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## **The transformative service paradox: The dilemma of wellbeing trade-offs**

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### **Abstract**

**Purpose** – A transformative service aims to improve wellbeing, however current approaches have an implicit assumption that all wellbeing dimensions are equal and more dimensions led to higher wellbeing. The purpose of this paper is to present evidence for a new framework that identifies the paradox of competing wellbeing dimensions for both the individual and others in society – the transformative service paradox (TSP).

**Design/methodology/approach** – Data is drawn from a mixed-method approach using qualitative (interviews) and quantitative data (lab experiment) in an electricity service context. The first study involves 45 household interviews (n= 118) and deals with the nature of trade-offs at the individual level to establish the concept of the TSP. The second study uses a behavioral economics laboratory experiment (n=110) to test the self vs other nature of the trade-off in day-to-day use of electricity.

**Findings** – The interviews and experiment identified that temporal (now vs future) and beneficiary-level factors explain why individuals make wellbeing trade-offs for the transformative service of electricity. The lab experiment showed that when the future implication of the trade-off is made salient, consumers are more willing to forego physical wellbeing for environmental wellbeing whereas when the ‘now’ implication is more salient consumers forego financial wellbeing for physical wellbeing.

**Originality/value** – This research introduces the term Transformative Service Paradox and identifies two factors that explain why consumers make wellbeing trade-offs at the individual level and at the societal level; temporal (now v future) and wellbeing beneficiary.

**Keywords:** Transformative service paradox, wellbeing, dilemma, trade-offs

**Paper type:** Research paper

## Introduction

A transformative service is one “...that centers on creating uplifting changes and improvements in the well-being of both individuals and communities” (Ostrom et al. 2010, p. 12) and which are found in multiple contexts, such as healthcare, tourism and finance, and even service industries which may not appear altruistically inclined at first (Rosenbaum, 2015). The importance of transformative services is underlined by issues such as the declining life expectancy in countries such as the United States (American Academy of Family Physicians, 2018) and United Kingdom (Institute and Faculty of Actuaries, 2019). Alarmingly, this has led to forecasts of future generations being worse off than their parents in crucial wellbeing areas (Grattan, 2014). In response to these issues, service scholars urge greater understanding of how services can assist in improving individual and societal wellbeing, which has evolved into the Transformative Service Research (TSR) agenda.

Wellbeing is thought to be a multi-faceted concept with physical, emotional, financial and other aspects which are a focus of services (Pham, Sweeney and Soutar, 2019; McColl-Kennedy, Hogan, Witell and Synder, 2017; Guyader, Ottosson, Frankelius and Witell, 2019). Transformative service research has consistently shown that services can improve the wellbeing of consumers and society, though to date TSR has focused on wellbeing as a whole rather than from a multidimensional angle (Kuppelwieser and Finsterwalder, 2016). This represents a new direction for transformative service research to take, given that scholars have called for a greater balance of research exploring both the positive and negative impacts of services (Čaić, Odekerken-Schröder and Mahr, 2018; Plé and Chumpitaz Cáceres, 2010). This research sits at the nexus of positive and negative service impacts, providing new insights into how transformative services can affect wellbeing.

The current research focuses on how consumers often experience a dilemma whereby they must trade off one dimension of wellbeing against another. For example, a dentist surgery provides an important service that ultimately improves consumer physical wellbeing, but at the same time, this service result in a significant negative impact to the consumer due to the size of the bill, subsequently detracting from their financial wellbeing (c.f. Hill *et al.*, 2013; Kelly, Binkley, Neace and Gale, 2005). Thus, transformative service wellbeing goals can often unknowingly compete, resulting in a predicament for consumers as to which wellbeing goal should take priority. To theoretically and empirically explain these dilemmas experienced by consumers this article theoretically proposes and empirically examines the transformative service paradox.

In service literature, many scholars have contributed to explaining consumer trade-offs in the evaluation of service attributes, such as price, level of quality and level of personal service (e.g. Ostrom and Iacobucci, 1995), which underpin central outcomes such as value (a trade-off of costs and benefits; Kleijnen, De Ruyter and Wetzels, 2007). Yet, while there is understanding that consumers negotiate with themselves as to what trade-offs with service attributes are made in the lead-up to a purchase decision (a ‘self dilemma’), little of this thinking has transferred to transformative service research. The first aim of this paper is to understand how individuals trade off different dimensions of wellbeing with themselves.

Another dilemma experienced by consumers is performing behaviors which may have competing benefits for themselves and others (a ‘social dilemma’). For example, during a cold Winter consumers may choose to use a large amount of electricity to heat their home, which increases their physical wellbeing. However, this is at the expense of others as placing strain on the grid can lead to increased investment (and higher electricity bills), and environmental wellbeing suffers as more resources are consumed. Essentially, the social dilemma represents a mindset problem whereby individuals hold a zero-sum logic: if they believe that for one individual to ‘win’ another has to ‘lose’, then they will seek self-benefit first, rather than focusing on mutual benefit. Literature explains that consumers will behave differently based upon the beneficiary of their actions (Duclos and Barasch, 2014; White *et al.*, 2011; Ye *et al.*, 2015). However, little is known about how consumers behave when presented with social dilemmas relating to transformative services. The second aim of this paper is therefore to contribute to service knowledge related to the trade-off consumers may undertake for the wellbeing of “the self” versus others.

This paper therefore seeks to address two research questions: RQ1: “How do individuals trade-off different dimensions of individual wellbeing?” (Self vs Self); and RQ2: “How do individuals trade-off individual and others wellbeing?” (Self vs Other). To answer these two research questions the current paper applied a two-study mixed method approach using in-depth household interviews and a behavioral economics laboratory experiment in which the transformative service paradox is first explored and then confirmed within an electricity service context.

Electricity usage (or reduction of usage) has been identified as an important area for TSR with calls for further research in this area (Guyader *et al.*, 2019). Electricity services form the foundation of modern society and underpin the reliable and affordable supply of other transformative services such as health services, access to education and financial

services. Electricity services affect societal and individual wellbeing by improving quality of life (World Energy Council 2016) and can therefore be considered a transformative service. With global consumption of energy on the rise (Energy Information Administration, 2019) as consumers increasingly desire physical comfort (through appliances such as air-conditioning) at the expense of society's ability to provide the energy (environmental and resource issues), we see a 'transformative service paradox' (TSP) where consumers need to trade-off their wellbeing with that of society – resulting in a social dilemma. Research has noted that encouraging reduction of electricity usage to improve financial wellbeing can be counter-intuitive for some market segments as this can detract away from physical wellbeing (Waite *et al.*, 2016). Thus, given electricity is noted as a transformative service requiring exploration and literature and as a context that involves trade-offs and social dilemmas and is thus an appropriate context for this research. The use of electricity services extends the reach of TSR beyond the typical health contexts and broadens the understanding of how services can create uplifting change to wellbeing.

The remainder of this article is structured as follows. First, a review of relevant literature is presented including transformative service research, trade-offs and social dilemmas which are then synthesized into the theorization of the transformative service paradox. Next, an overview of the method is presented, followed by the presentation of Study 1 and Study 2. To conclude, the theoretical and practical implications of the paper are discussed, as well as an outline of the papers limitations and future directions for research.

## **Literature review**

In this literature review, the current state of play for transformative service research is outlined with particular attention to the contexts and conceptualizations of wellbeing used in past transformative service research leading to the first research question. Then the literature on wellbeing trade-offs is examined with particular emphasis on evidence from the field of economics and then a discussion on social dilemmas leading to the second research question. Collectively, these trade-offs theoretically guide the concept of the transformative service paradox.

### *Transformative service research – a state of play*

Transformative service research (TSR) is defined as the “integration of consumer and service research that centers on creating uplifting changes and improvements in the wellbeing

of individuals (consumers and employees), families, social networks, communities, cities, nations, collectives, and ecosystems” (Anderson *et al.*, 2011, p. 3). Since the initial work on TSR by Anderson and colleagues (2011), there have been substantial efforts by services marketing scholars to conceptualize and measure the wellbeing outcomes of services across a range of contexts (see Table 1). For example, Rosenbaum and Smallwood (2013) explore how healthcare services can be transformed into “third places” which assist both the physical and emotional wellbeing of patients. Likewise, Schuster *et. al.* (2015) examine the delivery of mental wellbeing health services via self-service technology. Despite the perhaps obvious relevance of healthcare as a setting for understanding transformative services, there are other settings where different aspects of services and wellbeing are understood in different ways; indeed, there is a recent call for wellbeing research to extend beyond health and examine more domains (Russell-Bennett, Fisk, Rosenbaum and Zainuddin, 2019). For example, service settings such as religion or spiritual retreats, police services or banking services.

