the challenges that brands face in encouraging the transmission of positive brand-relevant content, these results further highlight the opportunity for brands to create content that is inherently social – when individuals see the value in transmission for their social relationships, they will transmit.

While no such hesitancy was associated with negative transmission, brands may still benefit from being used for the social motives that drive this behaviour. Negative transmission was driven by an opportunity to engage in debate with other transmitters via the comments section of brand-relevant content. While the comments left during any such debate may not be uniformly positive in relation to the brand, any proliferation of comments on brand posts on Facebook increases engagement with, and the visibility of, the message on social media (Lee, Hosanagar, & Nair, 2018). Therefore, there is scope for brands to embrace some level of controversy on social media, in order to drive conversation about the brand. However, brands would need to weigh the benefits of any accompanying engagement against the negative impact of the particular controversy.

Brands may also need to re-evaluate the methods that they employ to handle negative transmission. While focusing on CSI and PSF may be helpful in cases where these drivers are heavily implicated in the negative transmission, and the potential for recovery remains (as outlined by Kucuk, 2019), the findings of this thesis suggest that transmission may be less about the brand and more about the transmitter. This finding poses a challenge to brands: how do they

handle the negative transmission when it is not necessarily about them? One potential strategy is to avoid reinforcing this type of transmission. Reinforcement from the brand may facilitate the self-enhancement experienced by the transmitter, and make future negative transmission more likely (Foxall, 1999; Wells, 2014).

6.3 Limitations and Future Directions

The specific limitations of Studies 1-7 are discussed in detail in Chapter 4. In summary, the key limitations of Studies 1-7 were the inconsistent findings regarding the need to selfenhance and perceived social risk and benefit. This inconsistency may have been driven by the sampling approach taken, the stimuli employed, and/or the self-reported measurement of the likelihood of transmission. Studies 8 and 9 were designed to partially address these limitations, through the purposive sampling approach taken in Study 9, and the measurement and analysis of actual transmission behaviour in both Studies 8 and 9.

As discussed in Chapter 4, the initial quantitative studies in this thesis involved measuring *general* perceptions of social risk and benefit (e.g., '... risky to share *a* story...'). While this procedure was congruent with that of the previous literature (Eisingerich et al., 2015), it was possible that perceptions of social risk and benefit are inextricably linked to the nature of the WOM that is transmitted. To explore this possibility, future research could involve the measurement of *specific* perceptions of social risk and benefit associated with transmitting the experimental stimulus (e.g., '... risky to share *the* story...').

This need to explore specific perceptions of social risk and benefit was partially addressed by Study 8, in which specific perceptions of social risk and benefit associated with generation and transmission were measured. However, Study 8 was limited in that the forced choice between generation and transmission was not ecologically valid, therefore, the results

may not generalise to real-world WOM behaviour. Further research is needed to explore the factors that drive specific perceptions of social risk and benefit, and choice between transmission and generation in real-world contexts.

Real-world contexts could also be examined in future work aiming to determine the best means for marketers to influence consumers' need to self-enhance and perceptions of social risk and benefit. While this thesis provides evidence that these key variables should be considered when designing and managing viral and social media marketing efforts, the relative effectiveness of specific strategies to decrease the need to self-enhance and enhance the overall value of transmission for different consumers could be explored further. Future research in real-world settings could also refine the conceptualisation of transmission, by exploring how the gradual transformation of the initial message that is transmitted (Bebbington et al., 2017) occurs, and whether this forms a continuum between transmission and generation.

The potential for a continuum of synchronicity could also be explored by future research in more ecologically valid settings. The current thesis focused on synchronous (real-time, faceto-face) and asynchronous (written) communication, but further work could be done to understand the differences between precise modes of communication, for example, in-person communication vs online video communication. Both of these modes of communication are synchronous (Taipale, 2016), but the approximate nature of the face-to-face aspect of online video communication could be explored. This future research would benefit from (a) exploring whether synchronicity is a continuum, rather than a dichotomy between synchronous and asynchronous communication, and (b) determining how factors such as the need to self-enhance and perceived social risk and benefit might be implicated in this potential continuum.

Study 9 was exploratory in nature and while the first phase of the research involved a large number of Facebook comments, the interview phase of the research involved a small sample that was selected purposively. Future work can determine the causal nature of the relationships between key variables identified in this research, as well as the role of communication context in the negative transmission process. Such research would benefit from a more representative sample to increase the generalisability of the current findings, and allow for an examination of: (a) why some individuals do not engage in negative transmission, and (b) when negative transmission is not self-verifying or self-enhancing.

Further investigation is also recommended to understand how different brand-related factors are implicated in the negative transmission process. The current research did not specifically examine the impact of the magnitude or type of controversy on negative transmission. Future research that examines the type of brand and relationship that the transmitter has with the brand would also address the limitations of the current research, and provide insight for more specific and targeted managerial strategies. Study 9 also highlighted some key distinctions between negative transmission and more involved forms of anti-branding (e.g., anti-branding websites). However, a comprehensive study of the differences between these types of negative, brand-relevant communications would help explicate how each can be most effectively addressed.

6.4 Conclusion

Encouraging transmission behaviour is not only related to viral marketing success, it is also central to the success of digital and social media marketing campaigns in general (Drury, 2008). This thesis has clearly demonstrated that transmission behaviour is driven not only by arousal, but by the need to self-enhance and the impact of this inherent need on perceptions of

the social risk and benefit associated with transmission. This research is the first to establish that perceptions of social risk and benefit - and individuals' likelihood of transmission - differ depending on the audience size, audience type, and the synchronicity of the communication.

This research also demonstrates that negative transmission, as a casual form of antibranding, can serve as a covert method of self-enhancement through the propensity for negative transmission behaviour to facilitate a downward social comparison. In contrast to positive transmission, which serves to maintain and deepen existing social relationships, negative transmission can be a means for the transmitter to engage in debate and exert superiority in a way that de-emphasises the brand more than other forms of anti-branding.

This thesis contributes to the theoretical understanding of transmission behaviour, which is positioned as distinct from other forms of WOM. The findings also provide managerial guidance around content-creation and the management of digital and social media marketing. Messages that are designed to be transmitted by consumers should: (a) boost self-esteem, (b) have value for social relationships, and (c) encourage impactful transmissions via narrowcasting to strong ties. When managing the transmission of negative brand-relevant content, brands should avoid reinforcement of negative transmission, and harness consumers' propensity to engage in debate and downward social comparison.

For marketers, the increasing importance of online platforms in consumers' brand interactions and purchase decisions will lead to a continued need to understand how transmission behaviour can harm or help a brand. This thesis has provided a strong platform from which to further this understanding, highlighting the need to consider transmission as a distinct form of WOM in which consumers act as valuable contributors to the network of messages that shape brand meaning.

References

- Ahluwalia, R. (2002). How prevalent is the negativity effect in consumer environments? *Journal* of Consumer Research, 29, 270-279.
- Akhtar-Danesh, N. (2017). A comparison between major factor extraction and factor rotation techniques in Q-methodology. *Open Journal of Applied Sciences*, 7(04), 147.
- Alexandrov, A., Lilly, B., & Babakus, E. (2013). The effects of social-and self-motives on the intentions to share positive and negative word of mouth. *Journal of the Academy of Marketing Science*, 41(5), 531-546.
- Amabile, T. M. (1983). Brilliant but cruel: Perceptions of negative evaluators. Journal of Experimental Social Psychology, 19, 146-156.
- Alalwan, A. A., Rana, N. P., Dwivedi, Y. K., & Algharabat, R. (2017). Social media in marketing: A review and analysis of the existing literature. *Telematics and Informatics*, 34(7), 1177-1190.
- Allan, G. (2003). A critique of using grounded theory as a research method. *Electronic Journal* of Business Research Methods, 2(1), 1-10.
- Allwood, C. M. (2012). The distinction between qualitative and quantitative research methods is problematic. *Quality & Quantity*, *46*(5), 1417-1429.
- Amrhein, Valentin, Greenland, Sander, & McShane, Blake. (2019). Scientists rise up against statistical significance. *Nature*, 567(7748), 305-307.
- Andersen, S. M., & Chen, S. (2002). The relational self: an interpersonal social-cognitive theory. *Psychological Review*, 109(4), 619.
- Ang, L. (2014). Principles of integrated marketing communications. Port Melbourne: Cambridge University Press.

- Antwi, S. K., & Hamza, K. (2015). Qualitative and quantitative research paradigms in business research: A philosophical reflection. *European journal of Business and Management*, 7(3), 217-225.
- Aral, S., & Walker, D. (2011). Creating social contagion through viral product design: A randomized trial of peer influence in networks. *Management Science*, 57(9), 1623-1639.
- Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A metaanalytic review. *British Journal Of Social Psychology*, *40*(4), 471-499.
- Arndt, J. (1967). Role of product-related conversations in the diffusion of a new product. *Journal of Marketing Research*, 4(3), 291-295.
- Arndt, J. (1985). On making marketing science more scientific: role of orientations, paradigms, metaphors, and puzzle solving. *Journal of Marketing*, *49*(3), 11-23.
- Arthur, W. B. (1994). Inductive reasoning and bounded rationality. *The American Economic Review*, 84(2), 406-411.
- Ashley, C., & Tuten, T. (2015). Creative strategies in social media marketing: An exploratory study of branded social content and consumer engagement. *Psychology & Marketing*, 32(1), 15-27.
- Babones, S. (2016). Interpretive quantitative methods for the social sciences. *Sociology*, *50*(3), 453-469.
- Babić Rosario, A., Sotgiu, F., De Valck, K., & Bijmolt, T. H. (2016). The effect of electronic word of mouth on sales: A meta-analytic review of platform, product, and metric factors. *Journal of Marketing Research*, *53*(3), 297-318.
- Baker, M. J. (2000). Selecting a research methodology. The Marketing Review, 1(3), 373-397.

