

***“Giving”* in Online Recommendation Systems:
The Roles played by Narcissism and Altruism**

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Declaration

This thesis is entirely my own work, and has not been previously submitted to this or any other third level institution.

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Signature

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List of Tables

<u>Table Number</u>	<u>Table Name</u>	<u>Page</u>
Table 1	Reviewer Frequency by Location and Age	39
Table 2	Descriptive Statistics	39
Table 3	Reviewer Frequency by Gender	39
Table 4	Content Analysis Theme Frequencies	45
Table H-1	NPI Scores by Frequent and Infrequent Contributors	76
Table H-2	NPI Means and Standard Deviations by Gender, Location and Age	76
Table H-3	IRI Scores by Frequent and Infrequent Contributors	77
Table H-4	IRI Means and Standard Deviations by Gender, Location and Age	77
Table H-5	Mann Whitney U Test for NPI differences	78
Table H-6	Mann Whitney U test for Exhibitionism differences	78
Table H-7	Mann Whitney U test for IRI differences	78
Table H-8	Spearman's rho for NPI and Number of Reviews	79
Table H-9	Spearman's rho for Exhibitionism and Number of Reviews	79
Table H-10	Spearman's rho for IRI and Number of Reviews	79

List of Figures

<u>Figure Number</u>	<u>Figure Name</u>	<u>Page</u>
Figure 1	Processes in Prosocial Behaviour	4
Figure 2	Relationships between the concepts of Helping, Pro-social Behaviour and Altruism	22
Figure 3	Distribution by (A) Frequent and (B) Infrequent Groups	38
Figure 4	NPI Mean Scores by Location	40
Figure 5	NPI Mean Scores by Age Group	41
Figure 6	IRI Mean Scores by Location	42
Figure 7	IRI Mean Scores by Age Group	42
Figure 8	Motivation Theme Frequencies	45

List of Appendices

<u>Appendix Letter</u>	<u>Appendix Name</u>	<u>Page</u>
Appendix A	E-mails requesting participation in study	64
Appendix B	Consent Form	65
Appendix C	Demographic Questions	66
Appendix D	Narcissistic Personality Inventory	67
Appendix E	Interpersonal Reactivity Index	71
Appendix F	Open-ended Motivation Question	74
Appendix G	Debriefing Document	75
Appendix H	Results Tables	76

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“The important thing is not to stop questioning” - Albert Einstein

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Table of Contents

Declaration.....	i
List of Tables	ii
List of Figures.....	iii
List of Appendices	iv
Acknowledgements	v
Dedication	vi
Abstract.....	1
Chapter 1: Introduction	2
1.1 Background to the Study	3
1.2 Motivation for Online Gift-Giving	3
1.3 Narcissism and Altruism: The Controversy	4
1.3.1 <i>Prolific and Infrequent Contributors</i>	5
1.4 Survival of Online Recommendation Systems	5
1.5 Scope of the Study	6
Chapter2: e-WOMs and Gift Economies.....	7
2.1 e-WOMs	8
2.2 Online Gift Economies.....	10
2.2.1 <i>Public Goods</i>	11
Chapter 3: Narcissism and Altruism as Motivation.....	12
3.1 WOM Motivation	13
3.2 Tension between pure Gift-giving and Narcissism.....	14
3.3 Narcissism	15
3.3.1 <i>Self-Interest and Narcissism</i>	16
3.3.2 <i>Reflection Online and Narcissism</i>	17
3.3.3 <i>Exhibitionism and Narcissism</i>	17
3.3.4 <i>Celebrity and Exhibitionism</i>	18
3.3.5 <i>Status-seeking and Exhibitionism</i>	18
3.3.6 <i>Multiple Reviewing as its own Reward</i>	19
3.3.7 <i>Narcissism as Motivation</i>	20
3.4 Altruism.....	22
3.4.1 <i>Altruism as Motivation</i>	23
3.4.2 <i>Empathy and Altruism</i>	24
3.5 The Research Question	26

Chapter 4: Methodology	28
4.1 Study Design	29
4.2 Pilot Studies	29
4.3 Participants	31
4.3.1 <i>Sample Size and Demographics</i>	31
4.3.2 <i>Recruitment</i>	31
4.3.3 <i>Sample Sourcing</i>	31
4.4 Quantitative Measures	32
4.4.1 <i>The Narcissistic Personality Inventory</i>	32
4.4.2 <i>The Interpersonal Reactivity Index</i>	33
4.5 Qualitative Analysis	34
4.6 Procedure	35
4.7 Ethical Issues	36
Chapter 5: Results	37
5.1 Quantitative Analysis	38
5.1.1 <i>Demographic Results</i>	38
5.1.2 <i>NPI and Exhibitionism Results</i>	40
5.1.3 <i>IRI Results</i>	41
5.1.4 <i>Mann-Whitney U Test</i>	43
5.1.5 <i>Spearman's Rho</i>	44
5.2 Content Analysis	45
5.3 Conclusion	45
Chapter 6: Discussion	46
6.1 Key Findings	47
6.2 Results in the light of Previous Studies	49
6.3 Implications of this Study for Current Theory	50
6.4 Weaknesses of this Study	52
6.4.1 <i>Limitations of the NPI</i>	52
6.4.2 <i>Sample size and Focus</i>	52
6.4.3 <i>Hypotheses</i>	53
6.4.4 <i>Internet Sampling</i>	53
6.5 Suggestions for Future Research	53
6.6 Conclusions	54
References	55
Appendices	64-79

Abstract

This study explores Altruism and Narcissism as motivation for online informational giving. There is a dilemma about whether helping generally is motivated by altruism or egoism. Evidence is also gathering which demonstrates a propensity for narcissists to move online, to places where they can gain more exposure and access a large number of shallow relationships. For this study, 44 participants from tripadvisor.com took the Narcissistic Personality Inventory (NPI) which measures sub-clinical narcissism, the Interpersonal Reactivity Index (IRI) which measures altruism and an open-ended question about motivation. No statistically significant results were found. However, the open question revealed Reciprocation as the most common reason for reviewing, thus highlighting the possibility of Reciprocation as an important factor in online informational giving.

Chapter 1:

Introduction

“Magnify small gifts; reduce the man to want a gift, and then give with pomp”
(Blake, 1966, p. 323)

1.1 Background to the Study

Online communities are created and used for different reasons e.g. information exchange, friendship, support and leisure (Ridings & Gefen, 2004). Online travel recommendation sites are web-based word-of-mouth (WOM) communities where people post holiday reviews for others to read. In these online travel WOMs (e-WOMs), reviews are exchanged which consist of holiday experiences in hotels, travel experiences and opinions about tourist products and services. This information exchange is one of the many activities that take place over the Internet. As distinct from commercial ventures online, many people actually *give away* digital information of all kinds, including software code, how-to information, personal data and product reviews on e-WOMs. Such a setting where information is offered with no apparent expectation of immediate or direct return can be described as “gift economy” (Rheingold, 1993, p.49).

The aim of this study is to explore altruism and narcissism as motivational factors in online informational gift-giving. Altruism is a concern for the welfare of others; specifically it is a type of helping where the benefactor provides aid to another without any anticipation of external rewards for providing that aid (Macaulay & Berkowitz, 1970). Narcissism refers to a set of character traits concerned with self-centredness, specifically “A pervasive pattern of grandiosity (in fantasy or behaviour), need for admiration, and lack of empathy”, (American Psychiatric Association, 1994).

1.2 Motivation for Online Gift-Giving

The reason for investigating motivation for online gift-giving is as follows. Prosocial behaviour is made up of various elements, with the evolutionary processes remotely related to prosocial behaviour, and goals and motives more closely related (see Figure 1). All the factors shown in the diagram are interdependent because the motivation for giving or helping is shaped by how the affective and cognitive processes operate, which in turn are influenced by context and personality. Research has been carried out on situational factors for helping (Bierhoff, 2002) and an in-depth analysis of both evolutionary processes and affective and cognitive processes are beyond the scope of

this study, though they do inform the background to the area. This study concentrates instead on the factors most closely related and of immediate relevance to the prosocial action i.e. egoistic and altruistic goals and motives for online gift-giving.

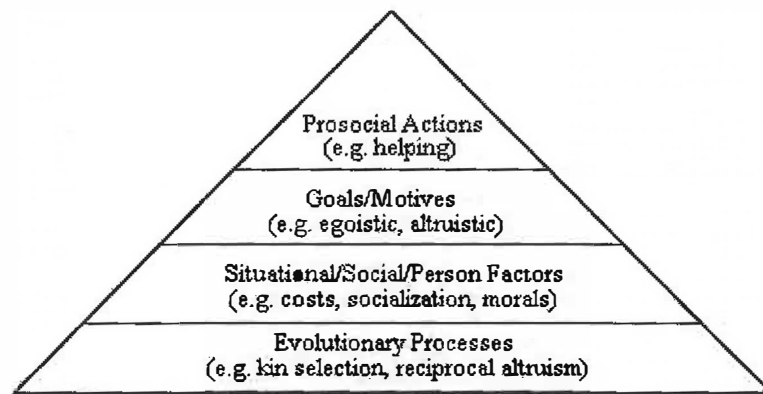


Figure 1: Processes in Prosocial Behaviour (Dovidio, Piliavin, Schroeder & Penner, 2006)

1.3 Narcissism and Altruism: The Controversy

Western society views *self-enhancement* which includes ambition and self-centredness, versus *self-transcendence* which includes compassion and empathy, as two polar ends on a dimension of human values. The literature on prosocial behaviour since the 1980s reflects a similar dilemma in the ongoing controversy around whether helping is motivated by altruism or egoism (Bierhoff, 2002). Batson (1991) has been responsible for a lot of valuable work in the field and has shown that there is usually a combination of altruistic and egoistic goals motivating prosocial behaviour in what is referred to as a *dual process theory*. The egoistic process is viewed as being under the intentional control of the person, whereas altruism is seen as an unconscious process; the implications of which are a subject worthy of further research (Bierhoff, 2002). Studies show that self-enhancement bias is related to narcissism and ego involvement (Robins & Beer, 2001); thus the reason for exploring narcissism as a measure of one aspect of self-enhancement.

There is also a propensity for narcissists to move online to places where they can gain more exposure and where they can access a larger number of shallow relationships. A lot of media attention has been given to the issue of narcissism and web page creation

and narcissism and social networking sites in particular (Baldwin & Stroman, 2007; Orlet, 2007; Vaidhyanathan, 2006). The idea is that such sites offer the narcissist an opportunity for self-promotion and vanity – each of which are linked to narcissism. An exploration of the same phenomenon in e-WOMs, where prolific writers may exhibit their knowledge and show-off about related aspects of their lives is therefore justified.

1.3.1 Prolific and Infrequent Contributors

This study investigates whether those who contribute in disproportionately large amounts exhibit higher levels of narcissism. An understanding of what drives them to contribute prolifically is important, because this audience make up the majority of contributors (Curien, Fauchart, Laffond & Moreau, 2005) and because word-of-mouth influences have been shown to be crucially important for travel decision-making (Murphy, Mascardo, & Benckendorff, 2007). This study also investigates those who contribute infrequently and explores whether they are the individuals who are motivated by altruism.

1.4 Survival of Online Recommendation Systems

Another reason to explore the factors for motivation to online informational gift-giving is long-term survival of online recommendation systems. In order to ensure sustainability of e-WOMS like TripAdvisor and IgoUgo it is important to understand the drivers behind this prosocial behaviour, so that the structural features of WOMS that support these traits and motivations can then be put in place if necessary. Current success in some e-WOMS cannot be assumed to guarantee continued successful co-operation. These systems may be important sources of social solidarity, helping to maintain the societies of which they are a part (Giesler, 2006).

Though review posting behaviour can be described as helping and therefore prosocial, it is not certain that the motivation behind it is always altruistic or even that altruism can be relied upon to ensure long-term sustainability of these systems. Therefore it is important to seek out and understand other rewards that motivate participation. As many of the other areas have been researched extensively, a focus on self-interest and narcissistic personality traits is considered an important area of exploration for this study. e-WOMS as citizen journalism also give ordinary people an opportunity to have

their say by telling the true story or at least their opinions about an experience with particular products. Therefore it is in the common interest to ensure the survival of these online review sites.

1.5 Scope of the Study

Chapter 2 begins with e-WOMS and the characteristics of a gift economy. In Chapter 3, the study turns to explore narcissism and altruism as motivation for contributing online informational gifts. The research community has looked at various self-interest aspects of motivation and this work is outlined. However, little work has been carried out on narcissism as a factor in contributing to online word-of-mouth systems, though narcissism online is beginning to emerge as a topic of interest. This study explores narcissism as motivation generally and then looks at the more recent studies on emerging online narcissism.

In the methodology chapter, the study looks for narcissism and one of its subcomponents – exhibitionism - as motivations for contributing to travel recommendation systems in particular, using the Narcissistic Personality Inventory (NPI), (Raskin & Hall, 1979; Raskin & Terry, 1988). Substantial evidence for the reliability and construct validity of the NPI as a measure of overt narcissism in non-clinical populations has been reported (Emmons, 1984; Raskin & Hall, 1979; Raskin & Terry, 1988). Internal consistency reliability is also high (Guttman's $\lambda_3 = .83$) as reported by Raskin and Terry (1988).