**Table 1.**  
Chronological Overview of TSR studies

Author(s)/Year	Conceptual / Empirical	Setting	Orientation of Benefits		Wellbeing Dimensionality	
			Self	Other	Uni-dimensional	Multi-dimensional
Rosenbaum, et al. (2011)	Conceptual	Services (general)	Y	Y		Y
Anderson, et al. (2013)	Conceptual	Services (general)	Y	Y		Y
Rosenbaum and Smallwood (2013)	Empirical	Healthcare	Y			
Wunderlich, et al. (2013)	Empirical	Energy Use	Y		Y	
Rayburn (2014)	Empirical	Services (general)	Y		Y	
Blocker and Borrios (2015)	Empirical	Poverty	Y		Y	
Corus and Saatcioglu (2015)	Conceptual	Healthcare	Y			Y
Engström and Elg (2015)	Empirical	Healthcare	Y			
Martin and Hill (2015)	Empirical	Financial Services	Y		Y	
Mende and Van Doorn (2015)	Empirical	Financial Services	Y		Y	
Schuster, et al. (2015)	Empirical	Healthcare	Y		Y	
Black and Gallan (2016)	Conceptual	Healthcare	Y		Y	
Fisk, et al. (2016)	Conceptual	Poverty	Y	Y		Y
Kuppelwieser and Finsterwalder (2016)	Conceptual	Services (general)	Y	Y		
Rosenbaum, et al. (2016)	Empirical	Retail	Y		Y	
Edgar et al. (2017)	Empirical	Retail	Y		Y	
Hamedi, et al. (2017)	Empirical	Healthcare	Y		Y	
Parkinson, et al. (2017)	Empirical	Healthcare	Y		Y	
Anderson, et al. (2018)	Conceptual	Healthcare	Y			Y
Friman, et al. (2018)	Empirical	Sports Services	Y		Y	
Mulcahy, et al. (2018)	Empirical	Services (general)	Y		Y	
Parkinson, et al. (2019)	Empirical	Healthcare	Y			Y

Rosenbaum, et al. (2019)	Empirical	Healthcare	Y	Y
Tanouri, et al. (2019)	Empirical	Healthcare	Y	Y

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Another interesting observation from the review of the TSR literature is that while definitions and conceptualizations of transformative services explicitly mention the aim of benefitting individuals and others (e.g. families, social networks, communities and collectives), most research focuses on the individual rather than on multiple levels, as seen in Table 1. Indeed, literature on transformative services that outlines the need for understanding both individual and group levels appear to be mostly conceptual. Kuppelwieser and Finsterwalder (2016) point out that implications of transformative services for individual actors or entities (individual-oriented benefits), as well as their effects on the communities and society (other-oriented benefits) have not been not sufficiently explored. In summary, there is a need to understand transformative services beyond healthcare settings and to look beyond the individual as the only beneficiary of wellbeing.

#### *Wellbeing conceptualization and dimensionality in TSR*

In the literature, approaches to the conceptualization of wellbeing vary. First, TSR and the broader literature have examined wellbeing from subjective and objective perspectives. Objective wellbeing contains indicators of quality of life such as material resources (income, food and housing) and social attributes (education, social networks, health) while subjective wellbeing refers to evaluations of the subjects own life including happiness and life satisfaction (Western and Tomaszewski, 2016). In this research we adopt a subjective approach to wellbeing. The Easterlin paradox (1974) identified that objective wellbeing as measured through GDP does not increase happiness and that higher levels of material resources do not necessarily increase wellbeing (Sen, 1999). Subjective wellbeing is comprised of “people’s emotional responses, domain satisfactions and global judgements of life satisfaction” (Diener *et al.*, 1999, p. 277). In TSR, subjective wellbeing appears to be the dominant approach to wellbeing. One reason may be the difficulty in operationalizing objective wellbeing with disagreement on objective wellbeing thresholds. For example, in the case of financial wellbeing governments and policy-makers often examine the threshold level of income to define ‘below-the-poverty-line’ households (Blocker *et al.*, 2013; Laderichi, *et al.*, 2003; UNESCO, 2016). As pointed out by Blocker and colleagues (2013) while there is

wide-spread motivation to assist poverty reduction, there is little agreement on what constitutes low-income, poverty or financial hardship.

Secondly, the dimensionality of wellbeing has not yet received much attention in the TSR literature which tends to focus on wellbeing as a whole concept rather than from a multi-dimensional perspective (Kuppelwieser and Finsterwalder, 2016). This represents a potentially fruitful new direction of investigation for TSR, adding nuance to service scholars' understanding of what it means to be transformative. Indeed, key service concepts such as customer value (Leroi-Werelds, 2019; Sánchez-Fernández, and Iniesta-Bonillo, 2007) and service quality (Brady and Cronin, 2001; Dagger, Sweeney and Johnson, 2007) have evolved from uni-dimensional to multi-dimensional constructs. Of the limited studies which take a multi-dimensional approach to wellbeing, McColl-Kennedy *et al.*, (2017) use the McGill QOL index which is comprised of four indicators; social, existential, psychological and physical wellbeing. The lack of multi-dimensional conceptualizations of wellbeing in TSR could be attributed to the contextual dependence of the construct. That is, wellbeing is contextually-bound, where different forms of wellbeing are prevalent or important in different transformative service settings.

### *Wellbeing Trade-offs*

Past TSR focuses on the positive aspects of wellbeing with an assumption that 'more is better'. However, given the limited resources available to most consumers, understanding trade-offs amongst wellbeing dimensions is timely, particularly given the potential negative outcomes – such as deviant or destructive behavior – that can result when one wellbeing dimension is disregarded or traded-off (Čaić, Odekerken-Schröder and Mahr, 2018). Further, Kuppelwieser and Finsterwalder (2016) have called for an examination of both “positive and negative wellbeing”, showing that researchers are aware of the existence of multiple types of wellbeing and the destructive outcomes that may result from a wellbeing conflict.

There are countless examples demonstrating that consumers trade-off wellbeing dimensions. For instance, there is rising social commentary on 'mummy wine time' where mothers trade-off their health (through alcohol consumption) against providing for their children (see Thayer 2018). Likewise shift workers trade-off their physical wellbeing (irregular sleeping patterns) against career or financial wellbeing (Jehan *et al.*, 2017). In the electricity context there is evidence to show that consumers trade-off physical wellbeing with



financial wellbeing, for example by spending significant amounts of time below the ‘zone of comfort’ (Gasprini, 2015) – that is, enduring very cold indoor temperatures to save on electricity use (Watson, 2013). Another example is consumers unwillingness to pay increased electricity prices to access green energy and save the environment (Nomura and Akai, 2004).

Despite these examples of wellbeing trade-offs, there is little research in transformative service research or indeed in the wellbeing literature about this paradoxical relationship and why the trade-off occurs. This research addresses that gap and raises the research question of *RQ1: “Why do individuals trade-off different dimensions of individual wellbeing?” (Self vs Self)*

### *Social dilemmas*

Literature demonstrates that consumers also make trade-offs between individual gain and societal benefit. The occurrence of this trade-off is termed a social dilemma (Sen, Gürhan-Canli, and Morwitz, 2001). A social dilemma within a service-setting involves the use of a service whereby an individual benefits at the expense of the collective (Kollock, 1998). Examples include inappropriate use of public health services such as hospitals (e.g. using emergency services for minor injury), overuse of water in drought conditions (e.g. watering the lawn when dam levels are low) and use of electricity at peak demand times (e.g. using heat/cooling and increasing demand on an electricity service possibly creating a blackout). The paradox of individual benefit of service use vs the social benefit of non-use creates a forced trade-off, made all the more complex given that more than one dimension of wellbeing might be influenced by the service exchange.

Assisting individuals to resolve the paradox is of importance for transformative services researchers as they seek to improve wellbeing through services. This is particularly important as the number of social dilemmas consumers will face is increasing due to increasing resource scarcity (Hajkowicz *et al.*, 2012). For instance, if the health wellbeing dimension is improved through virtual service requiring technological devices that are made from petroleum-based plastics, we are essentially creating the social dilemma of self-oriented health wellbeing against the other-oriented wellbeing of environmental resources. A responsible service management approach needs to overcome individual ‘free riding’ where an individual attempts to benefit from the investment of others without contributing themselves – for example, avoiding taxes but enjoying the hospitals paid for by the taxes of others (Isaac and Walker, 1988). Social dilemma situations are ubiquitous in society –

consider air pollution or the use of public goods like electricity (Abbott, 2001). In social dilemmas an individual forgoes some benefits so that the community can benefit (Mas-Colell, Whinston and Green, 1995). Individual demands affect entire communities and societies and thus the individual has to trade-off individual wellbeing against societal wellbeing. Despite the fact that most transformative services inherently create a social dilemma, this has not yet been applied as a theoretical lens in TSR.