- Baker, A. M., Donthu, N., & Kumar, V. (2016). Investigating how word-of-mouth conversations about brands influence purchase and retransmission intentions. *Journal of Marketing Research*, 53(2), 225-239.
- Baškarada, S., & Koronios, A. (2018). A philosophical discussion of qualitative, quantitative, and mixed methods research in social science. *Qualitative Research Journal, 18*(1), 2-21.
- Banaji, M. R., & Prentice, D. A. (1994). The self in social contexts. Annual Review of Psychology, 45(1), 297-332.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall, Inc.
- Barasch, A., & Berger, J. (2014). Broadcasting and narrowcasting: How audience size affects what people share. *Journal of Marketing Research*, *51*(3), 286-299.
- Barbeito, R., & Simpson, T. L. (1991). Should level of measurement considerations affect the choice of statistic? *Optometry and Vision Science*, *68*(3), 236-242.
- Barker, A., Nancarrow, C., & Spackman, N. (2001). Informed eclecticism: a research paradigm for the twenty-first century. *International Journal of Market Research*, *43*(1), 3–27
- Barnham, C. (2015). Quantitative and qualitative research: Perceptual foundations. International Journal of Market Research, 57(6), 837-854.
- Batterton, K. A., & Hale, K. N. (2017). The Likert scale: What it is and how to use it. *Phalanx*, 50(2), 32-39.
- Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, *5*, 323-370.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497.

- Baumeister, R. F., & Tice, D. M. (1985). Self-esteem and responses to success and failure: Subsequent performance and intrinsic motivation. *Journal of Personality*, *53*(3), 450-467.
- Baveja, D. (2017). Projective techniques: Concept and controversies. *Recent Advances in Psychology*, 4(2), 124-138.
- Bebbington, K., MacLeod, C., Ellison, T. M., & Fay, N. (2017). The sky is falling: evidence of a negativity bias in the social transmission of information. *Evolution and Human Behavior*, 38(1), 92-101.
- Berkovich, I. (2018). Beyond qualitative/quantitative structuralism: the positivist qualitative research and the paradigmatic disclaimer. *Quality & Quantity, 52*(5), 2063-2077.
- Bettany, S., & Woodruffe-Burton, H. (2009). Working the limits of method: the possibilities of critical reflexive practice in marketing and consumer research. *Journal of Marketing Management*, 25(7-8), 661-679.
- Buechel, E. C., & Berger, J. (2018). Microblogging and the value of undirected communication. *Journal of Consumer Psychology*, 28(1), 40-55.
- Berger, J. (2011). Arousal increases social transmission of information. *Psychological Science*, 22(7), 891-893.
- Berger, J. (2013). Contagious: Why things catch on: Simon and Schuster.
- Berger, J. (2014). Word of mouth and interpersonal communication: A review and directions for future research. *Journal of Consumer Psychology*, *24*(4), 586-607.
- Berger, J., & Iyengar, R. (2013). Communication channels and word of mouth: How the medium shapes the message. *Journal of Consumer Research*, *40*(3), 567-579.
- Berger, J., & Milkman, K. L. (2012). What makes online content viral? *Journal of Marketing Research*, 49(2), 192-205.

- Berkowitz, L., & Donnerstein, E. (1982). External validity is more than skin deep: Some answers to criticisms of laboratory experiments. *American Psychologist*, *37*(3), 245.
- Berridge, C. W., & Arnsten, A. F. (2013). Psychostimulants and motivated behavior: arousal and cognition. *Neuroscience & Biobehavioral Reviews*, *37*(9), 1976-1984.
- Black, T. R. (1999). Doing quantitative research in the social sciences: An integrated approach to research design, measurement and statistics. Sage: London,
- Blodgett, J. G., Granbois, D. H., & Walters, R. G. (1993). The effects of perceived justice on complainants' negative word-of-mouth behavior and repatronage intentions. *Journal of Retailing*, 69(4), 399.
- Boddy, C. R. (2016). Sample size for qualitative research. *Qualitative Market Research*, 19(4), 426-432.
- Boksem, M. A., Meijman, T. F., & Lorist, M. M. (2005). Effects of mental fatigue on attention: an ERP study. *Cognitive Brain Research*, 25(1), 107-116.
- Bowen, G. A. (2008). Naturalistic inquiry and the saturation concept: a research note. *Qualitative Research*, 8(1), 137-152.
- Brannen, J. (Ed.). (2017). *Mixing methods: Qualitative and quantitative research*. Routledge.
- Brannick, T., & Coghlan, D. (2007). In defense of being "native": The case for insider academic research. *Organizational Research Methods*, *10*(1), 59-74.

Brown, J. D. (2011). Likert items and scales of measurement. Statistics, 15(1), 10-14.

Brown, J., Broderick, A. J., & Lee, N. (2007). Word of mouth communication within online communities: Conceptualizing the online social network. *Journal of Interactive Marketing*, 21(3), 2-20.

- Browne, M. W. (2001). An overview of analytic rotation in exploratory factor analysis. *Multivariate Behavioral Research*, *36*(1), 111–150.
- Bryman, A. (2006). Integrating quantitative and qualitative research: how is it done? *Qualitative Research*, *6*(1), 97-113.
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk a new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, 6(1), 3-5.
- Buscher, G., Cutrell, E., & Morris, M. R. (2009, April). What do you see when you're surfing?: using eye tracking to predict salient regions of web pages. In *Proceedings of the SIGCHI Conference On Human Factors In Computing Systems* (pp. 21-30). ACM.
- Caplan, S. E. (2002). Problematic Internet use and psychosocial well-being: development of a theory-based cognitive-behavioral measurement instrument. *Computers in Human Behavior*, 18(5), 553-575.
- Carins, J. E., Rundle-Thiele, S. R., & Fidock, J. J. (2016). Seeing through a Glass Onion: broadening and deepening formative research in social marketing through a mixed methods approach. *Journal of Marketing Management*, 32(11-12), 1083-1102.
- Carley, K. (1993). Coding choices for textual analysis: A comparison of content analysis and map analysis. *Sociological Methodology*, 23, 75-126.
- Castillo-Montoya, M. (2016). Preparing for interview research: The interview protocol refinement framework. *The Qualitative Report*, *21*(5), 811.
- Chandler, J., Mueller, P., & Paolacci, G. (2014). Nonnaïveté among Amazon Mechanical Turk workers: Consequences and solutions for behavioral researchers. *Behavior Research Methods*, 46(1), 112-130.

- Charlett, D., Garland, R., & Marr, N. (1995). How damaging is negative word of mouth. *Marketing Bulletin*, 6(1), 42-50.
- Chatterjee, P. (2001). Online reviews: do consumers use them? In M. C. Gilly, J. Myers-Levy, Eds., *Association for Consumer Research Proceedings Vol.* 28.
- Chen, Z. (2017). Social acceptance and word of mouth: How the motive to belong leads to divergent WOM with strangers and friends. *Journal of Consumer Research*, 44(3), 613-632.
- Chen, Z., & Berger, J. (2013). When, why, and how controversy causes conversation. *Journal of Consumer Research*, 40(3), 580-593.
- Chen, Y., & Xie, J. (2008). Online consumer review: Word-of-mouth as a new element of marketing communication mix. *Management Science*, 54(3), 477-491.
- Cheung, C. M., & Lee, M. K. (2012). What drives consumers to spread electronic word of mouth in online consumer-opinion platforms. *Decision Support Systems*, *53*(1), 218-225.
- Cheung, C. M., & Thadani, D. R. (2012). The impact of electronic word-of-mouth communication: A literature analysis and integrative model. *Decision Support Systems*, 54(1), 461-470.
- Cho, J., & Trent, A. (2006). Validity in qualitative research revisited. *Qualitative Research*, 6(3), 319-340.
- Chou, H. & Edge, N. (2012). They Are Happier and Having Better Lives than I Am: The Impact of Using Facebook on Perceptions of Others' Lives. *Cyberpsychology, Behavior and Social Networking, 15*(2), 117-121.
- Chowdhury, M. F. (2015). Coding, sorting and sifting of qualitative data analysis: Debates and discussion. *Quality & Quantity*, 49(3), 1135-1143.

- Chu, S. C., & Kim, Y. (2011). Determinants of consumer engagement in electronic word-ofmouth (eWOM) in social networking sites. *International Journal of Advertising*, 30(1), 47-75.
- Chung, E., & Alagaratnam, S. (2001). "Teach ten thousand stars how not to dance": a survey of alternative ontologies in marketing research. *Qualitative Market Research: An International Journal*, 4(4), 224-234.
- Clark, V. L. P., & Creswell, J. W. (2008). The mixed methods reader. Sage: London.
- Cook, D. A., & Beckman, T. J. (2006). Current concepts in validity and reliability for psychometric instruments: theory and application. *The American Journal of Medicine*, *119*(2), 7-15.
- Costello, L., McDermott, M. L., & Wallace, R. (2017). Netnography: Range of practices, misperceptions, and missed opportunities. *International Journal of Qualitative Methods*, 16(1), 1-12.
- Cowen, A. S., & Keltner, D. (2018). Clarifying the conceptualization, dimensionality, and structure of emotion: Response to Barrett and colleagues. *Trends in Cognitive Sciences*, 22(4), 274-276.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, *16*(3), 297-334.
- Cronbach, L. J., & Shavelson, R. J. (2004). My current thoughts on coefficient alpha and successor procedures. *Educational and Psychological Measurement*, 64(3), 391-418.
- Crouch, M., & McKenzie, H. (2006). The logic of small samples in interview-based qualitative research. *Social Science Information*, *45*(4), 483-499.

- Darley, W. K., Blankson, C., & Luethge, D. J. (2010). Toward an integrated framework for online consumer behavior and decision making process: A review. *Psychology & Marketing*, 27(2), 94-116.
- De Angelis, M., Bonezzi, A., Peluso, A. M., Rucker, D. D., & Costabile, M. (2012). On braggarts and gossips: A self-enhancement account of word-of-mouth generation and transmission. *Journal of Marketing Research*, 49(4), 551-563.
- De Bruyn, A., & Lilien, G. L. (2008). A multi-stage model of word-of-mouth influence through viral marketing. *International Journal of Research in Marketing*, *25*(3), 151-163.
- De Bruyn, L. L. (2004). Monitoring online communication: can the development of convergence and social presence indicate an interactive learning environment? *Distance Education*, 25(1), 67-81.
- De Matos, C. A., & Rossi, C. A. V. (2008). Word-of-mouth communications in marketing: A meta-analytic review of the antecedents and moderators. *Journal of the Academy of Marketing Science*, 36(4), 578-596.
- Denzin, N. K. (2010). Moments, mixed methods, and paradigm dialogs. *Qualitative Inquiry*, *16*(6), 419-427.
- Deshpande, R. (1983). "Paradigms lost": On theory and method in research in marketing. *Journal of Marketing*, 47(4), 101-110.
- Dobele, A., Lindgreen, A., Beverland, M., Vanhamme, J., & Van Wijk, R. (2007). Why pass on viral messages? Because they connect emotionally. *Business Horizons*, *50*(4), 291-304.
- Dolan, R. J. (2002). Emotion, cognition, and behavior. Science, 298(55), 1191-1194.
- Dolan, R., Conduit, J., Fahy, J., & Goodman, S. (2016). Social media engagement behaviour: A uses and gratifications perspective. *Journal of Strategic Marketing*, 24(3-4), 261-277.