Similarly, research has already been carried out on altruism as motivation for prosocial behaviour in off-line settings and this work is scoped in the latter part of Chapter 3. In Chapter 4: Methodology - Altruism is measured using the Interpersonal Reactivity Index (Davis, 1983), which is a well-established standardized self-report measure of empathy (Lauterbach & Hosser, 2007). The remaining two chapters highlight the results and discuss implications of the findings for current theory and future research.

Chapter 2:
e-WOMs and Gift Economies

2.1 e-WOMs

Increasingly there is a move away from relying only on company information and product advertising, towards seeking out opinions and reviews from friends, family and other informal sources. Offline, word-of-mouth communication is the information transmitted by consumers on an informal basis (Solomon, Bamossy, Askegaard and Hogg, 2006) i.e. it typically consists of spoken words exchanged in a face-to-face situation.

Online word-of-mouth communication (e-WOM) generally consists of personal experiences and opinions being transmitted by the written word (Sun, Youn, Wu & Kuntaraporn, 2006). e-WOM communication then is any “positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet” (Hennig-Thurau, Gwinner, Walsh & Gremler, 2004, p.39). e-WOM can reach a very large audience - including strangers, more conveniently and much more quickly, than traditional word-of-mouth communication. Though e-WOM has no face-to-face cues and requires a certain technical proficiency not needed for traditional word-of-mouth communication, e-WOM is generally accepted as an important tool for facilitating information exchange and diffusion throughout online communities generally.

Online review or recommendation sites - also referred to as online consumer communities (OCCs) are frequently grouped into three categories i.e. knowledge-sharing communities, file-sharing communities and experience-sharing communities, the latter being those sites in which posters write about their experiences e.g. of holidays (Curien et al, 2005). What is distinct about experience-sharing communities is firstly, the timing of use i.e. readers generally avail of this information *prior* to purchase (as opposed to sites which exchange information post-purchase about how to use a product) and secondly, the information is broadcast to *all*, as distinct from other communities which may involve a one-to-one answer in response to a question.

Research has been carried out on e-WOM systems, as well as gift-giving and information exchange generally, in order to better understand how the process operates and what motivates people to free exchange. In particular economists and marketers are interested in how they can use this relatively new and increasingly

important platform to broadcast their marketing message to a wider audience and to further influence the customer-base (viral marketing) (Balasubramanian & Mahajan, 2001; Curien et al, 2005; Godes et al, 2005).

Social scientists and psychologists have studied such systems from the perspective of understanding system features/structures and social interactions therein, participation levels – particularly under-participation (Curien et al 2005; Lampel & Bhalla, 2007), computer mediated communication in WOMs, and the motivation of contributors and beneficiaries (Fischer, Bristor & Gainer, 1996; Granitz & Ward, 1996; Lampel & Bhalla, 2007). There may be a mix of reasons why individuals contribute and it is likely that frequent contributors may have motivations and characteristics not present in infrequent contributors. Specifically there is a lot of interest in why some people invest a disproportionate amount of time and effort in posting opinions.

Existing research on motivation for contributing to e-WOMs has shown evidence of two drivers. Firstly, altruism may be a motivator – i.e. that people contribute for the greater good of the group (Avery, Resnick, & Zeckhauser 1999; Rheingold, 1993). Some individuals are motivated to satisfy the needs of the group especially where the needs of the group are clearly understood. The second motive is *reciprocity* (Curien et al, 2005; Kollock, 1999). This means that contributors give something now, with the idea that they will get something back from the group at some time in the future. Though many studies have been carried out in the area of e-WOM communication generally, few studies have been published on the motivation behind online WOM activities or reasons for the individual's engagement in them (Sun et al, 2006). This points to a gap in the literature, which this study hopes to address.

2.2 Online Gift Economies

Traditionally, the literature has viewed an environment where information is offered with no apparent expectation of immediate or direct return, as a “gift economy” (Rheingold, 1993, p.49). An online travel review community such as tripadvisor.com fits the concept of such a gift economy, as people freely give and receive the gift of travel experiences, through postings on travel review sites.

The characteristics of a gift economy are examined first, in order to examine motivation for gift-giving in this environment. An online community where people freely and often anonymously exchange things with people they do not know, is thought of as a gift community, because they contribute things without expecting anything in return (Kollock, 1999). The interest in this area is explained by the fascination with why people often give away valuable information in a seemingly altruistic way. This utopian view of the Internet is popular and attractive.

However, there is somewhat of a contradiction between the concept of utopian giving over the Internet and the metaphor of traditional gift-giving. The gift was traditionally seen as having the elements of giving and receiving, as well as repayment (Maus, 1969), and as being based on a type of sacrifice (Bataille, 1988; Giesler, 2006). The assumption behind this thinking is that the gift-giver cannot be expected to remain a gift-giver for very long if the giving is all in one direction. These concepts have carried over to online experience review economies but have had to be adapted. In the online system, in contrast to many face-to-face situations, there is usually anonymity i.e. givers and receivers generally do not know each other, and there may be multiple receivers of any particular piece of information provided by the giver. The giver generally has no expectation of getting anything immediate in return, and he may not know or care whether any potential reciprocation is from the original receiver. There is also little or no sacrifice in the online contribution model as the item still remains with the contributor, even after sharing with others. The only sacrifice is seen in economic terms (Hennig-Thurau et al, 2004; Kollock, 1999) in that the decision to provide a gift is based on a cost/benefit analysis i.e. if the benefit (perhaps to the group or long-term benefit to oneself) outweighs the cost (e.g. the time to write the review) then all other things being equal, the decision to contribute will be made.

2.2.1 Public Goods

In order to explain the process, the type of goods exchanged in online review systems and other online consumer communities are referred to by economists as *public goods* (Dellarocas & Narayan, 2006; Kollock, 1999). Online information exchange has the characteristics of a public good because everyone in the community may *benefit* regardless of whether they helped to create it or contributed to it in any way. It further has the characteristic that it is *indivisible* as one person's usage does not diminish the overall good, and it is *non-excludable* because it is usually impossible to exclude anyone from benefiting whether or not they contributed. Information exchange in online travel recommendation systems satisfies these criteria.

The literature has widely recognised an inherent danger in systems where public goods are exchanged. There is the temptation to "free-ride" (Kollock, 1999, p.4) or "leech" (Giesler, 2006, p.287), where some individuals only take i.e. they do not contribute. This may threaten the ongoing viability of the entire system. Curien et al (2005) refers to this as the "tragedy of the digital commons" (p.2), where there is the danger of overexploitation of a common shared resource. Ekeh (1974) refers to the dangers of a system of "generalized exchange" (p.48), in which the gift given is not reciprocated by the recipient but by someone else in the group. Though this system appears generous, there is the risk that many people will benefit without taking the trouble to contribute. The potential social dilemma proposed here is that individually reasonable behaviour will lead to collective disaster. Therefore this study aims to explore motivation behind online informational gift-giving in order to shed more light on how these systems survive, despite these threats, in the hope of ensuring long-term sustainability.

Chapter 3:
Narcissism and Altruism as Motivation

3.1 WOM Motivation

Motivation for WOM contribution has been categorised by Dichter (1966) as follows:

- product involvement,
- self involvement (self-enhancement and gaining attention),
- other involvement (altruism: concern for others) and
- message involvement (e.g. enjoying the WOM experience).

Dellarocas and Narayan (2006) in a study of the product-specific qualities of WOM based on Dichter (1966) find strongest support for self-confirmation motives and little support for altruism as a primary motivation for posting online reviews. Others have postulated that users mainly contribute when their product expectations are disconfirmed i.e. expectations are not met (Anderson, 1998) or that positive WOM is motivated differently to negative WOM (Sundaram, Mitra & Webster, 1998).

Similarly “brag-and-moan” theory states that moderate reviews do not get posted (Hu, Pavlou & Zhang, 2006, p.15) and that only very positive or negative experiences are written about. One of the most comprehensive studies on WOM communication and motivation to date, which builds on previous research and categorisation of motives by Dichter (1966) and Engel, Blackwell and Miniard (1993), is by Sundaram et al (1998). This research finds the following motives; altruism, product involvement, self-enhancement, helping the company, anxiety reduction, and retaliation against the company for a negative experience (Hennig-Thurau et al, 2004).

Even those who rationalise the motivation to contribute as altruistic or reciprocal cannot easily account for why some people contribute vast amounts of reviews, when others contribute little or nothing. It is generally accepted that a gift can sometimes bestow a type of moral obligation on the receiver. Some social scientists, poets and philosophers have seen elements of domination, subversion and humiliation in the bestowing of gifts and charity upon the receiver (Blake, 1966). In order for one to give, the other must be needy, dependent and subordinated in some way. While such views might be extreme, it is also likely that altruism and reciprocation as motivation cannot be solely relied upon, when of themselves they are unlikely to be sufficient to guarantee long-term sustainability of e-WOMS.

3.2 *Tension between pure Gift-giving and Narcissism*

A gift is generally accepted as having an expectation of some kind of reciprocation. It is expected to elicit a 'thank you' response at the very least, which expectation itself may become an imposition or burden on the receiver (Derrida, 1994). Moreover, it is possible that the giving may actually be carried out purely to gain something in return; merely in anticipation of the expected response or acknowledgement. Philosophers have argued that such an exchange negates the concept of the pure gift (Derrida, 1994) because pure gift-giving can only exist without the indebtedness and anticipation of something in return. In this way, charity and gift-giving are seen as being at the expense of others. True or not, this does not necessarily negate the benefits of giving to the community; rather it helps to shed some light on the many possible individual motivations for giving.

Gift-giving is sometimes seen as requiring anonymity of the giver (Derrida, 1994) – and this is generally the case in an e-WOM context. However, what is interesting here is that the concept of the genuine gift in its purest philosophical sense also requires that the giver himself is unaware of the giving “do not let your left hand know what your right is doing; your good deed must be in secret” (Jesus: Matthew 6:3-4). Awareness on the giver's part that he has given carries with it a possible self-congratulation about the good deed. So by this argument, there are intrinsic rewards for the giver, simply because the person is aware and feels good about the act of giving itself. Plant (2004) says of Derrida “the tension between generosity and narcissism lies at the very heart of his... thinking” (p.547). Whether a pure gift requires unawareness of the giving act is not so important as the notion that awareness of the deed on the part of the giver has benefits in terms of expected acknowledgement and possible return, and intrinsically in terms of self-congratulation and a sense of accomplishment or achievement.

Even in the absence of a single other person to notice a good deed, a person has a reflective relation to himself, “whereby self-congratulation and good conscience are always possible” (Plant, 2004, p.550). Therefore even secrecy does not guarantee against rewards. This paper argues that such motivation can be useful because “without the risk of certain narcissism – albeit a welcoming, hospitable narcissism – charity is rendered equivalent to mere chance occurrence, causal processes or bare

natural forces” (Plant, 2004, p.556). In other words, without an optimal amount of self-interest to drive us, there may be far fewer good deeds in the world, and ultimately less information-giving in online communities.

Following from this, it may be that online informational exchange does not operate in a utopian gift economy built on pure altruism, but also provides many heretofore unrecognised personal rewards and elements of individual satisfaction. Some reviewers, then, rather than being “pure contributors”, may be motivated by what Curien et al, 2005 call “private benefit” (p.5). This then suggests the importance of researching intrinsic motivation for online gift-giving and understanding the likelihood of “all-consuming narcissism” (Plant, 2004, p.559).

3.3 Narcissism

“Who do we see as we catch sight of our images in the mirror of the machine?”
(Turkle, 1995, p. 9)

This study sets out to specifically investigate whether those who contribute frequently exhibit narcissistic tendencies, as defined by the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1994) under Narcissistic Personality Disorder (NPD). The term *narcissism* comes from the Greek myth of Narcissus, a young man who thought he was so much better than everyone else that he fell in love with his own image reflected in a pool of water.

Narcissism is considered to be an overly positive self-view (Raskin & Hall, 1981) i.e. a grandiose and inflated self-concept. Narcissism has been compared to blood-pressure (Gutheil & Simon, 2005) in that too much or too little is a problem, but an average level is just right. The concept of narcissism has undergone much iteration over more than 100 years including major work carried out by Freud, Ellis and Kohut. Nowadays, narcissism is used to describe both a clinical condition and a normal personality trait. In clinical psychology, narcissism is considered a personality disorder (Axis II), where people diagnosed with narcissism exaggerate their abilities, are exploitive and lack empathy for others. However, narcissistic personality disorder affects less than 1% of the population according to the American Psychiatric

Association (1994) and there are notable differences in the general population according to gender, age and world region. Males show higher levels of narcissism than females, narcissism levels decline with age, and people from more individualistic societies report more narcissism (Foster, Campbell & Twenge, 2003).

Personality theorists, however, generally view narcissism as an individual difference multidimensional variable, that can be measured in the normal population (Brunell et al, 2008). Though clinical research in the area has been quite strong, very little quantitative research has been carried out until quite recently, most of which was devoted to either creating or validating narcissism measurement scales. Therefore the quantitative focus of this study on narcissism as motivation for contributing prolifically to online review systems, is a relatively novel one.