Behavioral economics studies in social dilemmas show that while participants may initially consider their community, this effect tends to deteriorate over time (Kagel and Roth, 1995) and few communities succeed in achieving societally optimal, high contributions (Fischbacher, Gächter and Fehr, 2001). The adverse effect on the community, given the public policy nature of the infrastructure investments, also affects the long-term financial burden for the individual.

Trade-offs are not unfamiliar in customer value, where the very nature of exchange is based on costs and benefits. In the marketing literature, there are two examples of social dilemma-style trade-offs. These are when making eco-conscious purchases (Gupta and Ogden, 2009), when using the internet (Hann, Hui, Lee, and Png, 2002), or when deciding whether to participate in a consumer boycott of a favorite product (Sen, Gürhan-Canli, and Morwitz, 2001). Value and satisfaction result when this exchange works in the consumers favor - but there is no assumption that this comes without cost. At the very minimum, a consumer in a traditional purchase decision situation will need to give up money, effort, and time. This is especially true in situations where consumer desires are heterogenous and markets contain numerous competing offers (Johnson, 1974) or in the case of emotion-laden decisions (Luce, 1998).

Emotion-laden decisions often involve a motivational conflict, and tend to lead to trade-off behavior (Drolet and Luce, 2004). During an approach-approach conflict, a consumer knows that one favorable outcome will cost them another, while an approach-avoid conflict presents a classic trade-off, with consumers aware of the sacrifices being made and whether the desired product is worth it (Elliot, 2006). Social dilemmas are different to these traditional motivational conflicts in that consumers are trading off with their neighbors or society, rather than trading off with themselves (one exception: green products and other morally imbued goods). Despite the knowledge we have of social dilemmas there is little evidence of the application of this concept for transformative services and wellbeing. This

research addresses that gap and answers the research question of *RQ2*: “*Why do individuals trade-off individual and others wellbeing?*” (*Self vs others*)

### Overview of research design

This paper reports the results of two studies to address the two research questions. The first is a qualitative study that utilized in-depth group interviews with 118 individuals from 45 households to identify the relevant wellbeing dimensions that underpin the use of electricity services and to examine the reasons for wellbeing trade-offs in that context. The second is a behavioral economics laboratory experiment which confirms the transformative service paradox and the reasons for the paradox identified in study 1. The studies are both situated within the transformative service setting of electricity and are summarized in Table 2.

**Table 2.**  
Summary of Studies

	Study 1	Study 2
Purpose	Explore the nature of the transformative service paradox.	Confirm transformative service paradox findings of Study 2
Research Question	1 and 2	1 and 2
Method	Qualitative household interviews	Quantitative Laboratory experiment
Analysis	Inductive and deductive coding	ANCOVA
Sample size	118	110

### Study 1

#### *Study 1 method*

Study 1 qualitatively explored the presence of wellbeing trade-offs between the self and between self and others and addressed both research questions. Forty-five household interviews were conducted with 118 participants. Recruitment occurred in partnership with the local industry partners using a convenience snowballing approach. Interview locations included metropolitan and rural areas of Australia. An overview of the sample is provided in Table 3.

**Table 3.**  
Study 1 Sample Overview.

Characteristic	%
<i>Age</i>	
Under 12	25.8
13-17	9.0
18-24	18.0

25-34	6.7
35-44	15.7
45-54	10.1
55-64	14.6
65+	
<i>Household Income</i>	20.5
Under \$50,000	18.2
\$50,001-\$75,000	11.4
\$75,001-\$100,000	22.7
\$100,001-\$125,000	27.3
\$125,001 and over	
<i>Education</i>	22.9
Bachelor	20.3
Certificate of Diploma	2.5
N/A*	6.8
Postgraduate	47.5
School level	
<i>Occupation</i>	
Intermediate	7.7
Not Employed	17.1
Professional	30.8
Routine and Manual	12.8
Student	31.6

\*N/A children yet to have completed schooling

### *Interview Procedure*

Household interviews were conducted in the home of the participants. The interviewer and observer would arrive after having scheduled the interview in advance, greet the participants, and then set up the interview materials and audio recorder. Participants were then stepped through each section of the interview guide at their own pace, with the average interview time being 1–1.5 hours. Projective techniques including pictorial stimuli was used to stimulate discussions regarding the dilemma of different transformative service choices which inherently had potential trade-offs consumers would consider.

### *Study 1 data analysis*

The analysis of the group interviews was undertaken using thematic analysis with two cycles of coding. As recommended by Fereday and Muir-Cochrane (2006) the first cycle involved inductive (data-driven) analysis, followed by the second cycle of deductive (theory-driven) analysis. The guiding literature and theories used for the deductive coding can be seen in the “guiding literature” column of Table 4. Once coding had been conducted, codes were cross-

checked by the research team to ensure consistency. The names of participants used in the results have been altered to preserve anonymity.

### *Study 1 results*

Wellbeing paradoxes emerged which were underpinned by two mechanisms; the temporal state (when wellbeing benefits were experienced) and the wellbeing beneficiary (who receives the wellbeing). A summary of the findings can be seen in Table 4 whereby for the self dilemma, consumers face the paradox of having physical wellbeing but reduced financial wellbeing thus leading to reduced overall wellbeing, or the paradox of having environmental wellbeing but reduced financial wellbeing and thus reduced overall wellbeing. For the social dilemma, consumers face the paradox of having individual wellbeing (financial) but society has reduced environmental and physical wellbeing which in turn reduces wellbeing of the individual.

**Table 4.**  
Overview of Study 1 Categories, Themes and Paradoxes Identified

Research Question	Guiding literature	Mechanism	Wellbeing paradox
RQ1	Guyader <i>et al.</i> (2019) Macdonall and White (2015) Sánchez-García <i>et al.</i> (2012)	Temporal state (Now vs Future)	Financial (Now) vs Environmental (Future) Physical (Now) vs Financial (Future)
RQ2	White <i>et al.</i> (2011) Ye, <i>et al.</i> (2015) Duclos and Barasch, (2014)	Beneficiary (Self vs other)	Financial wellbeing (self) vs environmental (other) Financial wellbeing (self) vs physical wellbeing (self)

### *Temporal state: Now versus future wellbeing*

An important theme that emerged from the data explaining why the transformative service paradox occurred within individuals was that of the temporal state – when is the wellbeing experienced (now versus future). This theme was characterized by participants implicitly discussing the importance of the timing wellbeing. Within this theme, there were two important trade-offs; physical versus financial wellbeing and financial versus environmental wellbeing.

*Physical vs Financial Paradox.* An important first paradox was physical vs financial wellbeing. Within this theme participants discussed how life situations would challenge them to trade-off between short-term (physical) and long-term (financial) wellbeing outcomes. For example, Kim, a mother of a household of four, noted that whilst it was useful to know how the household electricity usage would impact their financial wellbeing in the longer-term (the bill), short-term physical wellbeing came first, particularly temperature comfort:

It'd be useful to know how much the air-conditioner used [cost of running] but then we have to decide do we want to be hot or not? Save money and be hot or [uncomfortable].

This theme was also reiterated by Bridget who lives in a share-household, who discussed the short-term comfort of leaving lights on and increasing their electricity bill:

Well, I pay the bills and I always want to make the house more comfortable for whoever's here so if I can do that, that's why I suggest new things. I'm a user [use lots of electricity] because I am bad with turning off lights and I like lights because they make me feel happy.

In summary, households were willing to trade-off long-term financial wellbeing for short-term physical wellbeing despite desiring lower bills. This dilemma is explained by motivational conflict (approach-avoid) (Mowen, 2011), whereby consumers have preferences for physical comfort (approach) but also seek lower financial cost (avoid). The temporal state is similar to the Sánchez-García *et al.*, (2012) study which found that the impact of regret and variety-seeking depended on the time perspective of behavioral intentions (short versus long). The findings of this theme therefore appear to indicate that participants perceive short-term wellbeing behaviors as more desirable and are willing to trade this off against other long-term wellbeing behaviors despite the longer-term negative wellbeing effects and their desire to avoid these negative effects.

*Environmental vs Financial Wellbeing Paradox.* Consumers often expressed their preferences to undertake actions which would improve their future wellbeing. In line with Guyader and colleagues (2019), participants expressed their willingness to use services which not only benefited themselves short-term but also in the long-term (via the environment). For instance, Anna expressed her preferences to consume services in such a way that led to sustained wellbeing for herself and the environment:

Personal choice [willingness to use services in a conservatively manner first], because we know that it's not good for the environment to keep on using all the power.