- Domegan, Christine, McHugh, Patricia, Biroscak, Brian Joseph, Bryant, Carol, & Calis, Tanja. (2017). Non-linear causal modelling in social marketing for wicked problems. *Journal of Social Marketing*, 7(3), 305-329.
- Donmoyer, R., & Yennie-Donmoyer, J. (1995). Data as drama: Reflections on the use of readers theater as a mode of qualitative data display. *Qualitative Inquiry*, *1*(4), 402-428.
- Donoghue, S. (2000). Projective techniques in consumer research. *Journal of Consumer Sciences*, 28, 47-53.
- Drury, G. (2008). Opinion piece: Social media: Should marketers engage and how can it be done effectively? *Journal of Direct, Data and Digital Marketing Practice*, *9*(3), 274-277.
- Dubois, D., Bonezzi, A., & De Angelis, M. (2016). Sharing with friends versus strangers: How interpersonal closeness influences word-of-mouth valence. *Journal of Marketing Research*, 53(5), 712-727.
- Dutton, D. G., & Aron, A. P. (1974). Some evidence for heightened sexual attraction under conditions of high anxiety. *Journal of Personality and Social Psychology*, *30*(4), 510.
- Edris, T. A., & Meidan, A. (1990). On the reliability of psychographic research: encouraging signs for measurement accuracy and methodology in consumer research. *European Journal of Marketing*, 24(3), 23-41.
- Eisingerich, A. B., Chun, H. H., Liu, Y., Jia, H. M., & Bell, S. J. (2015). Why recommend a brand face-to-face but not on Facebook? How word-of-mouth on online social sites differs from traditional word-of-mouth. *Journal of Consumer Psychology*, 25, 120-128.
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook 'friends:' Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4), 1143-1168.
- Engel, J. F., Kegerreis, R. J., & Blackwell, R. D. (1969). Word-of-mouth communication by the innovator. *Journal of Marketing*, *33*(3), 15-19.
- Erkan, I., & Evans, C. (2016). The influence of eWOM in social media on consumers' purchase intentions: An extended approach to information adoption. *Computers in Human Behavior*, 61, 47-55.
- Essamri, A., McKechnie, S., & Winklhofer, H. (2019). Co-creating corporate brand identity with online brand communities: A managerial perspective. *Journal of Business Research*, *96*, 366-375.
- Felix, R., Rauschnabel, P. A., & Hinsch, C. (2017). Elements of strategic social media marketing: A holistic framework. *Journal of Business Research*, 70, 118-126.
- Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods*, 5(1), 80-92.
- Fetscherin, M. (2019). The five types of brand hate: How they affect consumer behavior. *Journal* of Business Research, 101, 116-127.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. London: Sage.
- Fielding, J., Fielding, N., & Hughes, G. (2013). Opening up open-ended survey data using qualitative software. *Quality & Quantity*, 47(6), 3261-3276.
- Filieri, R., Alguezaui, S., & McLeay, F. (2015). Why do travelers trust TripAdvisor?
 Antecedents of trust towards consumer-generated media and its influence on
 recommendation adoption and word of mouth. Tourism Management, 51, 174-185.

- Fine, G. A., & Deegan, J. G. (1996). Three principles of serendip: insight, chance, and discovery in qualitative research. *International Journal of Qualitative Studies in Education*, 9(4), 434-447.
- Firestone, W. A. (1987). Meaning in method: The rhetoric of quantitative and qualitative research. *Educational Researcher*, *16*(7), 16-21.
- Floyd, K., Freling, R., Alhoqail, S., Cho, H. Y., & Freling, T. (2014). How online product reviews affect retail sales: A meta-analysis. *Journal of Retailing*, 90(2), 217-232.
- Foxall, G. R. (1999). Putting consumer behaviour in its place: The behavioural perspective model research programme. *International Journal of Management Reviews*, 1(2), 133-158.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broadenand-build theory of positive emotions. *American Psychologist*, *56*(3), 218.
- Gensler, S., Völckner, F., Liu-Thompkins, Y., & Wiertz, C. (2013). Managing brands in the social media environment. *Journal of Interactive Marketing*, 27(4), 242-256.
- Gialdino, I. V. (2009). Ontological and Epistemological Foundations of Qualitative Research. *Qualitative Social Research*, 10(2).
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldire.
- Gneezy, A. (2017). Field experimentation in marketing research. *Journal of Marketing Research*, 54(1), 140-143.
- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report*, 8(4), 597-607.

- Goldsmith, R. E. (2008). *Electronic word-of-mouth*. In Electronic Commerce: Concepts, Methodologies, Tools, and Applications. IGI Global.
- Goldsmith, R. E., & Horowitz, D. (2006). Measuring motivations for online opinion seeking. *Journal of Interactive Advertising*, *6*(2), 2-14.
- Gómez, M., Lopez, C., & Molina, A. (2019). An integrated model of social media brand engagement. *Computers in Human Behavior*, *96*, 196-206.
- Goodman, J. K., Cryder, C. E., & Cheema, A. (2013). Data collection in a flat world: The strengths and weaknesses of Mechanical Turk samples. *Journal of Behavioral Decision Making*, 26(3), 213-224.
- Goulding, C. (1998). Grounded theory: the missing methodology on the interpretivist agenda. *Qualitative Market Research: An International Journal, 1*(1), 50-57.
- Goulding, C. (1999). Consumer research, interpretive paradigms and methodological ambiguities. *European Journal of Marketing*, *33*(10), 859-873.
- Goulding, C. (2002). Grounded theory: A practical guide for management, business and market researchers. London: Sage.
- Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 78(6), 1360-1380.
- Green, J., Willis, K., Hughes, E., Small, R., Welch, N., Gibbs, L., & Daly, J. (2007). Generating best evidence from qualitative research: the role of data analysis. *Australian & New Zealand Journal of Public Health*, 31(6), 545-550.
- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, 11(3), 255-274.

- Grégoire, Y., Salle, A., & Tripp, T. M. (2015). Managing social media crises with your customers: The good, the bad, and the ugly. *Business Horizons*, *58*(2), 173-182.
- Grewal, R., Mehta, R., & Kardes, F. R. (2004). The timing of repeat purchases of consumer durable goods: The role of functional bases of consumer attitudes. *Journal of Marketing Research*, 41(1), 101-115.
- Griggs, S. (1987). Analysing qualitative data. *Journal of the Market Research Society*, 29(1), 15–34.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. *Sage Handbook of Qualitative Research*, 2, 105.
- Gummesson, E. (2005). Qualitative research in marketing: Road-map for a wilderness of complexity and unpredictability. *European Journal of Marketing*, *39*(3), 309-327.
- Haenlein, M., & Libai, B. (2017). Seeding, referral, and recommendation: Creating profitable word-of-mouth programs. *California Management Review*, *59*(2), 68-91.
- Haig, B. D. (1995). Grounded theory as scientific method. Philosophy of Education, 28(1), 1-11.

Hair, J. F., & Lukas, B. (2014). Marketing research. McGraw-Hill.

- Hall, A. L., & Rist, R. C. (1999). Integrating multiple qualitative research methods (or avoiding the precariousness of a one-legged stool). Psychology & Marketing, 16(4), 291-304.
- Hamann, S. (2012). Mapping discrete and dimensional emotions onto the brain: controversies and consensus. *Trends in Cognitive Sciences*, *16*(9), 458-466.
- Hamet, J., & Michel, S. (2018). Rigor, relevance, and the knowledge "market". *European Business Review*, *30*(2), 183-201.
- Hanna, R., Rohm, A., & Crittenden, V. L. (2011). We're all connected: The power of the social media ecosystem. *Business Horizons*, 54(3), 265-273.

Hanson, D., & Grimmer, M. (2007). The mix of qualitative and quantitative research in major marketing journals, 1993-2002. *European journal of marketing*, *41*(1-2), 58-70.

Harding, J. (2018). Qualitative data analysis: From start to finish. Sage Publications, Inc.

- Harrison, R. L. (2013). Using mixed methods designs in the Journal of Business Research, 1990–2010. *Journal of Business Research*, 66(11), 2153-2162.
- Harrison, R. L., & Reilly, T. M. (2011). Mixed methods designs in marketing research. *Qualitative Market Research: An International Journal*, *14*(1), 7-26.
- Hayes, A. F. (2012). A versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper]. Retrieved from http://www.afhayes.com/public/process2012.pdf.
- Haynes, S. N., Richard, D., & Kubany, E. S. (1995). Content validity in psychological assessment: A functional approach to concepts and methods. *Psychological Assessment*, 7(3), 238.
- Heatherton, T., & Polivy, J. (1991). Development and validation of a scale for measuring state self-esteem. *Journal of Personality and Social Psychology*, *60*(6), 895-910.
- Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic word-ofmouth via consumer-opinion platforms: what motivates consumers to articulate themselves on the internet? *Journal of Interactive Marketing*, 18(1), 38-52.
- Huete-Alcocer, N. (2017). A literature review of word of mouth and electronic word of mouth: Implications for consumer behavior. *Frontiers in Psychology*, *8*, 1256.
- Hermann, A. D., Leonardelli, G. J., & Arkin, R. M. (2002). Self-doubt and self-esteem: A threat from within. *Personality and Social Psychology Bulletin*, *28*(3), 395-408.