3.3.1 Self-Interest and Narcissism

As seen already, it is necessary to understand the self-interest motivations behind e-WOM contribution, because altruism and reciprocity cannot be relied upon to guarantee their continued sustainability. One such motive for online cooperation may be that goods which are inherently more interesting to their producers may be produced more readily than less interesting but equally useful ones. Therefore the low-hanging fruit of interesting projects, such as Linux (Linksvayer, 1993) may have been supplied first and ongoing cooperation at the same levels as seen to date, cannot be assumed into the future, (Kollock, 1999).

Ego-rewards and areas of self-interest which have been the subject of some research to date include *status seeking* as motivation for disproportionate gift giving in offline communities (Harbaugh, 1998; Sherry, 1983), *prestige and reputation* in online communities (Kollock, 1999) and *self-efficacy* (Bandura, 1995) where in an online environment the contributor can have a great effect on society from a relatively small effort. Another self-interest motivation which has been identified, is the pleasure derived from discussing or talking about a loved product or experience (Solomon et al, 2006). Narrative about consumption has been shown to communicate status, and individuals sometimes “emote” their experiences about objective content, as a way to establish identity (Lampel & Bhalla, 2007, p.8). Despite what is known already about non-altruistic motivation, little light has been shone on the part played by personality

traits such as those exhibited in narcissism and any impact this may have on online informational gift giving. This research proposes to explore this gap.

3.3.2 Reflection Online and Narcissism

The Internet and online communities generally are sometimes viewed as helping people to construct and reshape identity, through self-presentation (Ellison, Heino & Gibbs, 2006; Qian & Scott, 2007) experimenting with multiple identities (Herrmann, 2007), and even having a second life e.g. SecondLife.com. The double or twin concept in narcissism was well-known to the ancient greek philosophers (Hymer, 1984): “One soul in two bodies” (Aristotle); “a second self” (Cicero); and “another I” (Zeno). Indeed, in his paper “The Uncanny”, Freud (1919) said the mirror dream represented an insurance against the destruction of the ego.

The idea of online communities acting as a mirror of the true self, fits well with the Greek myth of Narcissus who was banished forever to admiring his own reflection in a pool. Perhaps people are admiring themselves and looking at their own reflections when posting their views on the Internet? “In a new variant on the story of Narcissus, people are able to fall in love with the artificial worlds that they have created; they are able to see themselves in the computer. The machine can seem a second self.”, (Turkle, 1995, p.39-40). If it is true that the Internet facilitates this in a general way, this paper proposes that those who play a more active role such as disproportionately frequent reviewers are likely to exhibit higher levels of narcissism.

3.3.3 Exhibitionism and Narcissism

Raskin and Terry (1988) carried out a principal components analysis of the Narcissistic Personality Inventory (NPI) developed by Raskin and Hall (1979), and found evidence for a general construct of narcissism as well as seven components, one of which is exhibitionism. Their study showed validity evidence for the 40-item NPI as well as substantial validity evidence for the NPI Authority and Exhibitionism components (Raskin & Terry, 1988). More recently, Kubarych, Deary and Austin (2004) carried out a factor analysis of the NPI, the most widely used measure of narcissism, which revealed at least two measurable correlated factors measuring power and exhibitionism.

Because exhibitionism is one of the well validated components of the narcissism construct, and because it can be seen in attention-seeking behaviour online, particularly in Western culture where anyone can become a celebrity, this study seeks to find exhibitionism in online reviewing behaviour. The idea of Western culture becoming increasingly narcissistic is a popular one (Lasch, 1979). Information technology and the Internet in particular is also popularly seen as part of this slow slide into narcissism: “The Internet has many democratizing possibilities, but its use as a vehicle to grab attention and its potential for fuelling narcissism in millions of Americans deserves special comment” (Derber, 2000, p.xvii).

3.3.4 Celebrity and Exhibitionism

Online review sites present an opportunity for a type of fame, for celebrity reviewers (Lampel & Bhalla, 2007), for individuals’ own mini-celebrity – a means for putting oneself ‘out there’; for exhibitionism. Lasch (1979) says “The media give substance to and thus intensify narcissistic dreams of fame and glory, encourage the common man to identify himself with the stars and to hate the ‘herd’, and make it more and more difficult for him to accept the banality of everyday existence”(p.55-56). The right for everyman to have his say may have a darker side.

Though the balance of power is shifting from a mass media information system to the more democratised Internet, this brings with it the shadow of “de-massified individual media that incubate a new electronic narcissism” (Shane, 2001, p.xiii). Narcissists may indeed gravitate towards environments which offer them potential opportunities for high performance and self-glorification (Wallace & Baumeister, 2002, as cited by Young & Pinsky, 2006). Similarly, in a study researching motivation for contributing to online travel communities, personality is shown to affect the level of active contribution to such systems (Wang & Fesenmaier, 2003).

3.3.5 Status-seeking and Exhibitionism

Lampel and Bhalla (2007) found that status-seeking is an important motivation in online review systems dealing with experience goods. They argue that status-seeking is a strong driver of online contributions along with altruism and reciprocity. Their research focuses on systems where opinions are not generally solicited but are offered freely, where individual contributions are visible to all and where reviews are

evaluated according to generally accepted rules and guidelines. This research is highly pertinent to the subject of this study, because TripAdvisor is exactly such a system and matches these criteria.

Online status can be more difficult to achieve than offline status - the connection between social, economic and professional status being much clearer in the latter (Lampel & Bhalla, 2007). Kollock (1999) suggests that reputation is an important input to status and prestige e.g. “impressive technical details and elegant writing can all work to increase one’s prestige in the community” (p.228). Offline, reputation is one of a number of resources available to improve people’s standing in the community – whereas in an online environment by contrast, reputation is often the main resource which can be used for this purpose. This is true of TripAdvisor where reviewers are *complimented* and *rated* as helpful by other reviewers, and where they can also earn *expert badges* from the system administrators. These publicly bestowed *rewards* can be used by the gift-giver in his or her self-analysis.

Status is a social value combining people’s sense of who they are with how they would like to be seen. It is achieved online mainly through self-presentation i.e. it depends primarily on what people tell each other about themselves. Lampel and Bhalla (2007) found two status seeking strategies online i.e. one where contributors are focused on a specific area of expertise and a second, where contributors demonstrate knowledge of multiple areas i.e. what is referred to as “a diverse display of authority” (p.12). They cite several reviews from TripAdvisor to show how posters draw on diverse sets of experience and how they demonstrate their own “discerning tastes” (p.13) in for instance music and fashion while others hint at their not insubstantial financial resources. This *internal* status is pursued as an “ego reward”, (Emerson, 1962, p.39) and it is admiration or gratification-seeking (Homans, 1950), strongly suggesting the presence of exhibitionism in communities like TripAdvisor.

3.3.6 Multiple Reviewing as its own Reward

Furthermore multiple reviewing can be seen as an attempt to gain added status through greater exposure (Rheingold, 1993). As seen earlier, multiple reviewing is reinforced by e-WOMs like TripAdvisor. TripAdvisor allows the value of contributions to be rated with destination expert badges, which is marked by the

display of a “tangible ego-incentive” (Lampel and Bhalla, 2007, p.17) in the form of a digital logo displaying local expert status. Lampel and Bhalla (2007) conclude that the gift in e-WOMs like TripAdvisor, IMDB (movie review system) and Amazon.com (book review system) comes with a message about the gift-giver; it contains information about the identity and status of the individual contributor. TripAdvisor may be inherently successful, not because it is used solely for reasons of altruism and reciprocity, but perhaps because it is built on a foundation of display and authority which feeds the need for reputation and status-building, thereby ensuring its own continued sustainability. Therefore, it is the personality traits and the drivers and needs being fulfilled in e-WOMs like TripAdvisor which are the focus of this study.

3.3.7 Narcissism as Motivation

We have seen that traditional research in this area has argued that free-riding endangers ultimate survival of these online review systems. However, if narcissism is found to be a motivational factor, then free-riders or lurkers rather than being a threat to such systems may in fact be important; providing a larger audience to which the gift-giver can display. Rather than giving to one or a few individuals – review sites satisfy the need to broadcast their opinions to a much larger audience (Curien et al, 2005).

An important core concept in the social-psychological view of narcissism is that the narcissistic personality uses social relationships to regulate self-esteem and self-concept. The person has an unconscious dependency on others, which creates a vulnerability that is defended by narcissistic defences making the person appear self-sufficient (Kohut, 1971). Therefore narcissists usually initiate many relationships, are popular initially and seek opportunities and forums for self-enhancement, bragging, and public glory (Buffardi & Campbell, 2008).

It is not surprising then that studies have shown the presence of narcissists in various locations on the Internet. Several recent studies have focused on the issue of narcissism in social networking sites (SNSs), which are seen as fertile ground for narcissists to self-regulate through social connections. Two key features of SNSs which are seen to attract narcissists are firstly, the context of *many shallow relationships* (friends), commonly formed in these communities, featuring short

sound-byte type interactions, and secondly, the ability to control their web-page and therefore their *self-presentation* (Marcus, Machilek & Schutz, 2006; Vazire & Gosling, 2004). One such study by Buffardi and Campbell (2008) found that strangers successfully judged SNS narcissistic pages to be more narcissistic, simply by viewing them. Factors judged as narcissistic included higher levels of social interaction and more self-promoting content e.g. photographs. Narcissists act and portray themselves in SNSs, in much the same way as they do offline. However, the number of studies which have looked at narcissistic traits in online communities is few to date, and therefore this study proposes to add to this body of knowledge, by exploring narcissism in travel e-WOMs.

A travel review study carried about by Gretzel, Yoo and Purifoy (2007) which was supported financially by TripAdvisor, found that along with altruistic and reciprocative motives for contributing, there was also strong evidence of motivation out of “a need for extraversion and positive self-enhancement” (p.5). The DSM sets out criteria for NPD that closely match the findings of Gretzel et al (2007), including a grandiose sense of self-importance, need for admiration and to be recognized as superior. This study sets out to investigate whether narcissism and one of its components i.e. exhibitionism, as defined by Raskin and Hall (1979) is significant for frequent online contributors to these systems.

Individuals may be clinically diagnosed as pathologically narcissistic and suffering from Narcissistic Personality Disorder (American Psychiatric Association, 1994) or they may be studied at the sub-clinical level and classified as *normal narcissists*. Among other things, normal narcissism is characterized by self-centeredness, self-aggrandizement, and a manipulative interpersonal orientation (Emmons, 1984; Paulhus, 1998). This study is designed to address whether higher levels of narcissism do indeed exist among prolific reviewers, as the anecdotal evidence suggests. This research has been conducted at the sub-clinical level and was not designed to detect narcissistic personality disorder. Hereafter, the term narcissism refers to normal narcissism.

3.4 Altruism

Altruism is a form of prosocial behaviour where the helper is motivated by empathy (Bierhoff, 2002). The differences between the terms “helping”, “prosocial behaviour” and “altruism” (Bierhoff, 2002, p.9) are as follows, (see Figure 2).

- **Helping behaviour:** is the broadest term and includes all forms of interpersonal support, including paid-for activities.
- **Prosocial behaviour:** the action is intended to improve the situation of the recipient and is not paid-for. The goal of this behaviour *may* also be to benefit oneself.
- **Altruism:** Refers only to prosocial behaviour that is characterised by perspective taking and empathy. The emphasis is on the needs of the other.



Figure 2: Relationships between the concepts of Helping, Prosocial Behaviour and Altruism (Bierhoff, 2002, p.9).

The true nature of the person has long puzzled great philosophers, religious thinkers, psychologists, social scientists and even evolutionary biologists. The question is whether humans are intrinsically good or bad by instinct? There are many examples of prosocial behaviour where people behave well for the good of others but there are also many examples of people behaving selfishly and egoistically. Prosocial behaviour generally i.e. that benefits others regardless of motivation - is almost universally promoted in religions and cultures around the world as can be seen in religious teachings, fables and stories with morals. Equally many religions incorporate rules for behaving well towards one's neighbour e.g. contributing to the poor or to the church. This fact demonstrates a widespread belief that there is selfishness in human

nature and because of this that people often need to be advised or compelled to do good.

Altruism is usually viewed by social psychologists as a particular kind of helping where not just the good deeds are considered but also the motivation and benefits (Dovidio et al, 2006). Altruism is where the benefactor gives without expecting anything in return from external sources and may even incur a cost to one-self. The important focus in altruism is the underlying reason for the helping deed, some acts are motivated by egoistic concerns i.e. how it makes the giver look and feel, versus acts which are motivated by altruistic concerns i.e. wanting to help another (Batson, 1991, 1998). It is difficult to interpret a person's motivation for any good deed, but Batson (1991) argued that as long as the receiver gets some benefit from the act and the giver's primary motivation is the benefit of the other, in particular where he feels empathy for the other, then even if the giver gets some egoistic benefit the act is still altruistic. The differentiation between motivations for good deeds is at the heart of this study, which proposes to distinguish between altruism and narcissism as motivation for the prosocial behaviour of online informational gift-giving.