However, other participants expressed that whilst they would prefer consuming electricity in a way that had minimal environmental impact, their financial wellbeing was more of a top-of-mind priority. This is consistent with the findings of Macdonall and White (2015) who found that in charitable giving, money is construed as relatively more concrete in comparison to time. This preference for short-term financial wellbeing in comparison to a more abstract longer-term benefit is illustrated by Lisa and Beau's discussion about their household priorities:

Lisa: It's always the bill [that we are thinking about].

Beau: To be honest, it's the bill....

Lisa: Yeah, the environment will be fine as long as –

Beau: I wish I could care a bit about the environment.

Interestingly, other participants discussed how they recognized and attempted to find solutions which could benefit both aspects of their wellbeing.

Both [environment and financial]. Both, I think. Probably the environment. I think the natural cooling is better. The breeze goes from the front door right through the house so it works because we've got security screens on the back door, the side doors and the front door so you can leave the front door open [opposed to using air conditioning].

From the discussions with households, it was evident that that three main approaches were taken when considering the financial and environmental paradox, 1) focusing on the environment, somewhat at the expense of financial wellbeing, 2) a focus on financial wellbeing (bills) at the expense of environmental wellbeing, and 3) a focus on attempting to balance both environmental and financial wellbeing.

### *Wellbeing beneficiary*

The second mechanism underpinning the self vs other dilemma was the wellbeing beneficiary; who receives the wellbeing, which addresses research question two. The orientation of benefits has found to be an important consideration for consumers and motivates the performance of prosocial behaviors (e.g. Holmes *et al.*, 2002; White and Pelozo, 2009; Ye *et al.*, 2015). Consumers are often inherently individualistic, and their decisions and behaviors are often dependent on the benefits they can experience before others. Consistent with findings in settings outside of TSR literature, participants discussed

how their use of services was often dependent on who received the benefit. For several households, it was discussed that individual benefits were a primary motivator, and they were aware that this would come at the expense of others:

Yeah, I would do. Yeah, definitely as long as there's savings and I can get confirmation that there is a benefit to do it, a financial benefit, then that's normally – I'll definitely go ahead with something. But I have to be confident that those savings would be there.

Another participant, Greg, acknowledged that while individuals and mankind both benefit from some things (such as technology progress helping to reduce energy prices), there is often a negative outcome that comes along with positive change. In essence, any benefit may never be a complete victory for any beneficiary:

Technology actually as it comes should drive the price down otherwise there is no benefit, and in a lot of cases it is. Over the years prices have come down on all sorts of items purely because of technology. That should be the benefit to mankind, but I am always a believer in for every action there's an equal and opposite reaction, so if you get a good thing there is also a bad thing.

A different household discussed how if there were no self-oriented benefits apparent that this would demotivate them to perform pro-social behaviors such as placing solar panels on roofs to save the environment or reduce strain on the electricity network (other-oriented benefits) at the expense of their financial wellbeing (self-oriented benefits).

Maya: Yeah, I feel like if you're going to incentivize anything that's positive to the environment and energy use and you know, it's perhaps in that space. You know, there's no benefit for us building that at all. It's actually we're disincentivized or disadvantaged in a way, because it's greater risk.

Maya's husband then described how their purchase of solar benefits would ultimately not benefit their individual household but others in the future:

Grant: I've already placed batteries on order when they reach a certain price, but that's going to be a couple of years and we'll be out of here anyway so somebody else will benefit.

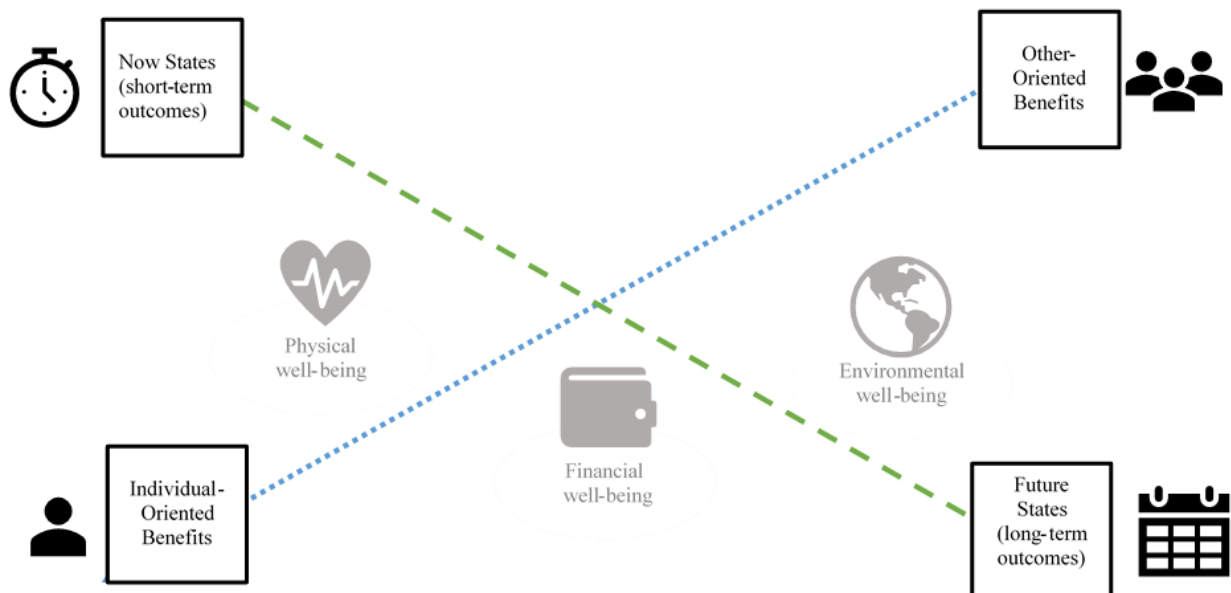
In summary, participants perceived individual and others as a zero-sum game and inherently in opposition which created tension. This is consistent with prior research which suggests that self-oriented benefits are often first preference for consumers (Duclos and Barasch, 2014; White and Pelozo, 2009). For most households self-oriented benefits were weighted more heavily than other-oriented benefits when making trade-offs in wellbeing.



### Study 1 Implications

Study 1 revealed two broad mechanisms that underpin transformative service paradoxes; the temporal state and the wellbeing beneficiary (see Figure 1). The trade-offs underpinning the paradox reflected three core wellbeing dimensions relevant to the electricity service context; physical, financial and environmental. Financial wellbeing in particular appeared to be the most consistently emphasized by Study 1 participants. It is important to note that wellbeing dimensions are context-bound and that other transformative service contexts would likely involve different dimensions. Study 1 extends the current TSR literature by demonstrating that there are compromises made by consumers to reach a consistent or improved state of wellbeing, and this can be at the expense of other aspects of wellbeing, as well as other actors within the service ecosystem. The relative impact of these paradoxes and how they impact consumers decisions to use services however cannot be determined from this qualitative study, therefore, hypotheses based upon the findings of Study 1 for testing in Study 2 were developed and the three wellbeing dimensions uncovered in Study 1 will be used in Study 2 to test the framework.

**Figure 1.** Transformative paradox framework.



*\*Note: Grey icons indicate context specific wellbeing elements.*

## Hypotheses Development

Consistent with the aims of the research and the model derived from the findings of Study 1, three hypotheses for testing in study two were developed to confirm the transformative service research paradox. These hypotheses are underpinned by social dilemma theory, which posits that individuals are motivated to perform behaviors based upon how much they value outcomes for self in contrast to outcomes for others (see also Table 5).