- Higgins, J. P., & Thompson, S. G. (2002). Quantifying heterogeneity in a meta-analysis. *Statistics in Medicine*, *21*(11), 1539-1558.
- Hines, T., & Quinn, L. (2005). Socially constructed realities and the hidden face of market segmentation. *Journal of Marketing Management*, 21(5-6), 529-543.
- Hinz, O., Skiera, B., Barrot, C., & Becker, J. U. (2011). Seeding strategies for viral marketing:An empirical comparison. *Journal of Marketing*, 75(6), 55-71.
- Ho, J. Y., & Dempsey, M. (2010). Viral marketing: Motivations to forward online content. Journal of Business Research, 63(9-10), 1000-1006.
- Hogg, M. K., & Maclaran, P. (2008). Rhetorical issues in writing interpretivist consumer research. *Qualitative Market Research: An International Journal*, 11(2), 130-146.
- Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer brand engagement in social media: Conceptualization, scale development and validation. *Journal of Interactive Marketing*, 28(2), 149-165.
- Huang, H., Shen, H., Meng, Z., Chang, H., & He, H. (2019). Community-based influence maximization for viral marketing. *Applied Intelligence*, *49*(6), 2137-2150.
- Huber, F., Vollhardt, K., Matthes, I., & Vogel, J. (2010). Brand misconduct: Consequences on consumer–brand relationships. *Journal of Business Research*, 63(11), 1113-1120.
- Hudson, S., Roth, M. S., Madden, T. J., & Hudson, R. (2015). The effects of social media on emotions, brand relationship quality, and word of mouth: An empirical study of music festival attendees. *Tourism Management*, 47, 68-76.
- Hollenbeck, C. R., & Kaikati, A. M. (2012). Consumers' use of brands to reflect their actual and ideal selves on Facebook. *International Journal of Research in Marketing*, 29(4), 395-405.

- Hollenbeck, C. R., & Zinkhan, G. M. (2010). Anti-brand communities, negotiation of brand meaning, and the learning process: The case of Wal-Mart. *Consumption, Markets and Culture, 13*(3), 325-345.
- Hunt, S. D. (1991). Positivism and paradigm dominance in consumer research: toward critical pluralism and rapprochement. *Journal of Consumer Research*, *18*(1), 32-44.
- Hyde, K. F. (2000). Recognising deductive processes in qualitative research. *Qualitative Market Research*, 3(2), 82-89.
- Kaplan, A. M., & Haenlein, M. (2011). Two hearts in three-quarter time: How to waltz the social media/viral marketing dance. *Business Horizons*, 54(3), 253-263.
- Ketelaar, P., Janssen, L., Vergeer, M., Van Reijmersdal, E., Crutzen, R., & Van't Riet, J. (2016).
 The success of viral ads: Social and attitudinal predictors of consumer pass-on behavior on social network sites. *Journal of Business Research*, 69(7), 2603-2613.
- Killian, G., & McManus, K. (2015). A marketing communications approach for the digital era:Managerial guidelines for social media integration. *Business Horizons*, 58(5), 539-549.
- Kim, K., Yoon, S., & Choi, Y. K. (2019). The effects of eWOM volume and valence on product sales–an empirical examination of the movie industry. *International Journal of Advertising*, 38(3), 471-488.
- Koch, O. F., & Benlian, A. (2015). Promotional tactics for online viral marketing campaigns: how scarcity and personalization affect seed stage referrals. *Journal of Interactive Marketing*, 32, 37-5.
- Kozinets, R. V. (2002). The field behind the screen: Using netnography for marketing research in online communities. *Journal of Marketing Research*, *39*(1), 61-72.
- Kucuk, S. U. (2019). Brand Hate. Palgrave Macmillan.

- Kwasnicka, D., Dombrowski, S. U., White, M., & Sniehotta, F. (2016). Theoretical explanations for maintenance of behaviour change: a systematic review of behaviour theories. *Health Psychology Review*, 10(3), 277-296.
- Jackson, S. J., & Welles, B. F. (2015). Hijacking #myNYPD: Social media dissent and networked counterpublics. *Journal of Communication*, 65(6), 932-952.
- Janesick, V. J. (1994). The dance of qualitative research design: Metaphor, methodolatry, and meaning. In N. K. Denzin & Y. S. Lincoln (Eds.), Handbook of qualitative research. Sage Publications, Inc.
- Jansen, A. S., Van Nguyen, X., Karpitskiy, V., Mettenleiter, T. C., & Loewy, A. D. (1995). Central command neurons of the sympathetic nervous system: basis of the fight-or-flight response. *Science*, 270(5236), 644-646.
- Jensen, M. L., Averbeck, J. M., Zhang, Z., & Wright, K. B. (2013). Credibility of anonymous online product reviews: A language expectancy perspective. *Journal of Management Information Systems*, 30(1), 293-324.
- Jeong, H. J., Paek, H.-J., & Lee, M. (2013). Corporate social responsibility effects on social network sites. *Journal of Business Research*, 66(10), 1889-1895.
- Jin, B., Park, J. Y., & Kim, H.-S. (2010). What makes online community members commit? A social exchange perspective. *Behaviour & Information Technology*, 29(6), 587-599.
- Johanson, G. A., & Brooks, G. P. (2010). Initial scale development: sample size for pilot studies. *Educational and Psychological Measurement*, 70(3), 394-400.
- Johnson, A. R., Matear, M., & Thomson, M. (2011). A coal in the heart: Self-relevance as a postexit predictor of consumer anti-brand actions. *Journal of Consumer Research*, *38*(1), 108-125.

- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational researcher*, *33*(7), 14-26.
- Kaiser, H. F. (1958). The varimax criterion for analytic rotation in factor analysis. *Psychometrika*, *23*(3), 187-200.
- Kankanhalli, A., Tan, B. C., & Wei, K.-K. (2005). Contributing knowledge to electronic knowledge repositories: an empirical investigation. *MIS Quarterly*, *29*(1), 113-143.
- Keller, E. (2007). Unleashing the power of word of mouth: Creating brand advocacy to drive growth. *Journal of Advertising Research*, *47*(4), 448-452.
- Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*, 54(3), 241-251.
- King, R. A., Racherla, P., & Bush, V. D. (2014). What we know and don't know about online word-of-mouth: A review and synthesis of the literature. *Journal of Interactive Marketing*, 28(3), 167-183.
- Klassen, K. M., Borleis, E. S., Brennan, L., Reid, M., McCaffrey, T. A., & Lim, M. S. (2018).
 What people "like": analysis of social media strategies used by food industry brands,
 lifestyle brands, and health promotion organizations on Facebook and Instagram. *Journal* of Medical Internet Research, 20(6), 102-227.
- Krämer, N. C., & Winter, S. (2008). Impression management 2.0: The relationship of selfesteem, extraversion, self-efficacy, and self-presentation within social networking sites. *Journal of Media Psychology*, 20(3), 106-116.
- Krishnamurthy, S., & Kucuk, S. U. (2009). Anti-branding on the internet. *Journal of Business Research*, 62(11), 1119-1126.

- Krishnamurthy, S., & Kucuk, S. U. (2015). The Role of Consumer-Organized Anti-Brand Sites as Market Agents. In revolution in marketing: Market driving changes. Springer.
- Kucuk, S. U. (2008). Negative double jeopardy: The role of anti-brand sites on the internet. *Journal of Brand Management, 15*(3), 209-222.

Kuhn, T. (1962). The structure of scientific revolutions. Chicago: University of Chicago Press.

- Kuppens, P., Stouten, J., & Mesquita, B. (2009). Individual differences in emotion components and dynamics: Introduction to the special issue. *Cognition and Emotion*, 23(7), 1249-1258.
- Labuschagne, A. (2003). Qualitative research: Airy fairy or fundamental. *The Qualitative Report*, 8(1), 100-103.
- Labrecque, L. I., vor dem Esche, J., Mathwick, C., Novak, T. P., & Hofacker, C. F. (2015). The evolution of consumer empowerment in the social media era: A critical review. In Ideas in marketing: Finding the new and polishing the old. Springer.
- Landsheer, J. A., & Boeije, H. R. (2010). In search of content validity: Facet analysis as a qualitative method to improve questionnaire design. *Quality & Quantity*, 44(1), 59.
- Langley, A., & Klag, M. (2019). Being where? Navigating the involvement paradox in qualitative research accounts. *Organizational Research Methods*, 22(2), 515-538.
- Lawrence, J., & Tar, U. (2013). The use of grounded theory technique as a practical tool for qualitative data collection and analysis. *Electronic Journal of Business Research Methods*, 11(1), 29.
- Lawson, T. (2012). Ontology and the study of social reality: emergence, organisation, community, power, social relations, corporations, artefacts and money. *Cambridge Journal of Economics*, 36(2), 345-385.

Lazarus, R. S. (1984). On the primacy of cognition. American Psychologist, 39(2), 124-129.

Lazer, D. (2015). The rise of the social algorithm. *Science*, 348(6239), 1090-1091.

- Leary, M. R., & Kowalski, R. M. (1990). Impression management: A literature review and twocomponent model. *Psychological Bulletin*, *107*(1), 34.
- Lee, D., Hosanagar, K., & Nair, H. S. (2018). Advertising content and consumer engagement on social media: evidence from Facebook. *Management Science*, *64*(11), 5105-5131.
- Lee, J., Kim, S., & Ham, C. D. (2016). A double-edged sword? Predicting consumers' attitudes toward and sharing intention of native advertising on social media. *American Behavioral Scientist*, 60(12), 1425-1441.
- Leech, N. L., & Onwuegbuzie, A. J. (2007). An array of qualitative data analysis tools: A call for data analysis triangulation. *School Psychology Quarterly*, 22(4), 557.
- Leitch, S., & Merlot, E. (2017). Power relations within brand management: the challenge of social media. *Journal of Brand Management*, 1-8.
- Lerner, J. S., & Keltner, D. (2000). Beyond valence: Toward a model of emotion-specific influences on judgement and choice. *Cognition & Emotion*, *14*(4), 473-493.
- Levin, M. (1991). The reification-realism-positivism controversy in macromarketing: A philosopher's view. *Journal of Macromarketing*, *11*(1), 57-65.
- Lewis, S. J., & Russell, A. J. (2011). Being embedded: A way forward for ethnographic research. *Ethnography*, *12*(3), 398-416.
- Lewis-Beck, M., Bryman, A. E., & Liao, T. F. (2003). *The Sage encyclopedia of social science research methods*. Sage Publications.