3.4.1 Altruism as Motivation

Social identity theories explore the concept of shared group membership as a strong motivator for helping (Tajfel & Turner, 1979). Thinking of others in terms of members of one's own group, where the members of the group see themselves as broadly interdependent on each other, has been shown to influence people strongly to help each other. A united fate generates a sense of *we-ness*, which leads to more helping behaviours (Allen, Sargent & Bradley, 2003). It is possible that such group identity may be at play to some extent for members of online communities like TripAdvisor.

People's motives for helping can be complex, and they may be unwilling or unable to clearly explain their own motives fully. Even though helping behaviours occur every day among all age groups and even infants of less than one year old will respond to other children in distress (Lamb & Zahkireh, 1997) self-interest is often involved as well. A fundamental psychological principle of human behaviour is that people do things that are personally reinforcing i.e. that have benefits for themselves e.g. gaining

respect or recognition from others, it makes them feel good about themselves or they may get some form of reciprocation at some point in the future (Dovidio & Penner, 2001).

Motivation and behaviour is driven by thoughts and feelings e.g. learned helpful behaviour and norms such as reciprocity which they learn through socialisation. In particular, from the negative state relief model, it has been shown that if people feel distressed, sad or tense e.g. from a bad experience – then they are egoistically motivated to improve their own welfare by helping others. (Cialdini, Kenrick & Baumann, 1982; Cialdini et al, 1987). The good feelings experienced from helping others may relieve the bad feelings, because of operant conditioning (Dovidio et al, 2006) i.e. helping gives the reward of improving the helper's mood. This may have particular relevance for posters on e-WOMs who have bad holiday or travel experiences and thus feel strongly motivated to “moan” (Hu et al, 2006, p.15).

Planned long-term helping such as that characterised by frequent reviewers on e-WOMs is distinguished from one-off helping, by its repetitive nature. This ensures long-term sustainability of the e-WOM because the reviewer contributes over and over again, across time. From studies conducted on long-term helping in offline areas such as volunteering and blood donating, it has been shown that such long-term behaviour can become an integral part of the individual's identity (Callero & Grube, 2002; Grube & Piliavin, 2000; Piliavin, Piliavin & Callero, 1991). Prosocial behaviour is usually multi-factorial i.e. it can depend on many factors e.g. context, personality, perceived need, emotional and social motivations, and personal skills. It is the motivations, the benefits to and the personality traits of the helper which are the primary focus of this study.

3.4.2 Empathy and Altruism

Personality theorists up to the early 1980s generally believed that personality traits are largely responsible for consistent helping behaviours over time and across contexts (Rushton, 1984) whereas social psychologists believed that the personalities will behave differently in different situations (Nisbett, 1980). Nowadays, most social psychologists believe in interactionism i.e. some level of interaction of personality

with environment and there is a growing interest in the importance of individual differences in helping (Dovidio & Penner, 2001).

Two of the *big five* core dimensions of personality proposed by Ashton, Paunonen, Helmes and Jackson (1998) and Graziano and Eisenberg (1997) as responsible for prosocial behaviour are *Agreeableness* (trust and tender-mindedness) and *Conscientiousness* (competence and reliability). Important personality characteristics found to differentiate helpers from non-helpers are; *empathy*, usually in response to other people's emotional experiences (Batson, 1991) and *extensivity* which is a combination of empathy, sense of responsibility and concern for others (Berkowitz & Daniels 1963).

There is now a convergence of findings indicating that there is a prosocial personality (Bierhoff, 2002) and the most consistently found personality trait across studies using different research methods is *dispositional empathy*. Dispositional empathy is a consistent tendency to empathise with the emotional experiences of others, to see their view point, and as a result to offer help. There are many studies showing dispositional empathy related to prosocial behaviour in both cases of heroes and everyday helpers. Thus the use of the Interpersonal Reactivity Index (Davis, 1983) to measure altruism in this study.

Until recently there has been a gap in the literature on online prosocial behaviour due to its concentration on exceptional acts of helping e.g. heroic deeds, or acts with a relatively high cost to the giver as in volunteering (time) and blood donation (discomfort). There has also been an emphasis on dyads in the literature. None of these scenarios usually apply to online helping especially in the case of e-WOM contributions. However, some of the traditional literature does concentrate on community activism and volunteering which involve considering how a person helps a community or group without necessarily knowing the individual(s) he is helping. To this extent the literature has relevance for online e-WOM contribution studies in that the individual reviewer generally contributes to the group without any knowledge of who if anyone will benefit. This study aims to fill a substantial gap nonetheless, by focusing on online prosocial behaviour in travel review e-WOMs.

3.5 The Research Question

This study explores the question: *what* is the motivation for online informational gift-giving of public goods and specifically, why do some people contribute excessively to e-WOMs like tripadvisor.com? There are two main avenues of exploration i.e. altruism as motivation (for the greater good) or self-interest / egoism as motivation specifically as a result of narcissistic personality traits.

Frequent contributors to e-WOMs sometimes contribute hundreds or even thousands of postings. This paper contends that something other than the good of others or the anticipation of getting something back at some time in the future, may be motivating these individuals. Because of the findings from the survey funded by TripAdvisor (Gretzel et al, 2007) and particularly because research from several sources including Lampel and Bhalla (2007) and Kollock (1999) have all found evidence for non-altruistic self-interest ego-rewards as motivation generally, it is hypothesised that higher levels of narcissism will be found in heavy contributors to online travel recommendation systems. “*Frequent contributors*” are defined as those who have contributed 10 or more times in the past year. “*Infrequent contributors*” are defined as those who have contributed between 2 and 5 times, in the past year (less than two is not multiple reviewing and may have been a one-off).

H1: Frequent contributors to online WOM travel recommendation systems are likely to exhibit higher levels of *Narcissism* than those who contribute infrequently.

This study sets out to investigate exhibitionism in the pursuit of attention and recognition, among frequent contributors to online travel WOMs. Lampel and Bhalla (2007) found that “multiple reviewing” is often an attempt to gain extra status “through greater exposure” (p.14). Aviram and Amichai-Hamburger (2005) found that online exhibitionism can be expressed by higher self-disclosure due to the feeling of “hyper-intimacy” provided by the Internet. Narration about consumption of luxury goods can also be a way of showing-off through verbal exhibitionism. It is postulated here that there are limelight seekers looking for a type of celebrity status where the author is ‘star’.

H2: Frequent contributors to online WOM travel recommendation systems are likely to exhibit higher levels of *Exhibitionism* than those who contribute infrequently.

Because the research has found much evidence of altruism as driver for online informational gift giving, and because it is likely as shown by the research, that there are different types of contributors, this study hypothesises that this motive will be evident in light contributors.

H3: Infrequent contributors to online WOM travel recommendation systems are more likely to contribute for reasons of Altruism, than are frequent contributors.

Chapter 4:

Methodology

4.1 Study Design

This chapter begins with brief introduction, the study design statement, and a review of the pilot studies. This is followed by a description of the participants in terms of number, why they were selected and how they were sourced. Then follows a description of the measures employed in the study, their appropriateness and how they measure the variables specified in the research question and hypotheses. Next in the procedure section, the chapter explains when, where and how the data was collected, with a detailed description of the precise steps taken to contact the participants, obtain their cooperation and administer the test instruments. Finally the ethical considerations are outlined.

This study examines the relationship between online travel reviewing and narcissism, exhibitionism and altruism. The research design is mixed though it is mainly a quantitative correlational one, using a cross-sectional survey methodology. It includes two survey instruments and an open-ended question about motivation for contributing. The purpose of the design is to correlate the scores of altruism and narcissism with frequency of travel reviewing.

4.2 Pilot Studies

Several pilot studies were constructed and carried out initially on small samples i.e. with three participants in each of the two groups. This was designed to discover and eliminate potential problems as far as possible, prior to conducting the main study including any issues with the sample itself, recruitment methods and responses, the measures, data gathering, input and analysis. A particular area of concern in the pilot studies was the number of contributions in each category. Initially the “frequent” category was defined as ≥ 80 . In a second pilot frequent was defined as ≥ 500 contributions, whereas “infrequent” was defined as ≤ 10 . This left a somewhat unsatisfactory large gap unaccounted for in the middle range.

On carrying out the pilot studies and consulting the methodology section from Lampel and Bhalla (2007), this was amended. Initially, all types of contributions had been taken into account when making the calculation, i.e. not only TripAdvisor reviews, but TripAdvisor *forum* contributions were also included. However, in light of the literature on gifting in online reviewing and the work of other researchers like Lampel

and Bhalla (2007), the researcher learned that this was an inaccurate way of categorising informational reviewing gifts. The reason for this is that TripAdvisor *forums* operate differently from reviews, as they often include questions and ongoing interactions with other members who can be identified, and therefore do not qualify as unreciprocated contributions or informational gifts in the same way as informational reviews. Lampel and Bhalla (2007) define “active” contributions in online communities as those “users who had posted at least 10 reviews” (p.9). Lampel and Bhalla (2007) did not deal with “infrequent” contributions, so this study defined “infrequent” as > 1 (to constitute multiple reviewing) but ≤ 5 . This left a more satisfactory gap of six to nine reviews unaccounted for in the middle range between the “frequent” and “infrequent” categories.

The pilot studies also cleared up any misunderstandings in question layout due to participant feedback, and the researcher made several amendments to the wording in the invitation to complete the survey, so that participants were not inadvertently being encouraged to be either altruistic or exhibitionist in their responses.

The pilot studies showed up the challenges in drawing from a pool of participants around the world. Even though a diverse set of *travel locations* was selected, it was found that most of the travelling reviewers to these locations were actually from the US, UK, Ireland, Europe, and Australia. Frequent contributors were found to participate more than infrequent contributors.

Survey response rates for the pilot studies carried out prior to the end of year holiday season were 25%. However this did not show up a problem that was to occur when the main survey was carried out over the holiday period i.e. response rates fell dramatically from 25% to 16%. Low rates were judged to be due to (a) spam filters on corporate e-mails, (b) no relationship between the researcher and e-mail recipients (c) unknown number of inactive or unchecked e-mail accounts (d) lengthy survey (e) disinterest in the topic or dislike of being asked to contribute and (f) people being away from work/desks/e-mail during the holiday season.

4.3 Participants

The study participants were recruited from the popular and reputable online travel recommendation system tripadvisor.com.

4.3.1 Sample Size and Demographics

Sample size was 42 and the participants were English-speaking adults, invited from travel locations around the world. Two groups of 22 and 20 were recruited; Sample A comprising “frequent contributors” defined as 10 or more contributions in the past year, and Sample B comprising “infrequent contributors” i.e. having less than or equal to 5 contributions, but greater than 1 contribution, in the last year. Gender breakdown was 22 males and 20 females, resulting in a gender-balanced sample of 52.4% and 47.6% respectively. Age ranged from 20 to 65 with a mean of 41.36. Location breakdown was as follows: 15 from the UK and Ireland, 17 from the US, 5 from Australia and 5 from other locations around the world, which means that 76% of the participants were from Ireland/UK and the US.

4.3.2 Recruitment

Participants were recruited via the TripAdvisor “send message” facility available on individuals’ profiles, which goes to their e-mail addresses. The profiles show the following information: location, number of contributions, date of joining, their most recent reviews, and a “send message” facility. The screen name given on the profile is usually an indicator of gender but not always. Gender may also be voluntarily indicated in the profile area. No e-mail addresses are directly visible on individual profiles on TripAdvisor, but the “send message” facility” allowed the survey to be sent to the individual’s hidden e-mail address.

4.3.3 Sample Sourcing

Participants were found by choosing a selection of towns and cities from around the world, in all continents, browsing from the most recent contribution date and moving backwards. Those reviewers who did not fall into the “frequent” or “infrequent” categories were excluded, as were foreign language contributors, due to the complexity of translating. Contributors who had been a member of TripAdvisor for less than one year, and who had been inactive for a year or more were also excluded.

4.4 Quantitative Measures

This study uses two quantitative instruments i.e. the Narcissistic Personality Inventory and the Interpersonal Reactivity Index.

4.4.1 The Narcissistic Personality Inventory

The Narcissistic Personality Inventory (NPI), (Raskin & Hall, 1979; Raskin & Terry, 1988) was used to measure narcissism and exhibitionism. This is a 40 question survey where each question consists of two statements representing pairs of attitudes, to which the participants are asked to select by clicking on (a) or (b). The NPI is a self-report measure that assesses sub-clinical levels of narcissism. Though it does not measure narcissistic personality disorder (NPD), the concept of narcissism used for the NPI is based on the criteria for the narcissistic personality, originally taken from the DSM-III (American Psychiatric Association, 1980). This study uses the 40-item seven factor version that produces a full-scale narcissism score and seven-factor-based sub-scale scores i.e. authority, self-sufficiency, superiority, exhibitionism, exploitiveness, vanity and entitlement. Each component sub-scale is composed of 3-8 non-overlapping items. The NPI measures narcissism as a continuous variable with no definitive cut off score for which a person is considered to be a narcissist (Foster & Campbell, 2007).