**Table 5.**

Overview of Study 2

Research Question	Dilemma	Hypothesis
RQ1 (self v self)	<ul style="list-style-type: none"><li>Physical (self) v financial (self)</li></ul>	Hypothesis 1
RQ2 (self v other)	<ul style="list-style-type: none"><li>Physical (self) v physical (other)</li><li>Physical (self, now) v environment (others, future)</li></ul>	Hypothesis 2 Hypothesis 3

### *H1 Self dilemma (self vs self)*

In Study 1 consumers discussed that they often considered trade-offs of their own wellbeing. These trade-offs were often based upon consumers temporal needs for when the wellbeing was experienced. Through the theoretical lens of temporal construal this could be due to consumers perceiving short-term wellbeing benefits more concretely and future wellbeing benefits more abstractly (Liberman and Trope, 1998). This is based upon temporal distance, the proximity of an event in time, and people's perceptions of the possibility of an outcome (Kim, Zhang and Li, 2008). Consider a consumer's dilemma on a hot day in relation to using an air conditioner (physical short-term wellbeing) and spending future money on the electricity needed to power the air-conditioner (financial long-term wellbeing). In transferring the principles of temporal construal to the current study, we proposed that consumers will choose short-term wellbeing such as physical wellbeing to gain concrete benefits in comparison to long-term wellbeing such as financial where the benefits are more abstract. The following hypothesis is therefore proposed:

*H1. When experiencing self versus self wellbeing trade off situations consumers will experience significantly lower financial wellbeing long-term in comparison to the short-term.*

*H2. Social Dilemma (self vs other)*

In line with the findings of Study 1 and the social motives and situational cues component of social dilemma theory, we suggest that preferences for performing different behaviors exist based upon the benefits realized individually (e.g. maximizing one's own outcomes regardless of others) or for others (e.g. maximizing joint outcomes for the benefit of others). In accordance with the principles of social dilemma theory, when exposed to a resource dilemma (e.g. running out of electricity), scarcity will encourage those with individualistic motives to gather more of the shared resource for themselves (Weber, Kopelman and Messick, 2004). However, when made aware that all consumers receive reduced outcomes when individuals make selfish choices, all consumers make cooperative choices (Weber, Kopelman and Messick, 2004). In applying this logic to the transformative service paradox, this suggests that to make choices which uplift the wellbeing of others, consumers are required to be made aware of how individual-oriented choices result in a negative impact to all consumers wellbeing. When this realization does not occur, individuals are more likely to prefer benefits for themselves.

Research also suggests that differences exist based upon the primary beneficiary of a behavior (Green and Peloza, 2009, 2014; White and Simpson, 2013). For example, White and Simpson (2013) demonstrate that the effectiveness of an appeal type for sustainable behavior depends on whether the individual or collective level of the consumer's mind set is activated. Additionally, Green and Peloza (2014) find that in private settings, consumers are more likely to favor and respond to self-benefit appeals and are more likely to respond to other-benefit appeals when behaviors are more public (Green and Peloza, 2014). Taken together, the theoretical principles of social dilemma theory and findings of prior research (Weber, Kopelman and Messick, 2004) indicate then when wellbeing behaviors become more public then consumers collective mind-set will be engaged and they will perform a behavior which maximizes joint wellbeing outcomes (other-oriented benefits). Thus, the following is hypothesized:

**H2.** *Consumers exposed to an other-oriented scenario will experience significantly higher financial wellbeing than those exposed to an individual-oriented scenario*

*H3. Self versus others and Short versus long term dilemmas*

The findings of Study 1 suggest that when provided concrete evidence of the benefits of other-oriented wellbeing behaviors consumers will experience significantly higher long-term wellbeing. In line with tenants of social dilemma theory (Kollock, 1998) and temporal construal theory (Liberman and Trope, 1998), when consumers perceive clear evidence of the superiority of the outcomes for themselves and others in the long-term the more likely they will be to engage in a proposed behavior. In the case of this research, this suggests that when provided concrete evidence that reducing electricity consumption will benefit both the individual *and* others it is more likely an individual will undertake beneficial long-term actions. Further, this should lead to significant wellbeing increases in comparison to consumers who are unaware of the benefits their actions may have upon others. The following hypothesis is therefore put forward for testing:

**H3.** *Consumers exposed to the other-oriented scenario will have higher long-term financial wellbeing than consumers exposed to the individual-oriented scenario in the long term compared to short term.*

## **Study 2**

The purpose of Study 2 was to confirm the transformative service research paradox identified in Study 1. This research focused on actual behaviors rather than stated ones; to achieve this laboratory experimentation was conducted. Laboratory experiments have relatively high rates of replicability, mainly due to their use of substantial financial incentives, avoiding the use of deception, and methodological transparency (Camere *et al.*, 2016). By only having variation of conditions (independent variables) potential confounds are controlled to mitigate their interference with any effect on relevant measures (dependent variables) (Elson and Quandt, 2016).

This study follows standard experimental economics methodology (Croson, 2005) and involves incentive-compatible tasks, i.e. where their final lump sum payment was determined on their performance throughout the experiment. As such financial wellbeing was one of the key indicators of wellbeing for Study 2. This is appropriate for several reasons. First, a key

finding from Study 1 was that financial wellbeing was a key motivating factor for consumers. Second, as indicated in sustainable consumption research, financially incentivizing consumers to reduce energy consumption is more effective as it allows for the dual benefit of saving money in the short term whilst saving the environment in the long term (Mulcahy, Russell-Bennett and Iacobucci, 2018; Russell-Bennett, Mulcahy, Little and Swinton, 2018), a key premise for Study 2. Further, calls have been made for a greater understanding of how to enhance consumer financial wellbeing from transformative scholars (Brüggen *et al.*, 2017; Losada- Otálora and Alkire, 2019). Thus, based upon these factors, it was determined that financial wellbeing was an appropriate dimension for focus in Study 2.

### *Procedure*

Participants were recruited through a convenience sample involving individuals who had registered to participate in laboratory-based experiments and a consumer panel. All participants were awarded a participation amount, with their final lump sum payment determined by their performance throughout the experiment, designed to pay on average AUD\$20. The simulation was a public good game (Andreoni, 1988) where participants were placed in groups of 4 (neighborhoods), given a financial allocation that represented electricity use (called an endowment) and asked to play rounds on a computer and indicate the amount of electricity they would contribute to the public good while foregoing electricity for themselves. At the end of the experiment, participants could take the amount of money left in real currency. The scenarios given to participants are contained in the appendix. The self dilemma focuses on energy efficiency for the individual and the need to forego physical comfort (physical wellbeing) to save money (financial wellbeing). The social dilemma makes the needs of others more salient by highlighting the risk of a network outage due to overload and the impact on others and the environment.

To best simulate real world social dilemmas, participants did not interact with each other; the experiment took place in complete silence and participants were in cubicles and did not know who in the room was in their group. Each session lasted on average approximately one hour. Two scenarios were run, with the first condition focused on self-oriented benefits and the second focused on other-oriented benefits.

The game ran for a total of 8 rounds, where contribution decisions were made simultaneously amongst players, with the corresponding payoff then distributed at the rounds

conclusion which signified the financial wellbeing of participants. The use of the 8 rounds in the behavioral economics experiment was advantageous as it allowed for the simulation of short-term versus long-term benefits. Further, the contributions and pay offs meant that all participants could act out self-oriented or other-oriented behaviors based on how much of their endowment they were willing to contribute to the public good without indication of what other members of the experiment were contributing. In sum, the rounds of the experiment allowed for the simulation of short-term versus long-term benefits and the ability to contribute or withhold contributions in the rounds simulated social dilemmas as required to test the hypotheses.

### *Operationalization*

At the end of each round, players were shown a screen that displayed the payoff they received. The payoff was calculated using the formula:  $\text{Payoff} = (10 - x) + [\frac{1}{4} * (x+y)] * 1.6$  where each player commenced with 10 endowment credits (\$10), contributed some of that endowment (x), received  $\frac{1}{4}$  of the total groups contribution multiplied by 1.6. At the end of 8 rounds, the amount of endowment credits was then received as cash. High levels of endowment at the end of each round represented the amount contributed to the public good and the sacrifice made. High contributions in the game represented high financial wellbeing (spending less on electricity) and low contributions in the game represented low financial wellbeing (spending more on electricity).

### *Hypothesis Testing*

To test the hypotheses, a series of analysis of covariances (ANCOVAs) were undertaken. The results of each ANCOVA are reported next.