- Lincoln, Y. S., Lynham, S. A., & Guba, E. G. (2011). Paradigmatic controversies, contradictions, and emerging confluences, revisited. *The Sage Handbook of Qualitative Research*, 4, 97-128.
- Liu-Thompkins, Y. (2012). Seeding viral content. *Journal of Advertising Research*, 52(4), 465-478.
- Lovett, M. J., Peres, R., & Shachar, R. (2013). On brands and word of mouth. *Journal of Marketing Research*, 50(4), 427-444.
- Luo, X. (2009). Quantifying the long-term impact of negative word of mouth on cash flows and stock prices. *Marketing Science*, *28*(1), 148-165.
- Ma, M., & Agarwal, R. (2007). Through a glass darkly: Information technology design, identity verification, and knowledge contribution in online communities. *Information Systems Research*, 18(1), 42-67.
- MacCallum, R. C., Widaman, K. F., Preacher, K. J., & Hong, S. (2001). Sample size in factor analysis: The role of model error. *Multivariate Behavioral Research*, 36(4), 611-637.
- Malär, L., Krohmer, H., Hoyer, W. D., & Nyffenegger, B. (2011). Emotional brand attachment and brand personality: The relative importance of the actual and the ideal self. *Journal of Marketing*, 75(4), 35-52.
- Malhotra, N., Hall, J., Shaw, M., & Oppenheim, P. (2006). *Essentials of Marketing Research*. Pearson: Frenchs Forest.
- Mandel, N. (2003). Shifting selves and decision making: The effects of self-construal priming on consumer risk-taking. *Journal of Consumer Research*, *30*, 30–40.
- Markus, H., & Wurf, E. (1987). The dynamic self-concept: A social psychological perspective. Annual Review of Psychology, 38(1), 299-337.

- Marsden, D., & Littler, D. (1996). Evaluating alternative research paradigms: A market-oriented framework. *Journal of Marketing Management*, *12*(7), 645-655.
- Maurer, T. J., & Pierce, H. R. (1998). A comparison of Likert scale and traditional measures of self-efficacy. *Journal of Applied Psychology*, *83*(2), 324.
- Mauss, I. B., & Robinson, M. D. (2009). Measures of emotion: A review. *Cognition and Emotion*, 23(2), 209-237.
- Mays, N., & Pope, C. (1995). Qualitative research: rigour and qualitative research. *British Medical Journal, 311*(6997), 109-112.
- McCarthy, L., Stock, D., & Verma Ph D, R. (2012). How travelers use online and social media channels to make hotel-choice decisions. *Cornell Hospitality Quarterly*, *53*(3), 183-186.
- McCraty, R., Atkinson, M., Tiller, W. A., Rein, G., & Watkins, A. D. (1995). The effects of emotions on short-term power spectrum analysis of heart rate variability. *The American Journal of Cardiology*, 76(14), 1089-1093.
- McHugh, M. L. (2012). Interrater reliability: the kappa statistic. *Biochemia Medica*, 22(3), 276-282.
- McShane, B. B., & Böckenholt, U. (2016). Planning sample sizes when effect sizes are uncertain: The power-calibrated effect size approach. *Psychological Methods*, *21*(1), 47.
- Mehdizadeh, S. (2010). Self-presentation 2.0: Narcissism and self-esteem on Facebook. *Cyberpsychology, Behavior, and Social Networking, 13*(4), 357-364.
- Melsen, W. G., Bootsma, M. C. J., Rovers, M. M., & Bonten, M. J. M. (2014). The effects of clinical and statistical heterogeneity on the predictive values of results from metaanalyses. *Clinical Microbiology and Infection*, 20(2), 123-129.

- Meuter, M. L., McCabe, D. B., & Curran, J. M. (2013). Electronic word-of-mouth versus interpersonal word-of-mouth: are all forms of word-of-mouth equally influential?. *Services Marketing Quarterly*, 34(3), 240-256.
- Michalska, A. (2015). Gestalt and Science. Kuhn's Model of Scientific Change in the Light of Gestalt Theory. *Dialogue and Universalism*, *4*, 131-144.
- Midgley, G., Nicholson, J. D., & Brennan, R. (2017). Dealing with challenges to methodological pluralism: The paradigm problem, psychological resistance and cultural barriers. *Industrial Marketing Management*, 62, 150-159.
- Miller, R., & Lammas, N. (2010). Social media and its implications for viral marketing. *Asia Pacific Public Relations Journal, 11*(1), 1-9.
- Milliken, J. (2001). Qualitative research and marketing management. *Management Decision*, *39*(1), 71-78.
- Mochalova, A., & Nanopoulos, A. (2014). A targeted approach to viral marketing. *Electronic Commerce Research and Applications, 13*(4), 283-294.
- Morgan, D. L. (2007). Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and quantitative methods. *Journal of Mixed Methods Research*, *1*(1), 48-76.
- Morgan, A. K., & Drury, V. B. (2003). Legitimising the subjectivity of human reality through qualitative research method. *The Qualitative Report*, 8(1), 70-80.
- Morse, J. M., Barret, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, 1, 13–22.

- Muralidharan, S., Yoon, H. J., Sung, Y., Miller, J., & Lee, A. (2017). Following the breadcrumbs: An analysis of online product review characteristics by online shoppers. *Journal of Marketing Communications*, 23(2), 113-134.
- Nakata, C., & Huang, Y. (2005). Progress and promise: the last decade of international marketing research. *Journal of Business Research*, *58*(5), 611-618.
- Neelankavil, J. P. (2015). *Primary data collection: Exploratory research*. In International business research. Routledge.
- Nevo, B. (1985). Face validity revisited. Journal of Educational Measurement, 22(4), 287-293.
- Niblo, D. M., & Jackson, M. S. (2004). Model for combining the qualitative emic approach with the quantitative derived etic approach. *Australian Psychologist*, *39*(2), 127-133.
- Niedenthal, P. M., Halberstadt, J. B., & Innes-Ker, Å. H. (1999). Emotional response categorization. *Psychological Review*, *106*(2), 337.
- Ochsner, K. N., & Gross, J. J. (2005). The cognitive control of emotion. *Trends in Cognitive Sciences*, *9*(5), 242-249.
- Onwuegbuzie, A. J., & Leech, N. L. (2005). On becoming a pragmatic researcher: The importance of combining quantitative and qualitative research methodologies. *International Journal of Social Research Methodology*, 8(5), 375-387.
- Oppewal, H. (2010). Causal research. Wiley International Encyclopedia of Marketing.
- Osborne, J. W., & Costello, A. B. (2009). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Pan-Pacific Management Review*, *12*(2), 131-146.
- Ott, L., & Theunissen, P. (2015). Reputations at risk: Engagement during social media crises. *Public Relations Review*, *41*(1), 97-102.

- Packard, G., & Wooten, D. (2013). Compensatory Communication: Consumer Knowledge Discrepancies and Knowledge Signaling in Word-Of-Mouth. Advances in Consumer Research, 41, 434-450.
- Pan, Z., Lu, Y., Wang, B., & Chau, P. Y. (2017). Who do you think you are? Common and differential effects of social self-identity on social media usage. *Journal of Management Information Systems*, 34(1), 71-101.
- Paolacci, G., & Chandler, J. (2014). Inside the turk: Understanding mechanical turk as a participant pool. *Current Directions in Psychological Science*, *23*(3), 184-188.
- Patomäki, H., & Wight, C. (2000). After postpositivism? The promises of critical realism. International Studies Quarterly, 44(2), 213-237.
- Percy, W. H., Kostere, K., & Kostere, S. (2015). Generic qualitative research in psychology. *The Qualitative Report*, 20(2), 76-85.
- Petrescu, M., & Korgaonkar, P. (2011). Viral advertising: Definitional review and synthesis. *Journal of Internet Commerce*, *10*(3), 208-226.
- Pfeffer, J., Zorbach, T., & Carley, K. M. (2014). Understanding online firestorms: Negative word-of-mouth dynamics in social media networks. *Journal of Marketing Communications*, 20(1-2), 117-128.
- Pieters, R. (2017). Meaningful mediation analysis: Plausible causal inference and informative communication. *Journal of Consumer Research*, *44*(3), 692-716.
- Plutchik, R. (2003). *Emotions and life: Perspectives from psychology, biology, and evolution*. American Psychological Association.
- Powell, A., Camilleri, A., Dobele, A., & Stavros, C. (2017). Developing a scale for the perceived social benefits of sharing. *Journal of Consumer Marketing*, *34*(6), 496-504.

Punch, K. F. (2003). Survey research: The basics. Sage Publications, Inc.

- Quan-Haase, A., & Young, A. L. (2010). Uses and gratifications of social media: A comparison of Facebook and instant messaging. *Bulletin of Science, Technology & Society*, 30(5), 350-361.
- Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences*, 6(2), 1-5.
- Rattray, J., & Jones, M. C. (2007). Essential elements of questionnaire design and development. *Journal of Clinical Nursing*, *16*(2), 234-243.
- Reissner, S. C. (2018). Interactional Challenges and Researcher Reflexivity: Mapping and Analysing Conversational Space. *European Management Review*, *15*(2), 205-219.
- Richins, M. L. (1983). Negative word-of-mouth by dissatisfied consumers: A pilot study. *Journal of Marketing*, 47(1), 68-78.
- Romani, S., Grappi, S., Zarantonello, L., & Bagozzi, R. P. (2015). The revenge of the consumer!
 How brand moral violations lead to consumer anti-brand activism. *Journal of Brand Management*, 22(8), 658-672.
- Rosenberg, J., & Egbert, N. (2011). Online impression management: personality traits and concerns for secondary goals as predictors of self-presentation tactics on Facebook. *Journal of Computer-Mediated Communication*, 17(1), 1-18.
- Rosenberg, M. (1965). Society and the Adolescent Self-Image. Princeton, NJ: Princeton University Press.

- Roy, G., Datta, B., & Mukherjee, S. (2019). Role of electronic word-of-mouth content and valence in influencing online purchase behavior. *Journal of Marketing Communications*, 25(6), 661-684.
- Rousson, V., Gasser, T., & Seifert, B. (2002). Assessing intrarater, interrater and test–retest reliability of continuous measurements. *Statistics in Medicine*, *21*(22), 3431-3446.
- Rudman, L. A., Dohn, M. C., & Fairchild, K. (2007). Implicit self-esteem compensation: automatic threat defense. *Journal of Personality and Social Psychology*, 93(5), 798.
- Ryan, G. W., & Bernard, H. R. (2003). Techniques to identify themes. *Field Methods*, 15(1), 85-109.
- Saenger, C., Thomas, V. L., & Bock, D. E. (2020). Compensatory word of mouth as symbolic self-completion When talking about a brand can restore consumers' self-perceptions after self-threat. *European Journal of Marketing*, 54(4), 671-690.
- Sandlin, J. A. (2007). Netnography as a consumer education research tool. *International Journal of Consumer Studies*, *31*(3), 288-294.
- Sawyer, A. G., & Ball, A. D. (1981). Statistical power and effect size in marketing research. *Journal of Marketing Research*, 18(3), 275-290.
- Schlenker, B. R., Britt, T. W., & Pennington, J. (1996). Impression regulation and management:Highlights of a theory of self-identification. In R. M. Sorrentino & E. T. Higgins (Eds.),Handbook of motivation and cognition. The Guilford Press.
- Sen, S., & Lerman, D. (2007). Why are you telling me this? An examination into negative consumer reviews on the Web. *Journal of Interactive Marketing*, 21, 76-94.
- Sezer, O., Gino, F., & Norton, M. I. (2018). Humblebragging: A distinct—and ineffective—selfpresentation strategy. *Journal of Personality and Social Psychology*, 114(1), 52.