The NPI construction is based on the DSM diagnosis of Narcissistic Personality Disorder, whose concept of extroverted narcissism is one of self-importance, exhibitionism and vanity as opposed to alternative concepts of narcissism such as Kohut's introverted and shy narcissist who nonetheless craves a "self-object unit" (Aviram & Amichai-Hamburger, 2005, p.3). Therefore the NPI is a useful tool for measuring the extroverted conceptualisation of narcissism, and exhibitionism, which may be present in prolific contributors to online WOMs.

Substantial evidence for the reliability and construct validity of the NPI as a measure of overt narcissism in non-clinical populations has been reported (Emmons, 1984; Raskin & Hall, 1979; Raskin & Terry, 1988). Internal consistency reliability is high (Guttman's $\lambda = .83$) as reported by Raskin and Terry (1988). Raskin and Hall (1979) found reliability of .72, for alternate forms, and .80, for split half. Scores on

the inventory correlated significantly and positively with those on the Narcissistic Personality Scale of the MCMI (Emmons, 1987).

4.4.2 The Interpersonal Reactivity Index

The Interpersonal Reactivity Index (Davis, 1980, 1983) was used to measure altruism. The Interpersonal Reactivity Index (IRI) is a multi-dimensional measure of dispositional empathy. Empathic concern is associated with prosocial behaviors such as helping, and has been considered a chief enabling process to altruism by Batson, (1991). It is widely believed that empathy encourages prosocial or altruistic behavior and numerous studies support this view (e.g., Batson, Fultz, & Schoenrade, 1987). Rather than treating empathy as a single affective or cognitive construct, as some instruments do, the IRI consists of a set of related constructs – related in that they all concern responsiveness to others, testing both affective and cognitive elements.

This 28-item Likert scale contains four seven-item sub-scales. The perspective taking (PT) scale measures the reported tendency to spontaneously adopt the psychological point of view of others in everyday life. The empathic concern (EC) scale assesses the tendency to experience feelings of sympathy and concern for unfortunate others. The personal distress (PD) scale taps self-oriented feelings of distress and anxiety in response in tense interpersonal situations. The fantasy (FS) scale measures the tendency to imaginatively transpose oneself into the feelings of fictional characters in plays, books or movies.

The IRI is a well-established standardized self-report measure of empathy frequently used by practitioners and researchers (Lauterback & Hosser, 2007). Internal reliabilities range from .71 to .77 for the sub-scales; test–retest reliabilities range from .62 to .71. As regards validity of the IRI, it is convergent with other measures such as Emotionality, and the Personal Attributes Questionnaire (Jolliffe & Farrington, 2004).

4.5 Qualitative Analysis

Finally, a single open-ended question was used to ask about motivation for contributing to TripAdvisor. This qualitative aspect was added to the study to supplement the data from the two questionnaires and to facilitate interpretation of the results. Content analysis was used to describe, analyse and interpret themes from the open-ended question. As only one question was asked, Microsoft Office Word (2003) was used to analyse the content of the question in order to identify common themes. Relevant information was coded and grouped with the assistance of a co-researcher for purposes of validation.

The literature was used as a foundation for seeking expected themes: Kollock (1999) identified reciprocity, reputation and efficacy as motives, while Lampel and Bhalla (2007) expanding on this found that motivation to contribute online informational gifts is shaped mainly by altruism, norms of reciprocity, positive self-image, status-seeking and product promotion. This study used a two-stage analysis of the content. In stage one the themes identified from the literature were combined and used for a preliminary scan of the text data. These themes were then ruled in or out, depending on whether or not they reflected what occurred in the study data, and further themes were added as new concepts emerged from content.

The themes finally selected were:

- 1) Reciprocation,
- 2) Efficacy,
- 3) Altruism
- 4) Product Promotion.
- 5) “brag-and-moan” (Hu et al, 2006, p.15)
- 6) Site sustainability and
- 7) TripAdvisor as objective source of information.

Once the themes were finalised, each response was analysed and the labels 1 – 7 were attached to groups of words in each response.

4.6 Procedure

The study primarily used a quantitative methodology. It employed two online survey questionnaires delivered through the e-WOM system being studied i.e. TripAdvisor. Two groups of participants were e-mailed individually during the month of December, 2008, via the TripAdvisor profile “send message” facility (see Appendix A). The e-mail requested participants to complete an online survey investigating frequent online travel reviewing, in the case of Sample A. In the case of Sample B (infrequent contributors), the e-mail requested potential participants to complete an online survey investigating the motivation for contributing to online travel reviews generally. In these e-mails subjects received a link which when clicked, brought them directly to the online survey - delivered in SurveyMonkey.

On entering the survey, participants were welcomed, briefed and asked to complete a Consent Form (see Appendix B). They were then asked to complete demographic questions on age, gender and location (see Appendix C). They were then presented with instructions for a questionnaire, which consisted of a series two-option forced-choice questions on narcissism (see Appendix D). This was followed by another set of questions with instructions, which consisted of a series of Likert-scale questions testing for altruism (see Appendix E). Finally participants were presented with a single open-ended question about motivation (see Appendix F) and debriefed before leaving the survey (see Appendix G).

4.7 Ethical Issues

There is nothing unique or problematic about this sample and there are no special ethical issues in the groups. However, actions were taken to ensure correct ethical procedures. Participants were briefed on the purpose of the study at the outset, required to be over 18, and asked to consent before commencing the survey. They were also given a clear idea of the time required to complete the survey. They were informed that all questions were optional and assured that the data was confidential and anonymous and that it would be held on secure servers. If participants declined to consent, they were thanked for their time. They were also offered the opportunity to leave the survey at any stage throughout, and to have their data removed at any time. They were given the primary researcher's contact details and those of the research supervisor – in the event of any questions or concerns. They were also given links to academic articles on topics relating to the study.

The pilot studies showed up no ethical concerns in a free-response question asking for general comments. The main survey threw up no issues or concerns about narcissism or the study generally. Because the debriefing document explained that the survey is looking for *both* altruism and narcissism, it was considered that this reference to both concepts was likely to provide protection against concerns regarding testing for narcissism alone. The Ethics committee from the Institute of Art, Design and Technology, Dun Laoghaire, approved this study at research proposal stage, before commencement of the main study.

Chapter 5:

Results

5.1 Quantitative Analysis

This section details the questionnaire data collected, to ascertain whether the hypotheses were supported. Statistical analysis was carried out using Statistical Package for Social Science (SPSS, 2008). A Spearman rho correlation coefficient to test the hypotheses is shown, following an initial set of descriptive statistics and a Mann Whitney U test for differences in narcissism, exhibitionism and altruism levels in the frequent and infrequent groups. Finally content analysis is used to analyse the text data from the open-ended question.

5.1.1 Demographic Results

Valid N = 42, with Frequent participants (Group A) and Infrequent participants (Group B) balanced, i.e. 22 in Group A and 20 in Group B (see Figure 3).

Contribution by gender is also well balanced at 22 Males and 20 females.

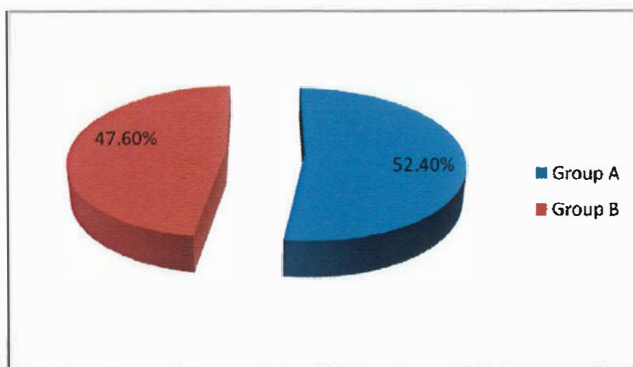


Figure 3. Distribution by (A) Frequent and (B) Infrequent Groups

Number of reviewers by location shows a larger number of participants from the categories “UK and Ireland” and “US” than from “Australia” or the “Other” category (see Table 1). The “Other” category comprises one participant each from Canada, Sweden, Hong Kong, Portugal and Israel. Age breakdown is evenly balanced for each of the categories 20-30, 31-40 and 41-50 with a lower frequency for the 51-65 category (see Table 1).

Table 1. *Reviewer Frequency by Location and Age*

		f	%
# Reviewers by Location	UK & Ire	15	35.7
	US	17	40.5
	Australia	5	11.9
	Other	5	11.9
# Reviewers by Age	20-30	11	26
	31-40	11	26
	41-50	11	26
	51-65	9	22

For Number of Reviews overall, $M = 16.52$, $sd = 17.68$, with a minimum Number of Reviews of 1 and a maximum of 71 (see Table 2).

Table 2. *Descriptive Statistics*

	N	Minimum	Maximum	Mean	Std. Deviation
Individual number of reviews	42	1	71	16.52	17.683
Age	42	20	65	41.36	12.564
NPI_Score	42	2	27	12.48	5.523
NPI Exhibitionism subscale	42	0	4	1.36	1.209
IRI_Score	42	36	89	60.52	10.496
Valid N (listwise)	42				

Mean Number of Reviews by gender is greater for Males than females at $M = 19.32$, $sd = 21.56$ and for Females, $M = 13.45$, $sd = 11.91$ (see Table 3).

Table 3. *Reviewer Frequency by Gender*

	Mean	Median	Std deviation
Male	19.32	7.5	21.56
Female	13.45	10	11.91

5.1.2 NPI and Exhibitionism Results

Results show that the NPI score for all participants was $M = 12.48$, $sd = 5.52$, the minimum score being 2 and the maximum being 27 (see Table 2). This score is less than the average score in the general population where the overall NPI score for a sample of 3,445 participants taken from all walks of life across many continents was $M = 15.2$, $sd = 6.7$ (Foster et al, 2003). Exhibitionism results as measured by NPI subscale exhibitionism were $M = 1.38$, $sd = 1.21$ (see Table 2). NPI mean scores differed little between Group A (frequent contributors) and Group B (infrequent contributors), in the direction predicted – i.e. frequent contributors showed higher narcissism levels. For Group A, $M = 12.73$, $sd = 5.87$, and for Group B, $M = 12.20$, $sd = 5.26$ (see Table H-1).

Similarly, NPI mean scores differed little by gender, for Males $M = 12.18$, $sd = 4.50$, and for Females $M = 12.80$, $sd = 6.57$ (see Table H-2). This result runs counter to the finding in the general population that men are more narcissistic than women (American Psychiatric Association, 1994). NPI mean scores by location were close for UK/Ireland and the US, with a lower mean score for Australia, and a higher mean score for the “Other” category (see Figure 4). Results are as follows: UK and Ireland: $M = 12.53$, $sd = 4.97$, US: $M = 12.59$, $sd = 6.89$, Australia: $M = 9.60$, $sd = 3.72$, Other: $M = 14.80$, $sd = 2.28$, (See Table H-2).

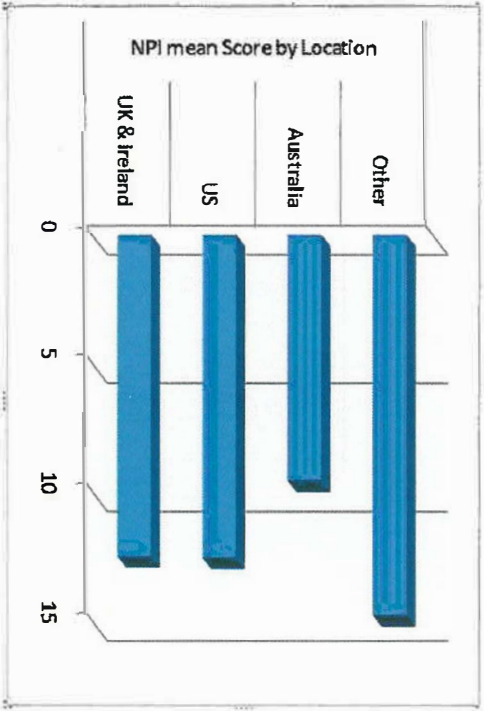


Figure 4: NPI Mean Scores by Location

NPI mean score by age is highest for the 31-40 category and lowest for the 51-65 category (see Figure 5). NPI/Age results are as follows: 20-30 years: $M = 12.73$, $sd = 5.31$, for 31-40 years: $M = 14.91$, $sd = 5.49$, for 41-50 years, $M = 11.55$, $sd = 4.39$, and for 51-65 years, $M = 10.33$, $sd = 6.69$. (See Table H-2).

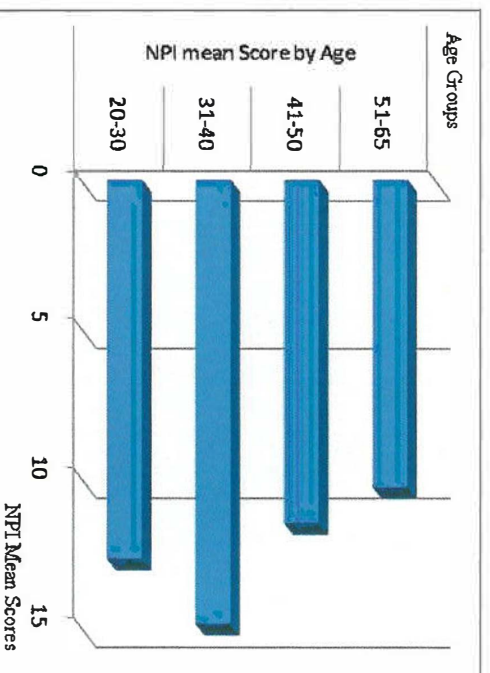


Figure 5: NPI Mean Scores by Age Group

5.1.3 IRI Results

Altruism results as measured by the IRI were $M = 60.52$, $sd = 10.50$, with a minimum score of 36 and a maximum score of 89 (see Table 2). IRI scores differed somewhat between Group A (frequent contributors) and Group B (infrequent contributors), in the direction predicted i.e. infrequent contributors showed the higher IRI scores. For Group A, $M = 59.45$, $sd = 10.04$, and for Group B: $M = 61.70$, $sd = 11.11$ (see Table H-3).