#### *Hypothesis 1 – Self versus self*

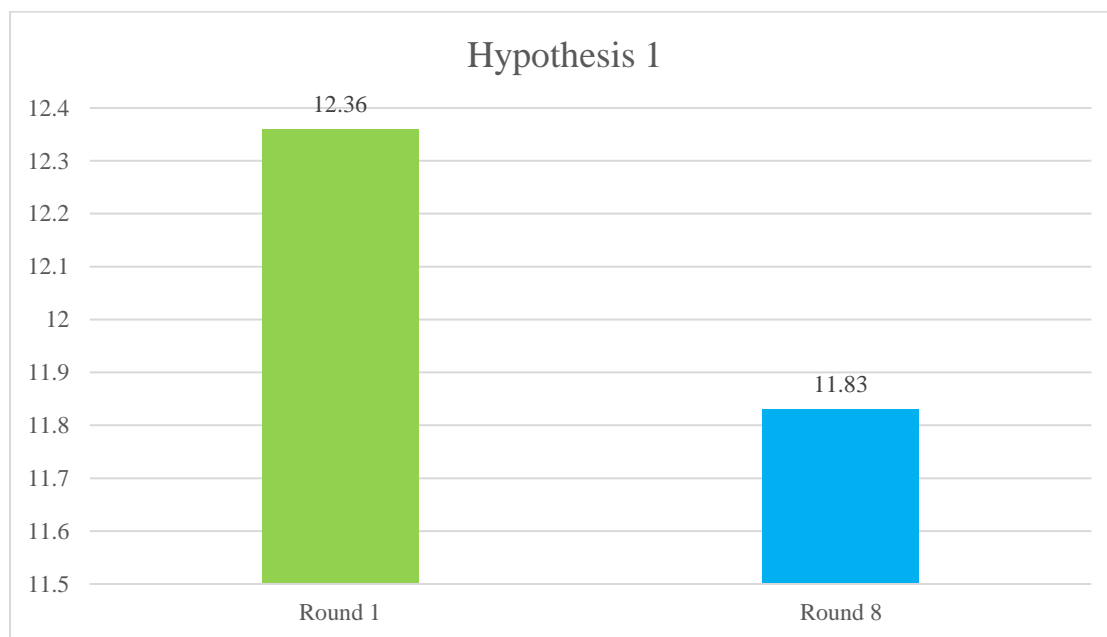
To test H1, a one-way repeat series ANCOVA (round one versus round 8) was conducted with the self dilemma scenario. The result of the one-way ANCOVA (Table 6 and Figure 2) shows that there was a significant difference between round 1 (M=12.36, SD=2.34) and round 8 (M=11.83, SD=2.93). The covariate of sex, (F=7.35, p=.018) was significant, whilst the other remaining covariates were non-significant, employment (F=3.56, p=.08), and age (F=1.40, p=.25). With financial wellbeing diminishing from round 1 to round 8, this indicates consumers are willing to forgo long-term benefits to enhance shorter term physical wellbeing.

For example, consumers are willing to use more electricity to be comfortable at the expense of their longer-term financial wellbeing. Thus, H1 is supported. This indicates that while in the short-term (round 1), consumers in a self dilemma are more likely to perform short-term focused physical wellbeing behaviors (e.g. turn the air conditioning on or heating), and forego financial wellbeing in the longer term, as illustrated by the significant drop in payoffs from round 1 to round 8. Thus, H1 is supported.

**Table 6.**  
Hypothesis 1 Results

Source	df	F	Sig.	Partial Eta Squared	Observed Power <sup>a</sup>
Financial Wellbeing Short-term versus long-term	1	2.68	.041	.136	.511

**Figure 2. The self dilemma payoff - financial wellbeing diminishes over time**



*Hypothesis 2 – Self versus other*

To test hypothesis 2, a two-way ANCOVA (self-versus other) were conducted comparing the two scenarios of the behavioral economics experiment (see also Table 7 and Figure 3). In particular, the cumulative payoffs from the eight rounds were used for comparison. The results of the one-way ANCOVA revealed a significant difference between the self (M=99.68, SD=2.49) and other (M=107.85, SD=2.06) scenarios as hypothesized (F=5.82,

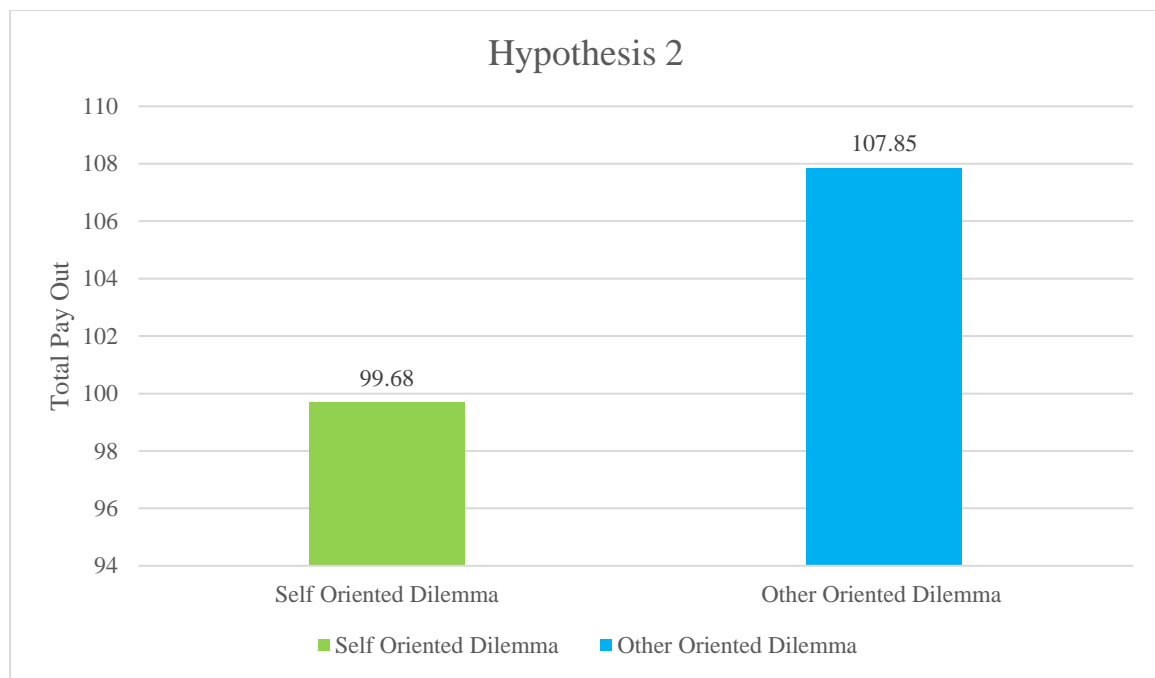
$p < .05$ ). The covariates of sex ( $p = .79$ ), age ( $p = .58$ ) and employment ( $p = .41$ ) had non-significant impacts. The results indicate that when aware of the need for others to benefit (other-oriented scenario) consumers were more willing to contribute to the public good (and spend less on electricity receiving high financial wellbeing) than consumers in a self-benefit scenario. Thus H2 is supported.

**Table 7.**

Hypothesis 2 Results

Source	df	F	Sig.	Partial Eta Squared	Observed Power <sup>b</sup>
Self versus Other	1	5.82	.018	.043	.588

**Figure 3. The self versus other dilemma - financial wellbeing for self and others**



\*Note that the numbers above are based upon cumulative payoffs over the eight rounds.

*Hypothesis 3 – Self versus other and short versus long-term*

To test H3 a one-way ANCOVA (self vs other) was conducted comparing the round pay outs between each scenario using the same covariates as per H1 and H2. As predicted and shown in Table 8 and Figure 4, consumers in the other-oriented scenario had significantly higher



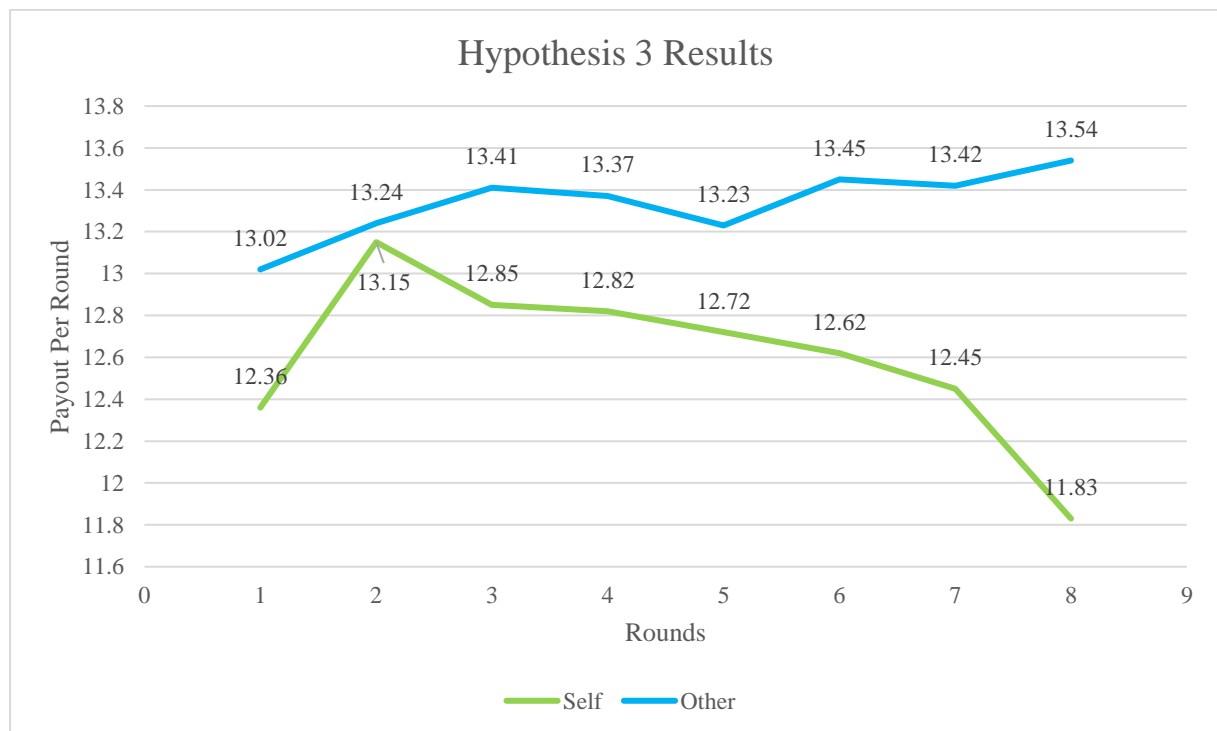
levels of financial wellbeing in the longer-term in rounds 6 ( $F=4.85$ ,  $p<.05$ ), 7 ( $F=3.95$ ,  $p<.05$ ) and 8 ( $F=5.45$ ,  $p<.05$ ) but not in the earlier rounds of 1-5, supporting hypothesis 3. The result of H3 suggests consumers' willingness to contribute to the public good (and gain financial wellbeing by spending less on electricity) increases when exposed to the need for others to benefit (other-oriented scenario) but decreases when there is a self-benefit that is salient. Thus, H3 is supported.