- Schaeffer, N. C., & Presser, S. (2003). The science of asking questions. Annual Review of Sociology, 29, 65-88.
- Schulze, C., Schöler, L., & Skiera, B. (2014). Not all fun and games: Viral marketing for utilitarian products. *Journal of Marketing*, 78(1), 1-19.
- Schram, A. (2005). Artificiality: The tension between internal and external validity in economic experiments. *Journal of Economic Methodology*, *12*(2), 225-237.
- Shaikh, A., Modi, P., Yadav, V., & Kumar, P. (2018). A paradigmatic and methodological examination of market orientation research. *The Marketing Review*, *18*(3), 368-401.
- Sharma, S., & Verma, H. V. (2018). Social media marketing: Evolution and change. In Social Media Marketing. Palgrave Macmillan, Singapore.
- Shaw, E. (1999). A guide to the qualitative research process: evidence from a small firm study. *Qualitative Market Research*, 2(2), 59-70.
- Shrivastava, S., & Kale, S. H. (2003). Philosophising on the elusiveness of relationship marketing theory in consumer markets: a case for reassessing ontological and epistemological assumptions. *Australasian Marketing Journal*, 11(3), 61-71.
- Simon, H. A. (1967). Motivational and emotional controls of cognition. *Psychological Review*, 74(1), 29.
- Singh, A. S. (2017). Common procedures for development, validity and reliability of a questionnaire. *International Journal of Economics, Commerce and Management*, 5(5), 790-801.
- Singh, S., & Sonnenburg, S. (2012). Brand performances in social media. *Journal of Interactive Marketing*, 26(4), 189-197.

- Sommer, K. L., & Baumeister, R. F. (2002). Self-evaluation, persistence, and performance following implicit rejection: The role of trait self-esteem. *Personality and Social Psychology Bulletin*, 28(7), 926-938.
- Sparks, B. A., & Browning, V. (2010). Complaining in cyberspace: The motives and forms of hotel guests' complaints online. *Journal of Hospitality Marketing & Management*, 19(7), 797-818.
- Spears, N., & Singh, S. N. (2004). Measuring attitude toward the brand and purchase intentions. *Journal of Current Issues & Research in Advertising*, 26(2), 53-66.
- Spencer, S. J., Zanna, M. P., & Fong, G. T. (2005). Establishing a causal chain: why experiments are often more effective than mediational analyses in examining psychological processes. *Journal of Personality and Social Psychology*, 89(6), 845.
- Stebbins, R. A. (2001). *Exploratory research in the social sciences*. Sage Publications, Inc.
- Steffes, E. M., & Burgee, L. E. (2009). Social ties and online word of mouth. *Internet Research*, *19*(1), 42-59.
- Stephen, A. T., & Lehmann, D. R. (2016). How word-of-mouth transmission encouragement affects consumers' transmission decisions, receiver selection, and diffusion speed. *International Journal of Research in Marketing*, 33(4), 755-766.
- Stokes, D., & Bergin, R. (2006). Methodology or "methodolatry"? An evaluation of focus groups and depth interviews. *Qualitative Market Research*, *9*(1), 26-37.
- Stutzman, F., & Kramer-Duffield, J. (2010). Friends only: examining a privacy-enhancing behavior in facebook. Paper presented at the Proceedings of the SIGCHI Conference on Human Factors in Computing Systems.

- Suls, J., Martin, R., & Wheeler, L. (2002). Social comparison: Why, with whom, and with what effect? *Current Directions in Psychological Science*, *11*(5), 159-163.
- Sundaram, D.S., Mitra, K. & Webster, C. (1998), 'Word-of-mouth communications: a motivational analysis' *Advances in Consumer Research*, *25*, 527–531.
- Swann, W. B., Polzer, J. T., Seyle, D. C., & Ko, S. J. (2004). Finding value in diversity: Verification of personal and social self-views in diverse groups. *Academy of Management Review*, 29(1), 9-27.
- Taipale, S. (2016). Synchronicity matters: defining the characteristics of digital generations. Information, Communication & Society, 19(1), 80-94.
- Taylor, S. E., Klein, L. C., Lewis, B. P., Gruenewald, T. L., Gurung, R. A., & Updegraff, J. A. (2000). Biobehavioral responses to stress in females: tend-and-befriend, not fight-orflight. *Psychological Review*, 107(3), 411.
- Taylor, D. G., Strutton, D., & Thompson, K. (2012). Self-enhancement as a motivation for sharing online advertising. *Journal of Interactive Advertising*, 12(2), 13-28.
- Tafarodi, R. W., Marshall, T. C., & Milne, A. B. (2003). Self-esteem and memory. *Journal of Personality and Social Psychology*, 84(1), 29.
- Tesch, R. (2013). Qualitative research: Analysis types and software. Routledge.
- Tesser, A. (1988). Toward a self-evaluation maintenance model of social behavior. *Advances in Experimental Social Psychology*, 21, 181-227.
- Tesser, A. (2000). On the confluence of self-esteem maintenance mechanisms. *Personality and Social Psychology Review*, 4(4), 290-299.

- Teven, J. J. (2008). An examination of perceived credibility of the 2008 presidential candidates: Relationships with believability, likeability, and deceptiveness. *Human Communication*, 11, 391-408.
- Thayer, R. E. (1986). Activation-deactivation adjective check list: Current overview and structural analysis. *Psychological Reports*, *58*(2), 607-614.
- Thomas, J. B., Peters, C. O., Howell, E. G., & Robbins, K. (2012). Social media and negative word of mouth: strategies for handing unexpecting comments. *Atlantic Marketing Journal*, *1*(2), 7.
- Tracey, T. J. (2000). Issues in the analysis and interpretation of quantitative data:
 Deinstitutionalization of the null hypothesis test. In S. D. Brown & R. W. Lent (Eds.),
 Handbook of counseling psychology. John Wiley & Sons Inc.
- Triandis, H. C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review*, *96*(3), 506.
- Trusov, M., Bucklin, R. E., & Pauwels, K. (2009). Effects of word-of-mouth versus traditional marketing: Findings from an internet social networking site. *Journal of Marketing*, 73(5), 90-102.
- Tsimonis, G., & Dimitriadis, S. (2014). Brand strategies in social media. *Marketing Intelligence and Planning*, *32*(3), 328-344.
- Tuohy, D., Cooney, A., Dowling, M., Murphy, K., & Sixsmith, J. (2013). An overview of interpretive phenomenology as a research methodology. *Nurse Researcher*, 20(6), 17-20.
- Valentini, C. (2015). Is using social media 'good' for the public relations profession? A critical reflection. *Public Relations Review*, *41*(2), 170-177.

- Velleman, P. F., & Wilkinson, L. (1993). Nominal, ordinal, interval, and ratio typologies are misleading. *The American Statistician*, 47(1), 65-72.
- Vogel, E. A., Rose, J. P., Roberts, L. R., & Eckles, K. (2014). Social comparison, social media, and self-esteem. *Psychology of Popular Media Culture*, *3*(4), 206.
- Voorhees, C. M., Brady, M. K., Calantone, R., & Ramirez, E. (2016). Discriminant validity testing in marketing: an analysis, causes for concern, and proposed remedies. *Journal of the Academy of Marketing Science*, 44(1), 119-134.
- Walther, J. B. (2007). Selective self-presentation in computer-mediated communication:Hyperpersonal dimensions of technology, language, and cognition. *Computers in Human Behavior*, 23(5), 2538-2557.
- Walther, J. B., Loh, T., & Granka, L. (2005). Let me count the ways the interchange of verbal and nonverbal cues in computer-mediated and face-to-face affinity. *Journal of Language and Social Psychology*, 24(1), 36-65.
- Wan, S., Koh, R., Ong, A., & Pang, A. (2015). Parody social media accounts: Influence and impact on organizations during crisis. *Public Relations Review*, 41(3), 381-385.
- Weber, E. U., Blais, A. R., & Betz, N. E. (2002). A domain-specific risk-attitude scale: Measuring risk perceptions and risk behaviors. *Journal of Behavioral Decision Making*, 15(4), 263-290.
- Weingarten, E., & Berger, J. (2017). Fired up for the future: How time shapes sharing. *Journal of Consumer Research*, 44(2), 432-447.
- Weinreich, N. K. (1996). A more perfect union: Integrating quantitative and qualitative methods in social marketing research. *Social Marketing Quarterly*, *3*(1), 53-58.

- Wells, V. K. (2014). Behavioural psychology, marketing and consumer behaviour: a literature review and future research agenda. *Journal of Marketing Management*, 30(11-12), 1119-1158.
- Westbrook, R. A. (1987). Product/consumption-based affective responses and postpurchase processes. *Journal of Marketing Research*, 24(3), 258-270.
- Wilcox, K., Kim, H. M., & Sen, S. (2009). Why do consumers buy counterfeit luxury brands? Journal of Marketing Research, 46(2), 247-259.
- Whiting, A., & Williams, D. (2013). Why people use social media: a uses and gratifications approach. *Qualitative Market Research*, *16*(4), 362-369.
- Wood, J. V., Giordano-Beech, M., Taylor, K. L., Michela, J. L., & Gaus, V. (1994). Strategies of social comparison among people with low self-esteem: Self-protection and selfenhancement. *Journal of Personality and Social Psychology*, 67(4), 713.
- Worthington, R. L., & Whittaker, T. A. (2006). Scale development research: A content analysis and recommendations for best practices. *The Counseling Psychologist*, *34*(6), 806-838.
- Yang, L., & Unnava, H. R. (2016). Ambivalence, selective exposure, and negativity effect. *Psychology & Marketing*, 33(5), 331-343.
- Yilmaz, K. (2013). Comparison of quantitative and qualitative research traditions:
 Epistemological, theoretical, and methodological differences. *European Journal of Education*, 48(2), 311-325.
- Zarantonello, L., Romani, S., Grappi, S., & Bagozzi, R. P. (2016). Brand hate. *Journal of Product & Brand Management*, 25(1), 11-25.
- Zikmund, W. G., D'Alessandro, S., Winzar, H., Lowe, B., & Babin, B. (2017). *Marketing research*. Cengage Learning.