IRI mean scores by gender are lower for Males than Females; for Males, $M = 56.59$, $sd = 9.97$, and for Females, $M = 64.85$, $sd = 9.50$ (see H-4). This reflects differences in the population generally, with females displaying higher scores than males (Davis, 1980). IRI scores vary by location with the highest mean from the “Other” category and the lowest mean from Australia (see Figure 6).

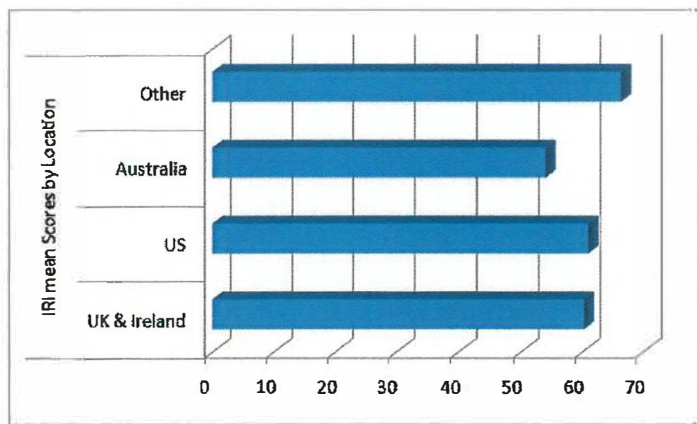


Figure 6: IRI Mean Scores by Location

Location results are as follows: UK and Ireland: $M = 60.27$, $sd = 11.37$, the US: $M = 61.00$, $sd = 9.30$, Australia: $M = 54.00$, $sd = 14.44$, and for the Other Category: $M = 66.20$, $sd = 5.17$ (see Table H-4). Regarding Age results, IRI mean scores are highest in the youngest age group and lowest in the 41-50 age group (see Figure 7).

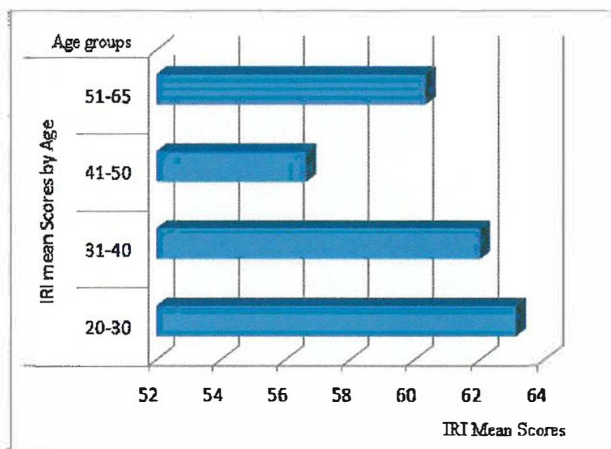


Figure 7: IRI Mean Scores by Age Group

IRI Age results are as follows: 20-30 years: $M = 63.09$, $sd = 13.12$, 31-40 years: $M = 62.00$, $sd = 6.50$, 41-50 years: $M = 56.64$, $sd = 11.63$, 51-65 years: $M = 60.33$, $sd = 9.73$ (see Table H-4). Age did not perform as expected in the general population, where scores are normally expected to increase with age (Lennon & Eisenberg, 1987).

5.1.4 Mann-Whitney U Test

The non-parametric Mann-Whitney U test for two independent samples was used next to test whether Sample A (frequent contributors) and Sample B (infrequent contributors) differed in one variable: Narcissism levels. There was no statistically significant difference between Sample A and Sample B in Narcissism levels ($U = 214.000$, $N1 = 22$, $N2 = 20$, $p = .880$, two-tailed), (see Table H-5).

Next Exhibitionism levels were compared between the two groups, again using the Mann-Whitney U test. There was no statistically significant difference between Sample A and Sample B in Exhibitionism levels ($U = 193.500$, $N1 = 22$, $N2 = 20$, $p = .490$, two-tailed), (see Table H-6).

Finally, the Mann-Whitney U test was used to test whether Sample A and Sample B differed in IRI levels. There was no statistically significant difference between Sample A and Sample B in Exhibitionism levels ($U = 197.000$, $N1 = 22$, $N2 = 20$, $p = .562$, two-tailed), (see Table H-7).

It was observed that p exceeds the Null Hypothesis declaration that $p \leq .05$ in all three cases. This is sufficient to accept the Null Hypothesis and to declare that there is no difference between the samples in terms of NPI levels, Exhibitionism levels and IRI levels.

5.1.5 Spearman's Rho

The next test was a correlational non-parametric test i.e. Spearman's rho was used to test the hypotheses, by measuring the amount and significance of a correlational relationship between three things i.e. (1) NPI and Number of Reviews, (2) NPI sub-scale Exhibitionism and Number of Reviews, and (3) IRI and Number of Reviews.

The hypotheses are as follows:

H1: Frequent contributors to online WOM travel recommendation systems are likely to exhibit higher levels of *Narcissism* than those who contribute infrequently.

The results did not support the hypothesis that there is a significant positive relationship between frequent reviewing and narcissism. There was no significant correlation, at $P < .0005$, between NPI and Number of Reviews ($r = .022$, $N = 42$, $p = .445$, one-tailed), (see Table H-8).

H2: Frequent contributors to online WOM travel recommendation systems are likely to exhibit higher levels of *Exhibitionism* than those who contribute infrequently.

The results did not support the hypothesis that there is a significant positive relationship between frequent reviewing and exhibitionism. There was no significant correlation, at $P < .0005$, between NPI Exhibitionism sub-scale and Number of Reviews ($r = .049$, $N = 42$, $p = .378$, one-tailed), (see Table H-9).

H3: Infrequent contributors to online WOM travel recommendation systems are more likely to contribute for reasons of *Altruism*, than are frequent contributors. The results partially supported the hypothesis that there is a negative relationship between low levels of reviewing and altruism. There was a weak negative correlation, at $P < .0005$, between IRI and Number of Reviews ($r = -.133$, $N = 42$, $p = .201$, one-tailed), (see Table H-10).

5.2 Content Analysis

Data from the open-ended question was analysed so that one or more phrases from each participant response were matched to the following labels (1) Reciprocation, (2) Efficacy, (3) Altruism, (4) Product promotion, (5) “brag-and-moan” (Hu et al, 2006, p.15), (6) Sustainability and (7) Objective source of information. The frequencies for each theme are shown in Table 4.

Table 4. *Content Analysis Theme Frequencies*

Reciprocation	Efficacy	Altruism	Product promotion	Brag & Moan	e-WOM sustainability	Objective source of info
21	7	7	1	2	7	9

By far the most common reason given for contributing reviews to TripAdvisor was *reciprocation* at 39% (see Figure 8), with *objective source of information* the next largest category, followed by *sustainability*, *altruism* and *efficacy* all at 13% each and smaller numbers for both *brag-and-moan* and *product promotion*.

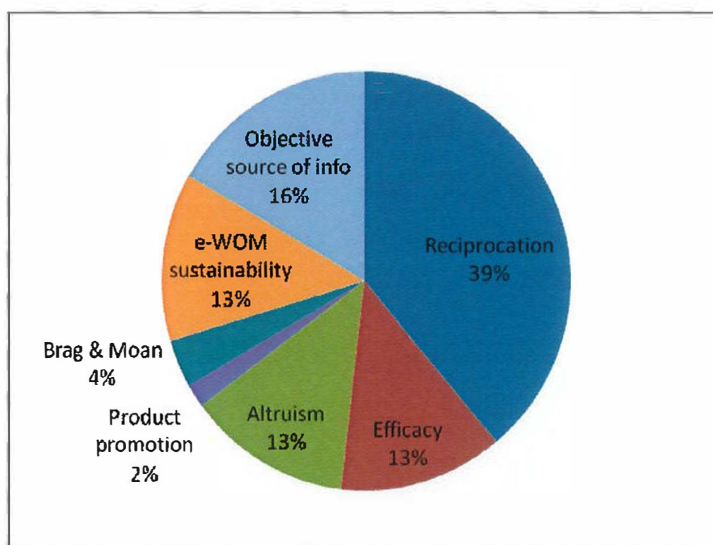


Figure 8: Motivation Theme Frequencies

5.3 Conclusion

None of the results from the three hypotheses tested were statistically significant, at $P < .0005$, for the sample size $N=42$, though the direction of all three were as predicted.

No significant difference was found between the frequent or infrequent groups.

However, the qualitative analysis found reciprocation as the most important motive.

Chapter 6:

Discussion

6.1 Key Findings

The results did not support the hypotheses that there is a strong positive relationship between frequent reviewing and either narcissism or exhibitionism. The results partially supported the hypothesis that there is a negative relationship between infrequent reviewing and altruism. There was a weak negative relationship, between IRI and Number of Reviews, which implies a small correlation in the direction predicted, between altruism and lower levels of reviewing, but which is not considered significant. No significant difference between the frequent and infrequent reviewing groups was found for narcissism, exhibitionism or altruism. There may have been confounding variables at work which were not taken into account, and the fact that only one measure was used to test each of the hypotheses, may have limited the results obtained.

Though narcissism has been shown to vary by gender, men being more narcissistic than women, this is unlikely to have influenced the results, as gender was equally balanced. However, according to Young and Pinsky (2006), narcissism also varies by location, with the US showing the highest mean NPI score across all continents, and this indeed may have influenced the results of this study. Location in this study was unbalanced, as a substantial majority of participants was accounted for by the UK/Ireland and US categories. NPI means were close for UK/Ireland and US (12.52 and 12.59 respectively), but varied substantially from this for the other locations; being lower for Australia (9.6) and higher for the "Other" category (14.80). Culture appears to exert a strong influence on narcissism as a large sample study (N=3445) carried out by Foster et al (2003) on individual differences in narcissism across five continents demonstrated. Results showed that average NPI scores for the US (15.3) and Europe (15.0) were significantly higher than for Asia (14.3) and the Middle East (13.9). It is therefore likely that culture distorted the results in this study, as 76.2% of the participants came from Ireland, UK and US. While prospective participants were selected from a variety of locations around the world, these were the holiday locations to which reviewers travelled, rather than their country of origin.

As shown, a sizeable majority of participants in this study were from more individualistic societies, where higher levels of narcissism are generally found (Foster

et al, 2003). Yet lower than average general population levels of narcissism were found in this study, than are found in the population in general (Foster et al, 2003). Therefore at a macro level (comparing population means) the population in this study, was far from being narcissistic.

Most of the participants (78%) were in the age range 20-50. The mean NPI score for the oldest age group i.e. 51-65 was the lowest at 10.33, and highest in the 31-40 age group at 14.91; this being a 4.58 difference in means. Age may be a confounding variable as generational difference over 25 years has been found to be twice as large as the current sex difference in narcissism; making generation a better predictor of narcissism scores than gender (Foster et al, 2003). Results differed also along demographic patterns for altruism, but not as much as for narcissism. As altruism generally increases with age, the bias in this sample towards the under 50's may have skewed the results. Demographic bias generally – including age and cultural bias - is likely to be a feature of Internet-based sampling (Dillman, 2007).

6.2 Results in the light of Previous Studies

NPI results for this study ($M = 12.48$, $sd = 5.52$, minimum score = 2 and maximum score = 27) show the mean to be less than the average score in the general population: $M = 15.2$, $sd = 6.7$ (Foster et al, 2003). The NPI measures narcissism as a continuous variable and there is no specific cut off score for which a person is considered a clinical narcissist (Foster & Campbell, 2007). Anything over 16 or 17 is considered more narcissistic. However, at a micro level, it is worth noting, that though the results did not achieve statistical significance, 17 participants from the sample of 42 did in fact score 17 or higher, with 5 of those scoring 20 or higher on the NPI scale. Those 5 participants represent participants who answered half or more of the items i.e. 20+ out of 40, in a narcissistic direction.

It is also worth noting how the results compare to data collected from a sample of celebrities including movie stars, famous musicians and reality TV participants (Young & Pinsky, 2006), which sample had a mean NPI score of 17.84. The results from this study show that 8 out of the 42 participants equal celebrities, in their levels of narcissism as measured by the NPI. A lot of media attention has also been given to the propensity of narcissists to move online to places where they can gain exposure and opportunities for self-promotion (Baldwin & Stromon, 2007; Orlet, 2007; Vaidhyathan, 2006). Due to the number of narcissistic individuals found in this study, the exploration of narcissism in e-WOMs, where prolific writers may exhibit their knowledge and show-off about related aspects of their lives is justified in future studies.