**Table 8.**  
Hypothesis 3 results.

Round	F	Sig	Partial ETA Squared	Observed Power
1	2.04	Ns	.019	.294
2	.375	Ns	.004	.093
3	1.93	Ns	.018	.281
4	1.64	Ns	.015	.246
5	3.67	Ns	.034	.476
6	4.85	Sig*	.04	.588
7	3.95	Sig*	.03	.503
8	5.45	Sig*	.049	.63

Sig\*=significant at  $p<.05$  level.

**Figure 4. Self versus other and Now versus Future Wellbeing**



### *Study 2 Implications*

Results of Study 2 confirms the transformative service paradox identified in Study 1 in a controlled laboratory setting. Consistent with H1, when exposed to a self dilemma, consumers financial wellbeing was found to significantly worsen over time. This lends support to arguments of transformative service researchers and others that short-term perspectives can have detrimental long-term outcomes for individuals and this is triggered by temporal characteristics.

Participants exposed to social dilemma whereby the beneficial results of their actions were made concrete had greater wellbeing benefits in comparison to their counterparts exposed to the self dilemma scenario. By making the impacts of other-oriented wellbeing behavior more concrete in accordance with social dilemma theory and past research (Macdonall and White 2015) this triggers consumers to actively engage in behaviors which benefit themselves and others.

Study 2 also shows that wellbeing beneficiary and time frame also impact behaviour when combined, specifically, consumers who performed other-oriented wellbeing behaviors experienced stable increases to their own wellbeing. As shown in Figure 4, individuals focused on self-oriented financial wellbeing behaviors were significantly worse off over time. In sum, Study 2 thus supports the hypotheses proposed as well as the findings from Study 1. It corroborates the central roles of the transformative service paradox, orientation of benefits, and the timing in which wellbeing benefits are perceived to be experienced.

### **Discussion**

This research has identified that wellbeing trade-offs occur in transformative services and that a paradox results whereby consumers forego a wellbeing dimension (in this case financial) to achieve another wellbeing dimension (physical) in the short-term despite seeking to achieve the foregone dimension in the long-term. Consumers are also willing to forego societal wellbeing for individual wellbeing despite individual wellbeing being dependent on societal wellbeing. Study 1 demonstrated that consumers were aware of the trade-offs and the paradox however the temporal state of the wellbeing and the beneficiary were powerful drivers of the trade-off. Further, consumers will often weigh up the benefits for themselves ahead of others before engaging in a wellbeing behavior. These insights into the transformative service paradox advance current understanding of consumers use of services and performance of behaviors which impact wellbeing.

### *Theoretical implications*

This paper contributes to the transformative service literature in three ways; illustrating the multidimensionality of wellbeing and the trade-offs this necessitates, showing that consumers prefer the concreteness of short-term wellbeing over abstract future states, and highlighting that consumers will make altruistic trade-offs when benefits for others and self are salient.

*Wellbeing multidimensionality and trade-off behaviour.* First, a review of the literature identified that the majority of TSR studies take a uni-dimensional approach to examining wellbeing (refer Table 1). This paper however demonstrates the importance of TSR scholars embracing and utilizing a multi-dimensional approach to wellbeing. As evidenced in Study 1 and confirmed in Study 2, consumers are often exposed to situations where different dimensions of wellbeing are traded off. The findings of this paper highlight the contextual nature of wellbeing as well as its global quality (Pham, Sweeney and Soutar, 2019) – in any given context, different wellbeing dimensions will have varying levels of importance, but often a ‘zero sum game’ is created where if one dimension becomes a priority, another must be duly deprioritized. This research finds that wellbeing dimensions are influenced by consumer resource scarcity (Weber, Kopelman and Messick, 2004), forcing consumers to compete with themselves (self dilemma) and others (social dilemma) to attain an imperfect balance of wellbeing dimensions. A key implication for TSR scholars is therefore highlighting the importance of taking a broader multi-dimensional approach to conceptualizing and empirically researching wellbeing to ensure the impacts – both positive and negative – of transformative services are more accurately and holistically captured and explained. In addition, this will assist in discovering any potential unintended consequences that occur in transformative services, a noted area of importance in furthering the TSR agenda (Čaić, Odekerken-Schröder and Mahr, 2018).

*Importance of time for perceptions of wellbeing benefits.* Second, this paper has found that wellbeing dimensions become more ‘concrete’ if framed within the short-term, causing immediate wellbeing to take precedence over long-term wellbeing. This is in keeping with previous behavioral economics and psychology literature, which found that a phenomenon known as hyperbolic discounting leads consumers to take a smaller reward in the now over a larger reward that requires patience (Laibson, 1997). This is further supported by temporal construal theory, which states that consumers make decisions for the future based on abstract ideas and assumptions, but are able to make short-term decisions by relying on much more

concrete expectations, hence short-term benefits are easier for consumers to imagine and so tend to be preferred (Lieberman and Trope, 1998). For transformative services, which often seek to ensure consumer wellbeing in the long-term, this further highlights the importance of taking a multi-dimensional approach as doing so will reveal trade-offs occurring between time points and so equip researchers to support long-term wellbeing through additional strategies. In essence, this is a second form of self dilemma – consumers not only trade-off wellbeing dimensions, but also trade-off between ‘now self’ and ‘future self’. Unfortunately this study finds that it is ‘future self’ who suffers, and this is supported by other work that finds consumers make decisions for their future self in the same way they would a stranger (Ersner-Hershfield, Wimmer and Knutson, 2008). Seemingly, even the self is abstract when considering the future.

*Wellbeing beneficiaries and the need for salience.* Third, the theorizing and findings of this article suggest that the appeal of transformative services (e.g. use the service to improve your wellbeing) can be somewhat oversimplified and not in line with seminal definitions of the TSR paradigm which call for uplifting the wellbeing of individuals and society (others). In line with the findings of prior research (Holmes *et al.*, 2002; White and Pelozo, 2009; Ye *et al.*, 2015), this article demonstrates that the self-benefit appeal of wellbeing behaviors is generally more effective than other-benefit appeals. However, it is also shown that when the wellbeing of others is made more salient, that is, public impact of behaviors is made more evident, the individual is more likely to trade-off wellbeing dimensions for the benefit of others. This provides an important extension on the work of White and Pelozo (2009) into the TSR domain, showing that consumers are not often as altruistic as they may first appear, which works against the definitions and premise of transformative services of uplifting “wellbeing for all” (self and others). This has important theoretical implications for future TSR studies suggesting the need, where possible, to measure uplifting change for individuals and others. Further, the current study illustrates that examining both the self and others in one study can be illuminating, as altruistic behavior can be triggered in two ways; first by making the plight of others more salient, and second, by linking the self-benefit to other-benefit (a win-win situation). In sum, TSR scholars need to theorize and empirically examine ways in which transformative services might help consumers to help themselves *and* others simultaneously, changing the beneficiary from a ‘Me’ to an ‘Us’.