- Zyphur, M. J., & Pierides, D. C. (2019). Statistics and probability have always been value-laden:An historical ontology of quantitative research methods. *Journal of Business Ethics*, *1*(18), 1-18.
- Zywica, J., & Danowski, J. (2008). The faces of Facebookers: Investigating social enhancement and social compensation hypotheses; predicting Facebook[™] and offline popularity from sociability and self-esteem, and mapping the meanings of popularity with semantic networks. *Journal of Computer-Mediated Communication*, *14*(1), 1-34.

Appendix A: Study 1 Stimuli

Happiness-Eliciting Story:

Organic Dog Food Company Saves an Entire Shelter, Adopts 52 Dogs

AUGUST 28 2015, 9:45AM

Aunty Jen, a premium pet food producer from San Francisco has brought joy to an animal shelter.

The company, whose signature line is "Gourmet Gobbles" an organic dog food, wanted to donate money to a good cause in return for some positive publicity.

What they got instead was a joyful surprise.

Company marketing director Mary Brunnen identified the Four Paws rescue shelter in Oakland, CA, as a suitable partner in this campaign and offered to give 1 dollar from every package of Gourmet Gobbles sold to the shelter during the month of May. This timing coincided with the Shelter's "adopt-a-pup" campaign, which has been operating for 20 years.

Ms Brunnen approached the shelter, asking to access the dogs residing there for a photo shoot for its website and billboards so it could promote the campaign.

This most recent adopt-a-pup campaign was all the more important to Four Paws. Due to financial difficulties Four Paws were planning to close their doors shortly after the campaign. The fate of any dogs left at Four Paws afterwards was uncertain. The manager of the shelter Charlie Wiseman said "If we didn't find homes for these dogs during this campaign, they would have had nowhere to go. Other local shelters were completely full, we were worried that the dogs would not be able to be saved."

This made the outcome of the Aunty Jen's photoshoot at Four Paws all the more joyful. Upon hearing of their plight, and meeting the adorable dogs in Four Paws' care, Aunty Jen's staff banded together to make an incredible decision. All of the animals used in the photo shoot, some 52 dogs, were adopted by Aunty Jen workers. To add to the joy, Aunty Jen's ended up donating \$200,000 to the shelter at the end of the month, citing record sales as the reason. "We had a great month," said Ms Brunnen. "What can I say? We just all fell in love with the dogs. Everyone in the company who saw one wanted to adopt one, so in the end we took them all".



Not only Aunty Jen's staff fell in love with Four Paws' dogs. When a lighting rig collapsed on the set of the photo shoot a rescue dog named Scooter demonstrated bravery and the spirit of true friendship. As the equipment came crashing down, Scooter leapt underneath it to save Peanut, his diminutive "best buddy" from the shelter. Luckily both dogs escaped injury, and their mismatched friendship was captured on film during the shoot. Scooter and Peanut went on to be the faces of the adopt-a-pup campaign, which saw record donations to Four Paws.

Peanut (left) and Scooter. These "best buddies" were adopted together by Mary Brunnen.

Mr Wiseman was naturally elated. "This is beyond our wildest dreams" he said. "Not only did this company provide us with the financing to go through another two years they also saved all our current dogs. Through their generosity, this company has not only provided a new life for these dogs, but a new life for this shelter"

Anger-Eliciting Story:

Organic Dog Food Company Implicated in the Death of Rescue Dogs

AUGUST 28 2015, 9:45AM

Skilo, a premium pet food producer from San Francisco has enraged animal lovers everywhere.

The company, whose signature line is "Gourmet Gobbles" an organic dog food that sells for approximately \$5 per serving, wanted to donate money to a good cause in return for some positive publicity.

What they got instead was a disaster that has resulted in the death of two dogs and considerable damage to the operations of a respected animal shelter

Company marketing director Charlie Wiseman identified the Four Paws rescue shelter in Oakland, CA, as a suitable partner in this campaign and offered to give 1 dollar from every package of Gourmet Gobbles sold to Four Paws during the month of May. This timing coincided with the shelter's "adopt-a-pup" campaign, which has been operating successfully for over 20 years.

Mr Wiseman approached the shelter, asking to access the dogs residing there for a photo shoot for its website and billboards so it could promote the Skilo brand and the adopt-a-pup campaign.

The annual adopt-a-pup campaign was integral to the ongoing success of Four Paws. Eighty percent of yearly adoptions occurred during these campaigns, which also helped to draw attention to the shelter and attract donations.

Rather than increasing exposure related to the adopt-a-pup campaign, the shelter's partnership with Skilo turned into a nightmare. After a Skilo representative picked up three of the Four Paws rescue dogs from the shelter and took them to a local studio for the photo shoot, two of the dogs, Scooter and Peanut, were severely injured when a lighting rig collapsed. The accident was allegedly due to poor supervision of the dogs by Skilo staff.

Four Paws staff were shocked at Skilo's handling of the incident. The lighting rig collapsed on Scooter and Peanut at approximately 10:00am, yet the dogs were not taken to a local veterinary clinic for at least one hour as Skilo staff sought to source replacement lights. Scooter and Peanut were severely injured and, according to the veterinarian who treated them, the delay in receiving proper treatment was considered a factor in their death.



the campaign.

In addition to denying responsibility for the death of the dogs, Skilo refused to help Four Paws pay for the vet bills incurred by the accident, claiming that the matter was with their insurers, who had denied liability.

Scooter (right) and Peanut on an excursion from the Four Paws Shelter

Due to the drama on set, the photoshoot was eventually abandoned. As Four Paws had been counting on Skilo to help promote adopt-a-pup, this resulted in the failure of

Ms Brunnen explained "we are a non-profit organization. We usually rely on the generosity of our donors to run adopt-a-pup. Between the trauma of the death of Scooter and Peanut, and the lack of exposure by Skilo, adopt-a-pup was a complete failure. This company is not only responsible for the painful deaths of two dogs, but also for the fact that we were unable to rehome any dogs during adopt-a-pup."

To compound the problem, Skilo did not end up donating any money to the shelter at the end of the month, citing slow sales as the reason. "We had a bad month," said Mr Wiseman. "What can I say? We are sorry for the dogs, but it was an accident and if the shelter had sent us two more placid dogs it would not have happened. Those two were running around everywhere and one of the photographers had an expensive lighting rig knocked over."

Ms Brunnen was naturally enraged. "We acted in good faith and were totally deceived" she said. "Not only did this company fail to provide us with the financing they had promised, they also, through their own negligence, killed two of our dogs!"

Neutral Story:

Organic Dog Food Company Donates to Shelter

AUGUST 28 2015, 9:45AM

Aunty Jen, a premium pet food producer from San Francisco has donated money to an animal shelter.

The company, whose signature line is "Gourmet Gobbles", an organic dog food that sells for approximately \$5 per serving, wanted to donate money to a good cause in return for some positive publicity.

Company marketing director, Mary Brunnen, identified the Four Paws rescue shelter in Oakland, CA, as a suitable partner in this campaign and offered to give 50 cents from every package of Gourmet Gobbles sold to the shelter during the month of May.

Ms Brunnen approached the shelter, asking to access the dogs residing there for a photo shoot for its website and billboards so it could promote the campaign. The manager of the shelter, Charlie Wiseman obliged.

Aunty Jen's ended up donating \$50 to the shelter at the end of the month. "We had a fair month," said Ms Brunnen "Although it was not as much as we were expecting, so I am not sure we would do this kind of promotion again.

Mr Wiseman was satisfied with the outcome. "We were hoping for a bit more money" he said. "Although a donation of any amount is appreciated."

Appendix B: Questionnaire Items

Emotional Arousal (Berger & Milkman, 2012):

How do you feel right now?

- 1. Very passive/very active
- 2. Very mellow/very fired up
- 3. Very low energy/very high energy

Self-Esteem (Rosenberg, 1965):

- 1. On the whole, I am satisfied with myself.
- 2. At times, I think I am no good at all.
- 3. I feel that I have a number of good qualities.
- 4. I am able to do things as well as most other people.
- 5. I feel I do not have much to be proud of.
- 6. I certainly feel useless at times.
- 7. I feel that I'm a person of worth, at least on an equal plane with others.
- 8. I wish I could have more respect for myself.
- 9. All in all, I am inclined to feel that I am a failure.
- 10. I take a positive attitude toward myself.

Need to Self-Enhance (refined for Studies 5, 6, 7)

Reflecting on the experiences and feelings that you wrote about in the essay writing task, how do you feel about yourself?

- 1. Unsatisfied with yourself Satisfied with yourself
- 2. Proud of yourself Not proud of yourself
- 3. Bad about yourself Good about yourself
- 4. An unsuccessful person A successful person
- 5. Confident about yourself Not confident about yourself
- 6. A worthless person A person of worth
- 7. A person with poor qualities A person with good qualities
- 8. Worse than most other people Better than most other people

Likelihood of Transmission (adapted from Berger & Milkman, 2012):

How likely would you be to:

- 1. Share publicly on your Facebook wall for all of your friends to see?
- 2. Share this with a large group which consists of your close friends and acquaintances if they were sitting with you right now?

- 3. Share privately using email or Facebook Messenger with a close friend?
- 4. Share this with an acquaintance using email or Facebook Messenger?
- 5. Share this with a close friend if they were sitting with you right now?
- 6. Share this with an acquaintance if they were sitting with you right now?
- 7. Share this with a large group of acquaintances if they were sitting with you right now?
- 8. Share this with a large group of acquaintances online using Facebook or email?
- 9. Share this with a large group of your close friends if they were sitting with you right now?
- 10. Share this with a large group of your close friends using Facebook or email?
- 11. Share this with a small group of close friends and acquaintances if they were sitting with you right now?
- 12. Share this with a small group of close friends and acquaintances using Facebook or email?

Note. Items 10, 11, and 12 added for Study 7.