Equally, the search for altruism is justified, as Batson (1991) has shown that there is usually a combination of altruistic and egoistic goals motivating prosocial behaviour in what is referred to as a *dual process theory*. Although means and standard deviations were calculated by Davis (1980), it is not possible to compare the means from these previous studies to those achieved by the current study due to the vast difference in sample size. Davis (1980) used samples of over a thousand individuals, something that was not possible for this research project.

6.3 Implications of this Study for Current Theory

The NPI is derived directly from the clinical criteria for Narcissistic Personality Disorder as contained in the DSM-III (American Psychiatric Association, 1980) and has been validated in clinical settings (Prifitera & Ryan, 1984) though it is intended for use as a measure of normal narcissism in general populations. The NPI has been validated widely (Emmons, 1984; Raskin & Terry, 1988; Rhodewalt & Morf, 1995) including not just self-report studies, but observer ratings (Raskin, Novacek, & Hogan, 1991) and behavioural measures (Robins & John, 1997).

However, despite this validity, one possible reason for insignificant results is the susceptibility to both social desirability bias and inaccurate introspection on self-reports like the NPI (Nisbett & DeCamp Wilson, 1977). Many of the attitudes on the NPI can be seen as obviously positive about oneself e.g. “*Modesty does not become me*”, “*I like to show off my body*” and “*If I ruled the world it would be a better place*”, and so it is possible that someone given narcissistic and non-narcissistic attitudes to select from, may elect to make themselves more socially desirable by selecting non-narcissistic options.

Likewise, Chatterjee and Hambrick (2008) in a study measuring narcissism in CEOs, elected not to use the NPI, partly at least, because of potential social desirability bias, despite the authors’ acknowledgement of the NPI as the “prevailing instrument” (p.20) for doing this. They chose instead to use *unobtrusive* methods of investigating narcissistic tendencies. Similarly, Webb, Campbell, Schwartz and Sechrest (1966) urged researchers to use evidence people leave behind them, non-participant observation, and sources of written and spoken words of participants, as alternate ways of learning about their preferences and personalities.

The researcher of this study contacted Dr. Laura Buffardi, following a study on narcissism in social networking sites (Buffardi & Campbell, 2008) seeking her opinion about participants’ lack of disclosure when using the NPI (L. Buffardi, personal communication, December 8, 2008). While acknowledging the susceptibility of self-report measures to both social desirability bias and inaccurate introspection, Dr. Buffardi outlined that a range of scores (4 to 34) is commonplace, suggesting that,

despite the cause of these scores, some individuals do tend to agree with more narcissistic statements than others; this being useful for predicting behaviour. The small sample in this study saw scores ranging from 2 to 27 which was a similar spread. In conclusion, the NPI may not always be the best or only way to measure sub-clinical narcissism for studies in the area, though it is the most popular and very well linked to theory and accepted clinical diagnosis criteria.

This study found that reciprocation was given more often (39%), than any other single reason as the motivation for contributing to TripAdvisor in the open-ended question. Reciprocation as motivation means that a reviewer contributes useful information to the community in the expectation that he or she will get something helpful in return. Kollock (1999) notes that group reciprocity can sometimes be seen as a type of “system of generalized exchange” (p.8). This means that a form of credit is permitted where users can take now and pay later, i.e. they make use of others’ contributions without feeling the need to reciprocate immediately. Such systems usually have a sense of approximate balance over time, where good citizenship is encouraged and people see that the group is better off if they reciprocate.

In a society where future reciprocation is the motivation for contributing, then arguably the provision of public goods will be increased and these communities will be sustained. In a paper examining how to avoid the exploitation of an online common resource, Curian et al (2005) make the point that by generating reciprocity, more contributions will be created and the “tragedy of the commons” avoided (p.2). Kollock (1999) notes that this is particularly true in communities where contributions can be seen by the whole group and where they are publicly praised and valued (e.g. by expert badges and compliments). A feature of e-WOMs which encourages reciprocation is “a well defined and defended group boundary” (Kollock, 1999, p.8), where participants do not feel that there is a strong likelihood of people taking advantage of group resources before leaving. If reciprocation is indeed confirmed as a key motivator of e-WOMs like TripAdvisor, these communities could look to their membership and boundary definition to help ensure future sustainability.

6.4 Weaknesses of this Study

Several weaknesses of this study are recognised, due to practical limitations and unforeseen events.

6.4.1. Limitations of the NPI

The NPI was the only instrument used to measure narcissism in this study. For the reasons seen earlier the NPI is not always as sensitive as it needs to be in measuring narcissism. This study adds weight to the notion that the NPI has its limitations and may not always be the best or only tool for measuring narcissism.

6.4.2 Sample size and Focus

The most important limitation of this study is the sample size. The sample for this study had only 42 participants, despite setting out to obtain a minimum of 60. One limitation to acquiring more participants was the low response rates, due partly to only having one place from which to acquire participants (TripAdvisor members) and partly from the large number of questions in the survey (68 survey questions, demographic questions and an open-ended qualitative question) causing high drop-out and incompleteness rates. Also, though the researcher individually recruited participants from the TripAdvisor members' messaging facility, the research came to an abrupt end, following an e-mail from TripAdvisor stating that soliciting participation in a survey did not comply with their Private Messaging guidelines (TripAdvisor, personal communication, January 8, 2009). So it is possible that if this study were replicated on a larger scale, a statistically significant result may be obtained, since achievement of statistical significance is a direct function of a sample size (Robson, 2002).

Another limitation of this study is the fact that it draws participants from only one e-WOM. Online review or recommendation sites - also referred to as online consumer communities (OCCs) are grouped into three categories i.e. knowledge-sharing, file-sharing and experience-sharing communities (like TripAdvisor), all of which have different functions and attributes (Curien et al, 2005). It is possible that different types of e-WOMS may result in different behaviours and motivations. So not having a cross-section of e-WOM types as well as a number greater than one, is a limiting factor to this study.

6.4.3 Hypotheses

A further possible explanation for the findings is that the hypotheses may not have been justified and there may not be statistically significant narcissism, exhibitionism or altruism on an e-WOM like TripAdvisor. However, this is thought to be an unlikely explanation, in light of the fact that as many as 17 out of the 42 participants scored 17 or above on the NPI. A larger e-WOM sample looks promising in this context.

6.4.4 Internet Sampling

Internet sampling can also be problematic, though this study had the advantage of being a non-volunteer sample because the researcher invited participants to contribute individually. Despite this, the Internet sample *may* cause homogeneity of participants to the detriment of the results (Hewson, Yule, Laurent & Vogel, 2003). It is believed from the demographic data gathered that the participants were mostly English-speaking, from the western world and their ages were within the 20-50. Only their gender was balanced. Other characteristics are likely to be more homogeneous than in the general population also e.g. ethnicity, socio-economic status and education. However, though the sample may not well be fully representative of the general population, it may better represent e-WOM populations generally and the *TrippAdvisor population* specifically. Therefore definite conclusions cannot be drawn that the Internet sample skewed the results in this context.

6.5 Suggestions for Future Research

Research which triangulates the results, combining qualitative and quantitative methods should be carried out. This study's emphasis is on a quantitative methodology, whereas the study carried out by Lampel and Bhalla (2007) is strong on qualitative methodologies. Buffardi and Campbell (2008) use both methods and this may be a better model to follow when seeking complex traits like narcissism, exhibitionism or altruism.

Future studies need to be broader in scope, with larger sample size, controlling for known confounding effects such as nationality, gender and age, more than one e-WOM, and preferably more than one type of e-WOM. Research that seeks narcissism and altruism online generally, needs to have more open questions, observational and

other unobtrusive methods (Webb et al, 1966), along with self-report measures – to allow for problems with disclosure and inaccurate introspection. However, research that seeks to understand motivation for pro-social behaviour online and in e-WOMs specifically, needs to broaden the tests used to include possibility of finding other motivations than those sought here, e.g. specifically reciprocation (Gretzel et al, (2007); Kollock 1999; Lampel & Bhalla, 2007). In a final open-ended question in this survey, where participants were offered the opportunity to volunteer their views about why they contributed to TripAdvisor by far the most common response was reciprocation. This is evidence indeed of the need to broaden the scope of future studies to include online reciprocation. It also lends weight to earlier theories of reciprocation as motivation for giving and highlights the importance of researching reciprocation in online giving communities. In the past studies in this area have been carried out on offline environments, but are rare in online environments to date.

6.6 Conclusions

Explaining how and why online word-of-mouth reviewing works has been the concern for many researchers. There has been a particular fascination with why some people contribute disproportionately, without the promise of gaining anything in return. Narcissism, exhibitionism and altruism are three of the motives explored here. However, this study did not find any statistically significant relationship between these factors and reviewing, using quantitative methods. Instead insight into the reasons behind participants' motivation was gained by analysing the content of a single open-ended question. The question offered reviewers the opportunity to explain in their own words why they contribute reviews. Reciprocation - the idea that *taking something from* the community obliges one to *give something back* - has emerged as the rationale most worth pursuing, while content analysis and other less obtrusive methods suggest themselves as worthy instruments to use in this pursuit. This study is one of the first to explore motivation for informational giving in an online environment. It is also one of the early studies to look for narcissism in online communities and to find some evidence of reciprocation in these settings – with most research currently focusing on social networking sites, rather than e-WOMs. Further exploration of online narcissism and reciprocation, and motivation for contributing to e-WOMs generally, looks both interesting and promising.

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Appendix A: E-mails requesting participation in study

Request to contribute to the survey

Sample A: request:

Send message to mary

From: mary


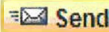
Subject:

Hello my name is Mary O'Brien and I am carrying out an independent survey of frequent online travel reviewers such as you. The survey is part of a Cyber-Psychology research project at IADT, Dublin, Ireland. I would really appreciate if you would spend a few minutes completing my questionnaire. Thanks for your time so far.

Contact email for any queries: reviewingresearch@hotmail.com

Begin survey: https://www.surveymonkey.com/s.aspx?sm=0G5LfZqSWdAx5nLGSah_2f8w_3d_3d

[Message guidelines](#)

Sample B: request

Send message to mary

From: mary

Subject:

Hello, my name is Mary O'Brien and I am carrying out an independent survey looking at the motivation for contributing travel reviews. The survey is part of a cyberpsychology research project being carried out at the School of Creative Technologies IADT, Dublin, Ireland. I would really appreciate if you would spend a few minutes completing my questionnaire. Thank you for your time so far.

contact email if you have any queries: reviewingresearch@hotmail.com

Begin survey: <http://surveyfink.com>

[Message guidelines](#)

Appendix B: Consent Form

WELCOME TO OUR PERSONALITY TRAITS STUDY

This Website is part of a CyberPsychology research project, at the School of Creative Technologies in the Institute of Art Design and Technology (IADT), in Dublin, Ireland.

Our study is an online survey examining personality traits of online travel system reviewers. Before taking part in this study, please read the consent form below and proceed by clicking on the "I agree" button at the bottom of the page if you wish to do so.

Consent Form

This survey will assess the personality traits of people who contribute to a travel review Website. It takes approximately 10 minutes to answer the questions. More detailed information with regard to the nature of the study will be provided after the participation.

Take your time. Please don't rush through the questions. Choose a time and place where you won't be disturbed or interrupted.

There are no right or wrong answers. The best answer to choose is the one that you most identify with.

Answer honestly. As much as possible, avoid the temptation to choose answers simply because they sound most desirable. This may diminish the accuracy of your feedback.

This survey is voluntary and you are free to skip a question or leave the survey at any point if you wish.

Participation in this study will not involve any known risks and data gathered in the study will be anonymous, confidential and held on secure servers for research purposes only. You are free to withdraw from the study at any time.

If you are 18 or over, understand the statements above and freely consent to participate in this study then click on the "I Agree" button to begin the study.

I Agree

I Do Not Agree

Appendix C: Demographic Questions

4. Background	
1. Please complete <u>the following details</u> :	
Age	<input type="text"/>
Gender	<input type="text"/>
Country:	<input type="text"/>

Appendix D: Narcissistic Personality Inventory

Instructions:

What follows is a series of questions to which you should tick **A** or **B** depending on which best describes you.

In each of the following pairs of attitudes, choose the one that you MOST AGREE with.
Only mark One ANSWER for each attitude pair.

Question 1

- A. I have a natural talent for influencing people
- B. I am not good at influencing people

Question 2

- A. Modesty does not become me.
- B. I am essentially a modest person

Question 3

- A. I would do almost anything on a dare
- B. I tend to be a mostly cautious person

Question 4

- A. When people compliment me, I sometimes get embarrassed
- B. I know that I am good because everyone keeps telling me so

Question 5

- A. The thought of ruling the world frightens me
- B. If I ruled the world it would be a better place

Question 6

- A. I can usually talk my way out of anything
- B. I try to accept the consequences of my behaviour

Question 7

- A. I prefer to blend into the crowd
- B. I like to be the centre of attention

Question 8

- A. I will be a success
- B. I am not concerned about success

Question 9

- A. I am not better or worse than most people
- B. I think I am a special person

Question 10

- A. I am not sure if I would make a good leader
- B. I see myself as a good leader

Question 11

- A. I am assertive
- B. I wish I were more assertive

Question 12

- A. I like having authority over other people
- B. I don't mind following orders

Question 13

- A. I find it easy to manipulate people
- B. I don't like it when I find myself manipulating people

Question 14

- A. I insist upon getting the respect that is due me
- B. I usually get the respect I deserve

Question 15

- A. I don't particularly like to show off my body
- B. I like to show off my body

Question 16

- A. I can read people like a book.
- B. People are sometimes hard to understand.