### *Practical Implications*

From a managerial perspective, there are three main implications. First, that wellbeing outcomes need to be treated as a multi-dimensional construct (Pham, Sweeney and Soutar, 2019) that requires awareness and creativity in order to avoid a ‘zero sum game’ scenario. At present, attempts by transformative services to improve a single wellbeing dimension are essentially blind to the unintended consequences for other dimensions. For instance, if a consumer needs to sacrifice physical comfort for financial wellbeing, but this results in poor health outcomes, then is the net wellbeing effect positive or negative – and even if positive, does this negative outcome outweigh the importance of any financial gain? Managers and policy-makers should be aware that the key indicators of program or policy success may be innately ‘silo-ed’ so that what appears to be a successful program may in fact be obscuring an overall reduction in wellbeing. In short, single indicators of wellbeing do not tell the whole story – managers and policy-makers should apply a holistic approach. For policy-makers, there is a risk that government departments (usually based around the functional issues of the community service they deliver rather than the complex citizenry), will result in only single dimensions of wellbeing being addressed by policy, sometimes at the expense of holistic wellbeing. For instance, energy policy may promote efficiency tactics that improve financial wellbeing by reducing energy bills for voters, but this may come at the expense of other wellbeing dimensions, and hence, another departments’ policy (e.g., health policy effectiveness may suffer if people do not use adequate energy for their physical wellbeing). This trade-off is acknowledged in the energy co-benefits literature (IEA, 2014). Similarly, arts policy may seek to improve mental wellbeing by encouraging visits to the theatre, but this may clash with transport policies to ensure environmental wellbeing with less car-use, or with health policy that would prefer people use their time in more vigorous activity that supports physical wellbeing. Policy-makers therefore need to work together across departments in order to create policy that supports holistic wellbeing for citizens.

Second, transformative service managers and policy-makers should ensure that long-term benefits are framed as short-term benefits (or as being both), given consumers’ tendency to prefer the concrete ‘now’ over the abstract ‘future’ (Laibson, 1997; Liberman and Trope, 1998). For instance, programs aiming to ensure long-term financial wellbeing should also reward consumers in the short-term – one example of this would be that a consumer receives a financial discount or access to a reward for each day that they keep their electricity use

within reasonable bounds (as for ‘reasonable bounds’ – this level should be set to ensure that physical wellbeing is not sacrificed). Gamification can be used to encourage behavior change (Tanouri et al., 2019) by revealing future consequences early via instant rewards and punishments during game play. In some cases, policy is already utilizing the need to make future consequences apparent in the present – such as in countries where pollution policy levies financial penalties by the day to those operating outside of agreed parameters, rather than awaiting the full consequences that will arise in the future. Another example is retirement savings, where some governments provide co-contributions to encourage citizens to contribute, with this strategy increasing awareness of the benefit of present actions on future consequences. It can be difficult for consumers and businesses alike to see the outcomes of their behavior, so sometimes it is necessary for policy to act as an ‘early warning system’ of what is to come.

Third, when it comes to considering others, this study reveals that consumers can be altruistic provided there is a benefit for the self as well. Hence policy-makers and managers should ensure that the needs of the other are salient *and* that the needs of the self are connected to those of the other. Programs should also tap into the temporal dimension in order to encourage positive wellbeing decisions. For instance, making environmental concerns salient is a positive step (this issue affects the self and the other) but the outcomes are very future-focused and hence abstract. Bringing the outcomes (and potential rewards) into the present is important to inspire action, especially given that when the dilemma involves the future self, this is really just an ‘other’ as far as consumers are concerned (Ersner-Hershfield, Wimmer and Knutson, 2008). Transformative service providers can leverage these consumer tendencies, for example by engaging in comparative advertising that highlights the self dilemma and other-dilemma, and demonstrates how it may be resolved while still benefiting the self in the ‘now’. Previous campaigns have also featured a personification of the future self (Bourke, 2018). It is suggested that policy-makers could focus on collective rewards for collective effort. That is, do not force the individual to choose between self and other, but work at the collective level wherever possible, even if this is via household groups rather than community groups. For example, collecting litter in the community or establishing a neighborhood garden are both initiatives that benefit the individual (improved mental and physical wellbeing from working on the clean-up effort/in the garden and eating fresh produce) and also the neighborhood (increased health for all, mental wellbeing that comes from belongingness, and potentially even financial wellbeing if

property values increase). Individual contribution still needs to be visible however, in order to avoid ‘free-loading’ behavior (Andreoni, 1988) so policy-makers may employ technology to help keep track of behavior; for instance a ‘neighborhood leaderboard’ for helping with the garden, which may then track against larger city or state leaderboards. Those who contribute most might save on their rates or council bills. In essence, policy-makers have the power to encourage altruism as long as they never forget to *also* answer the “what’s in it for me, right now?” question?

### *Limitations and Further research*

This research has aimed to shed light on the emerging concept of the transformative service paradox, and has provided a conceptualization and exploratory empirical investigation. However, this paper should be considered only the beginning of a large body of research examining this concept in greater detail. While this research has some strengths, such as using a two-study mixed method design including household interviews and laboratory experiments with repeated measures, it remains that the two studies used are moderately-sized and context-bound. This study was based on the transformative service of electricity consumption, so selected for its ability to encapsulate wellbeing multidimensionality, temporality, and self- and social-dilemmas. Much of the previous work in TSR has focused on the health context (refer Table 1). There is however a need to examine other contexts in order to add generalizability and nuance to the data – indeed, the findings of this study highlight the context-bound nature of wellbeing, and in doing so invites research for other contexts as a test of the transformative paradox framework proposed. Future work should examine additional contexts, using multiple and larger studies as well as further longitudinal investigation. Another worthy direction for future research would be to examine the transformative service paradox across different market segments. This could include an examination of consumers experiencing vulnerability, a key priority group for TSR.

### *Conclusion*

This research has addressed the important but often overlooked negative unintended consequences of transformative services on consumer wellbeing. The current work has proposed the transformative service paradox framework and aims to stimulate greater discussion and theorizing regarding unintended negative wellbeing consequences of

transformative services and services in general. As theorized and empirically demonstrated in this paper, it is possible for positive and negative impacts on different dimensions of wellbeing to occur concurrently. This leads to several implications for theory and practice in considering the multidimensional, temporal, and social (self and other) nature of wellbeing. Overall, this study contributes new insight into the growing area of TSR, providing an important foundation for future scholarly investigations and considerations for transformative service practitioners.



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## Appendix – Scenario Wording

### Scenario 1: Self dilemma

For the purposes of this experiment, consider your decisions about energy consumption. Acting in an environmentally friendly or energy efficient manner often comes with a higher price- or takes extra effort, e.g. reducing your energy consumption at peak times, checking all the lights are switched off before leaving the house, foregoing physical comfort, investing in solar power or eco-friendly electronic products. Whilst these choices may immediately incur greater costs for you, you will benefit in the long-run because of savings and the community may benefit with less demand on the network. In economic terms this is a public good situation, for whatever you invest in this activity, your own return is relatively low but as a group we all benefit. To capture this, you will be part of a group of four people. Each of you is asked how much you want to invest in the public good, i.e. invest in energy efficiency. The sum of all investments by the members of the group will be multiplied by 1.6 and then distributed shared equally among the group members.

### Scenario 2: Social-Dilemma

Living in Australia, we all know about the risk of a blackout (imagine no TV or fans during a hot day). But could black-outs be avoided if people took steps to use less electricity at busy times (like when it gets really hot in summer, or when most people arrive home and turn on the air-conditioning at the same time)? You're about to embark on an activity that deals with this question. You will be playing within a virtual neighborhood of four: you and three other people.

Each person will be given tokens that represent your electricity use during peak time (the benefit you get from using electricity between 5pm-9pm, like comfort or convenience). At each stage you will be asked how many tokens you would like to contribute to the neighborhood. There will be 16 rounds of this activity. At the end of each round, every token that you and the three other participants contributed that round will be added together. The total will be multiplied by 1.6 and you will each receive one quarter of the total number of tokens this creates (this increase represents savings you would receive through lower electricity bills).

The number of tokens you give to the neighborhood represent the percentage of times you would willingly not use electricity during peak times (usually 5-9pm Monday-Friday): so, giving three tokens means that for 30% of the time (about 9 days per month) you would reduce your peak electricity usage – for example, you might use your washing machine and dishwasher after 9pm, or turn the air-conditioning off at this time. Giving all 10 tokens means that you would do this every day, or 100% of the time.

Keep in mind that you get to choose how many tokens you give, and so do your neighbors. You and the other participants can choose to give nothing, everything, or amounts in

between. Because the tokens you get back at the end depend on the contributions of the whole neighborhood, it is possible to get back more or less than you gave originally, and it is possible for someone to be a 'freeloader' by contributing less and relying on others to contribute more.

For example, imagine in neighborhood 1, these were the contributions:

- 5 (your contribution)
- 9
- 3
- 5

If we add these together, we get 20 tokens for the neighborhood to share. The investment means this total goes up by 160%, meaning the neighborhood actually has 32 tokens. When we divide 32 by 4 people, this means that each person gets 8 tokens back. This means you have 8 tokens + 5 tokens (the tokens you did not contribute) for a total of 13 tokens.

*Are you ready? Let's begin...*