Perceived Social Risk (adapted from Eisingerich et al., 2015)

- 1. I feel it is risky to share the story with a large group of others/a person.
- 2. I am worried that people may disapprove of me if I share the story with a large group of others/another person.
- 3. I am afraid that I may be embarrassed or look stupid by sharing the story with a large group of others/a person.
- 4. I feel it is risky to share the story with an acquaintance/ a close friend.
- 5. *I am worried that people may disapprove of me if I share the story with an acquaintance/ a close friend.*
- 6. I am afraid that I may be embarrassed or look stupid by sharing the story with an acquaintance/a close friend
- 7. I feel it is risky to share the story with someone face-to-face/using email.
- 8. I am worried that people may disapprove of me if I share the story with someone face-to-face/using email.
- 9. I am afraid that I may be embarrassed or look stupid by sharing the story with someone face-to-face/using email.

Perceived Social Risk (refined for Study 7)

- 1. It could be risky to share content
- 2. People could disapprove of me when I share content
- 3. I could be embarrassed or look stupid if I share content.
- 4. I could bore people if I share content
- 5. I could share too much content
- 6. I could look bad if I share content
- 7. People could question my motives if I share content
- 8. People could not like the content I share
- 9. People could think that the content I share is not important enough to share

- 10. People could form the wrong impression of when I share content
- 11. People could be offended by the content I share
- 12. People may not find the content I share interesting

Perceived Social Risk of Communication Context

- 1. It could be risky to share content with a large group of people
- 2. It could be risky to share content with one person
- 3. It could be risky to share content with a close friend
- 4. It could be risky to share content with an acquaintance
- 5. It could be risky to share content with someone face-to-face
- 6. It could be risky to share content with someone online (e.g., via social media or email)

Perceived Social Benefit (developed in Study 2)

- 1. Sharing the story would improve my social status
- 2. Sharing the story would help me fit in
- 3. Sharing the story would benefit my relationships with others
- 4. Sharing the story would help me define myself
- 5. I feel I will gain approval if I share the story
- 6. I feel that sharing the story would benefit me
- 7. Sharing the story will make me look good
- 8. Sharing the story would help me communicate my self-identity
- 9. Sharing the story would make me feel part of a community

Perceived Social Benefit of Communication Context

- 1. It could be beneficial to share content with a large group of people
- 2. It could be beneficial to share content with one person
- 3. It could be beneficial to share content with a close friend
- 4. It could be beneficial to share content with an acquaintance
- 5. It could be beneficial to share content with someone face-to-face
- 6. It could be beneficial to share content with someone online (e.g., via social media or *email*)

Appendix C: RMIT Ethics Approval



Deputy Pro Vice-Chancellor arch & Innovation) **College of Business**

GPO Box 2476 Melbourne VIC 3001 Australia

Tel: +61 3 9925 5432 624

	Notice of Approval	Fax: +61 3 9925 54
Date:	21 December 2018	
Project number:	21889	
Project title:	The Need to Self-Enhance and Word-of-Mouth Type: Tran Generation	smission vs.
Risk classification:	Low Risk	
Chief Investigator: Student Investigator: Other Investigators:	Dr Angela Dobele Miss Ashleigh Druce A/Prof Con Stavros	
Project Approved:	From: 21 December 2018 To: 15 January 2020	

Notice of Approval

Terms of approval:

Responsibilities of the principal investigator

It is the responsibility of the principal investigator to ensure that all other investigators and staff on a project are aware of the terms of approval and to ensure that the project is conducted as approved by BCHEAN. Approval is only valid while the investigator holds a position at RMIT University. 1. Amendments

Approval must be sought from BCHEAN to amend any aspect of a project including approved documents. To apply for an amendment submit a request for amendment form to the BCHEAN secretary. This form is available on the Human Research Ethics Committee (HREC) website. Amendments must not be implemented without first gaining approval from BCHEAN.

2. Adverse events You should notify BCHEAN immediately of any serious or unexpected adverse effects on

participants or unforeseen events affecting the ethical acceptability of the project. Participant Information and Consent Form (PICF) 3. The PICF must be distributed to all research participants, where relevant, and the consent form is to

be retained and stored by the investigator. The PICF must contain the RMIT University logo and a complaints clause including the above project number.

4. Annual reports

Continued approval of this project is dependent on the submission of an annual report. 5. Final report

A final report must be provided at the conclusion of the project. BCHEAN must be notified if the project is discontinued before the expected date of completion.

б. Monitoring

Projects may be subject to an audit or any other form of monitoring by BCHEAN at any time. 7 Retention and storage of data

The investigator is responsible for the storage and retention of original data pertaining to a project for a minimum period of five years.



B 1

Deputy Pro Vice-Chancellor (Research & Innovation) College of Business

GPO Box 2476 Melbourne VIC 3001 Australia

Tel: +61 3 9925 5432 Fax: +61 3 9925 5624

Project Approved:	From: 9 February 2018	To: 1 March 2019	
Other Investigators:	A/Prof Con Stavros		
Student Investigator:	Miss Ashleigh Druce		
Chief Investigator:	Dr Angela Dobele		
Risk classification:	Low Risk		
Project title:	The Social Transmission of Brand-Relevant Content		
Project number:	21185		
Date:	9 February 2018		

.....

Terms of approval:

Responsibilities of the principal investigator

It is the responsibility of the principal investigator to ensure that all other investigators and staff on a project are aware of the terms of approval and to ensure that the project is conducted as approved by BCHEAN. Approval is only valid while the investigator holds a position at RMIT University. 1. Amendments

Notice of Approval

Approval must be sought from BCHEAN to amend any aspect of a project including approved documents. To apply for an amendment submit a request for amendment form to the BCHEAN secretary. This form is available on the Human Research Ethics Committee (HREC) website. Amendments must not be implemented without first gaining approval from BCHEAN.

2. Adverse events You should notify BCHEAN immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.

3. Participant Information and Consent Form (PICF) The PICF must be distributed to all research participants, where relevant, and the consent form is to be retained and stored by the investigator. The PICF must contain the RMIT University logo and a complaints clause including the above project number.

4. Annual reports

Continued approval of this project is dependent on the submission of an annual report. 5. Final report

A final report must be provided at the conclusion of the project. BCHEAN must be notified if the project is discontinued before the expected date of completion.

Monitoring 6.

Projects may be subject to an audit or any other form of monitoring by BCHEAN at any time. 7. Retention and storage of data

The investigator is responsible for the storage and retention of original data pertaining to a project for a minimum period of five years.



Business College Human Ethics Advisory Network (BCHEAN)

Building 106, Level 11 239 Bourke Street

Terms of approval:		
Project Approved:	From: 12 November 2015 To: 2 March 2019	
Chief Investigator: Other Investigator: Student Investigator:	Dr Angela Dobele Dr Adrian Camilleri Miss Ashleigh Druce	
Risk classification:	Low Risk	
Project title:	Communication Channel, Emotional Arousal, and Likelihood to Share Electronic Word-of-Mouth	
Project number:	19721	Fax +61 3 9925 5624
Date:	24 November 2015	Tel. +61 3 9925 5555
	Notice of Approval	GPO Box 2476V Melbourne VIC 3001 Australia
		Melbourne viic 3000

Responsibilities of the principal investigator:

It is the responsibility of the principal investigator to ensure that all other investigators and staff on a project are aware of the terms of approval and to ensure that the project is conducted as approved by BCHEAN. Approval is only valid while the investigator holds a position at RMIT University.

1. Amendments

Approval must be sought from BCHEAN to amend any aspect of a project including approved documents. To apply for an amendment submit a request for amendment form to the BCHEAN secretary. This form is available on the Human Research Ethics Committee (HREC) website. Amendments must not be implemented without first gaining approval from BCHEAN.

2. Adverse events

You should notify BCHEAN immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.

3. Participant Information and Consent Form (PICF)

The PICF must be distributed to all research participants, where relevant, and the consent form is to be retained and stored by the investigator. The PICF must contain the RMIT University logo and a complaints clause including the above project number.

4. Annual reports

Continued approval of this project is dependent on the submission of an annual report. 5. Final report

A final report must be provided at the conclusion of the project. BCHEAN must be notified if the project is discontinued before the expected date of completion.

6. Monitoring

Projects may be subject to an audit or any other form of monitoring by BCHEAN at any time. 7. Retention and storage of data

The investigator is responsible for the storage and retention of original data pertaining to a project for a minimum period of five years.
			Business College Hun Ethics Advisory Netwo (BCHEAN)
	ONIVERSITY		Building 108, Level 11 239 Bourke Street Melbourne VIC 3000
		Notice of Approval	GPO Box 2476V Melbourne VIC 3001 Australia
	Date:	14 May 2015	Tel. +61 3 9925 5555
	Project number:	19312	Fax +61 3 9925 5624
Project title: Self-Enhancement Motivation, Communication Channel, Emotional Word -of-Mouth Transmission		ent Motivation, Communication Channel, Emotional Arousa Transmission	l, and Electronic
	Risk classification:	Low Risk	
	Chief Investigator: Other Investigator: Student Investigator:	Dr Angela Dobele Dr Adrian Camilleri Miss Ashleigh Druce	
	Project Approved:	From: 14 May 2015 To: 9 December 2018	

Responsibilities of the principal investigator:

It is the responsibility of the principal investigator to ensure that all other investigators and staff on a project are aware of the terms of approval and to ensure that the project is conducted as approved by BCHEAN. Approval is only valid while the investigator holds a position at RMIT University.

1. Amendments

Terms of approval:

Approval must be sought from BCHEAN to amend any aspect of a project including approved documents. To apply for an amendment submit a request for amendment form to the BCHEAN secretary. This form is available on the Human Research Ethics Committee (HREC) website. Amendments must not be implemented without first gaining approval from BCHEAN.

2. Adverse events

You should notify BCHEAN immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.

3. Participant Information and Consent Form (PICF)

The PICF must be distributed to all research participants, where relevant, and the consent form is to be retained and stored by the investigator. The PICF must contain the RMIT University logo and a complaints clause including the above project number.

Annual reports 4.

Continued approval of this project is dependent on the submission of an annual report. 5. Final report

A final report must be provided at the conclusion of the project. BCHEAN must be notified if the project is discontinued before the expected date of completion.

6. Monitoring

Projects may be subject to an audit or any other form of monitoring by BCHEAN at any time. Retention and storage of data 7.

The investigator is responsible for the storage and retention of original data pertaining to a project for a minimum period of five years.