Question 17

- A. If I feel competent I am willing to take responsibility for making decisions.
- B. I like to take responsibility for my decisions.

Question 18

- A. I just want to be reasonably happy.
- B. I want to amount to something in the eyes of the world.

Question 19

- A. My body is nothing special.
- B. I like to look at my body.

Question 20

- A. I try not to show off.
- B. I will usually show off if I get the chance.

Question 21

- A. I always know what I am doing.
- B. Sometimes I'm not sure what I'm doing.

Question 22

- A. I sometimes depend on people to get things done.
- B. I rarely depend on anyone else to get things done.

Question 23

- A. Sometimes I tell good stories.
- B. Everybody likes to hear my stories.

Question 24

- A. I expect a great deal from other people.
- B. I like to do things for other people.

Question 25

- A. I will never be satisfied until I get what I deserve.
- B. I take my satisfactions as they come.

Question 26

- A. Compliments embarrass me.
- B. I like to be complimented

Question 27

- A. I have a strong will to power.
- B. Power for its own sake doesn't interest me.

Question 28

- A. I don't care about new fads and fashions.
- B. I like to start new fads and fashions.

Question 29

- A. I like to look at myself in the mirror.
- B. I am not particularly interested in looking in the mirror.

Question 30

- A. I really like to be the centre of attention.
- B. It makes me uncomfortable to be the centre of attention.

Question 31

- A. I can live my life any way I want to.
- B. People can't always live their lives in terms of what they want.

Question 32

- A. Being an authority doesn't mean that much to me.
- B. People always seem to recognise my authority.

Question 33

- A. I would prefer to be a leader.
- B. It makes little difference to me if I am the leader or not.

Question 34

- A. I am going to be a great person.
- B. I hope I'm going to be successful.

Question 35

- A. People sometimes believe what I tell them.
- B. I can make anyone believe anything I want to.

Question 36

- A. I am a born leader.
- B. Leadership is a quality that takes a long time to develop.

Question 37

- A. I wish someone would someday write my autobiography.
- B. I don't like people to pry into my life.

Question 38

- A. I get upset when people don't notice how I look when I go out in public.
- B. I don't mind blending into the crowd.

Question 39

- A. I am more capable than other people.
- B. There is a lot I can learn from other people.

Question 40

- A. I am much like everyone else.
- B. I am an extraordinary person.

Scoring Key of 40-item NPI.

1a, 2a, 3a, 4b, 5b, 6a, 7b, 8a, 9b, 10b, 11a, 12a, 13a, 14a, 15b, 16a, 17b, 18b, 19b, 20b, 21a, 22b, 23b, 24a, 25a, 26a, 27a, 28b, 29a, 30a, 31a, 32b, 33a, 34a, 35b, 36a, 37a, 38a, 39a, 40b

The above responses are scored as narcissistic. Each narcissistic response is worth one point. The total NPI score is the sum of narcissistic responses.

NPI Sub-scales:

Authority: Items 1, 8, 10, 11, 12, 32, 33, and 36.

Self-Sufficiency: Items 17, 21, 22, 31, 34, and 39.

Superiority: Items 4, 9, 26, 37, and 40.

Exhibitionism: Items 2, 3, 7, 20, 28, 30, and 38.

Exploitativeness: Items 6, 13, 16, 23, and 35.

Vanity: Items 15, 19, and 29.

Entitlement: Items 5, 14, 18, 24, 25, and 27.

Appendix E: Interpersonal Reactivity Index

The following statements inquire about your thoughts and feelings in a variety of situations. For each item, indicate how well it describes you by choosing the appropriate letter on the scale: A, B, C, D, or E. When you have decided on your answer, click on the letter next to the item number. **READ EACH ITEM CAREFULLY BEFORE RESPONDING.** Answer as honestly as you can. Thank you.

ANSWER SCALE:

A	B	C	D	E
DOES NOT DESCRIBE ME WELL				DESCRIBES ME VERY WELL

1. I daydream and fantasize, with some regularity, about things that might happen to me. (FS)
2. I often have tender, concerned feelings for people less fortunate than me. (EC)
3. I sometimes find it difficult to see things from the "other guy's" point of view. (PT) (-)
4. Sometimes I don't feel very sorry for other people when they are having problems. (EC) (-)
5. I really get involved with the feelings of the characters in a novel. (FS)
6. In emergency situations, I feel apprehensive and ill-at-ease. (PD)
7. I am usually objective when I watch a movie or play, and I don't often get completely caught up in it. (FS) (-)
8. I try to look at everybody's side of a disagreement before I make a decision. (PT)
9. When I see someone being taken advantage of, I feel kind of protective towards them. (EC)
10. I sometimes feel helpless when I am in the middle of a very emotional situation. (PD)
11. I sometimes try to understand my friends better by imagining how things look from their perspective. (PT)
12. Becoming extremely involved in a good book or movie is somewhat rare for me. (FS) (-)
13. When I see someone get hurt, I tend to remain calm. (PD) (-)

14. Other people's misfortunes do not usually disturb me a great deal. (EC) (-)
15. If I'm sure I'm right about something, I don't waste much time listening to other people's arguments. (PT) (-)
16. After seeing a play or movie, I have felt as though I were one of the characters. (FS)
17. Being in a tense emotional situation scares me. (PD)
18. When I see someone being treated unfairly, I sometimes don't feel very much pity for them. (EC) (-)
19. I am usually pretty effective in dealing with emergencies. (PD) (-)
20. I am often quite touched by things that I see happen. (EC)
21. I believe that there are two sides to every question and try to look at them both. (PT)
22. I would describe myself as a pretty soft-hearted person. (EC)
23. When I watch a good movie, I can very easily put myself in the place of a leading character. (FS)
24. I tend to lose control during emergencies. (PD)
25. When I'm upset at someone, I usually try to "put myself in his shoes" for a while. (PT)
26. When I am reading an interesting story or novel, I imagine how I would feel if the events in the story were happening to me. (FS)
27. When I see someone who badly needs help in an emergency, I go to pieces. (PD)
28. Before criticizing somebody, I try to imagine how I would feel if I were in their place. (PT)

Scoring Key:

NOTE:(-) denotes item to be scored in reverse fashion

PT = perspective-taking scale

FS = fantasy scale

EC = empathic concern scale

PD = personal distress scale

A = 0

B = 1

C = 2

D = 3

E = 4

Except for reversed-scored items, which are scored:

A = 4

B = 3

C = 2

D = 1

E = 0

Appendix F: Open-ended Motivation Question

Before leaving the survey, please tell us why you write travel reviews on Tripadvisor?

A large, empty rectangular box with a vertical scrollbar on the right side, intended for an open-ended response.

Appendix G: Debriefing Document

THANK YOU VERY MUCH FOR TAKING PART IN THIS SURVEY.

The study in which you just participated was designed to analyse the motivation for contributing to online travel review systems and in particular to investigate whether there is a link between altruism or narcissism and online information sharing. Previous research has highlighted the altruistic link and it is now predicted that participants who contribute heavily may score higher on aspects of narcissism.

If you have questions about this study or you wish to have your data removed from the study at any time, please contact Mary O'Brien: reviewingresearch@hotmail.com or her supervisor Hannah Barton: hannah.barton@iadt.ie.

We thank you sincerely for contributing and assure you that your data is confidential and anonymous, and if published the data will not be in any way identifiable as yours. Your contribution is very useful for investigating the future of online review systems.

Finally, if you would like more information about motivation for contributing online reviews, such as altruism or narcissism, please contact Mary O'Brien at reviewingresearch@hotmail.com or see the readings below.

Kollock, P. (1999). The economics of online cooperation: Gifts and public goods in cyberspace. In M.A. Smith & P. Kollock (Eds.), *Communities in Cyberspace* (pp 220-239). London: Routledge.

Lampel, J., & Bhalla, A. (2007). The role of status seeking in online communities: Giving the gift of experience. *Journal of Computer-Mediated Communication*, 12(2), Article 5. Retrieved March 17, 2009 from <http://jcmc.indiana.edu/vol12/issue2/lampel.html>

Dovidio, J.F., Piliavin, J.A., Schroeder, D.A., & Penner, L.A. (2006). *The Social Psychology of Prosocial Behavior*. Mahwah, NJ: Erlbaum.

Appendix H: Results Tables

Table H-1. *NPI Scores by Frequent and Infrequent Contributors*

Freq_Infreq			Statistic	Std. Error
NPI_Score	Frequent	Mean	12.73	1.250
		Median	12.00	
		Std. Deviation	5.865	
		Minimum	3	
		Maximum	27	
		Range	24	
	Infrequent	Mean	12.20	1.176
		Median	13.00	
		Std. Deviation	5.258	
		Minimum	2	
		Maximum	21	
		Range	19	

Table H-2. *NPI Means and Standard Deviations by Gender, Location and Age*

NPI Score by Gender	Mean		Std Deviation
	Male	12.18	
	Female	12.80	
NPI Score by Location	UK & Ireland	12.53	4.97
	US	12.59	6.89
	Australia	9.60	3.72
	Other	14.80	2.28
NPI Score by Age	20-30	12.73	5.31
	31-40	14.91	5.49
	41-50	11.55	4.39
	51-65	10.33	6.69

Table H-3. *IRI Scores by Frequent and Infrequent Contributors*

			Statistic	Std. Error
IRI_Score	Frequent	Mean	59.45	2.141
		Median	60.00	
		Std. Deviation	10.041	
		Minimum	36	
		Maximum	77	
		Range	41	
	Infrequent	Mean	61.70	2.485
		Median	60.50	
		Std. Deviation	11.112	
		Minimum	39	
		Maximum	89	
		Range	50	

Table H-4. *IRI Means and Standard Deviations by Gender, Location and Age*

IRI Score by Gender		Mean	Std Deviation
	Male	56.59	9.97
	Female	64.85	9.50
IRI Score by Location	UK & Ireland	60.27	11.37
	US	61.00	9.30
	Australia	54.00	14.44
	Other	66.20	5.17
IRI Score by Age	20-30	63.09	13.12
	31-40	62.00	6.50
	41-50	56.64	11.63
	51-65	60.33	9.73

Table H-5. *Mann Whitney U Test for NPI Differences*

Ranks				
	Freq_Infreq	N	Mean Rank	Sum of Ranks
NPI_Score	Frequent	22	21.77	479.00
	Infrequent	20	21.20	424.00
	Total	42		

Test Statistics^a

	NPI_Score
Mann-Whitney U	214.000
Wilcoxon W	424.000
Z	-.151
Asymp. Sig. (2-tailed)	.880

a. Grouping Variable: Freq_Infreq

Table H-6. *Mann Whitney U Test for Exhibitionism Differences*

Ranks				
	Freq_Infreq	N	Mean Rank	Sum of Ranks
NPI Exhibitionism subscale	Frequent	22	20.30	446.50
	Infrequent	20	22.83	456.50
	Total	42		

Test Statistics^a

	NPI Exhibitionism subscale
Mann-Whitney U	193.500
Wilcoxon W	446.500
Z	-.690
Asymp. Sig. (2-tailed)	.490

a. Grouping Variable: Freq_Infreq

Table H-7. *Mann Whitney U Test IRI Differences*

Ranks				
	Freq_Infreq	N	Mean Rank	Sum of Ranks
IRI_Score	Frequent	22	20.45	450.00
	Infrequent	20	22.65	453.00
	Total	42		

Test Statistics^a

	IRI_Score
Mann-Whitney U	197.000
Wilcoxon W	450.000
Z	-.580
Asymp. Sig. (2-tailed)	.562

a. Grouping Variable: Freq_Infreq

Table H-8. *Spearman's rho for NPI and Number of Reviews*

			NPI_Score	Individual number of reviews
Spearman's rho	NPI_Score	Correlation Coefficient	1.000	.022
		Sig. (1-tailed)	.	.445
		N	42	42
	number of reviews	Correlation Coefficient	.022	1.000
		Sig. (1-tailed)	.445	.
		N	42	42

Table H-9. *Spearman's rho for Exhibitionism and Number of Reviews*

			number of reviews	NPI Exhibitionism subscale
Spearman's rho	number of reviews	Correlation Coefficient	1.000	.049
		Sig. (1-tailed)	.	.378
		N	42	42
	NPI Exhibitionism subscale	Correlation Coefficient	.049	1.000
		Sig. (1-tailed)	.378	.
		N	42	42

Table H-10. *Spearman's rho for IRI and Number of Reviews*

			number of reviews	IRI_Score
Spearman's rho	number of reviews	Correlation Coefficient	1.000	-.133
		Sig. (1-tailed)	.	.201
		N	42	42
	IRI_Score	Correlation Coefficient	-.133	1.000
		Sig. (1-tailed)	.201	.
		N	42	42