

OBSERVER RETALIATION: APOLOGY COMPONENTS AFFECT ON OBSERVING CUSTOMERS' REACTIONS

Todd McClure, University of Central Missouri

Ginger Killian, Rollins College

Dr. J. Michael Pearson (Retired), Southern Illinois University-Carbondale

ABSTRACT

The purpose of this paper is to investigate how observing customers' react after witnessing an apology containing four unique components. The present research examines the influence of apology characteristics on observing customers' negative word-of-mouth and return intentions. Four apology components (timeliness, accepting responsibility, initiation, and remorse) were examined.

Keywords – *Apology Components, Observing customer, Service recovery, Uncivil Behavior*

INTRODUCTION

The motivation for this study lies in the fact that our culture suggests apologies are appropriate following uncivil acts (Kellerman 2006). Incivility may create crises that potentially inflict significant damage to an organization's reputation with little advanced warning. Workplace incivility is not an unusual phenomenon and may undermine an organization's reputation and create long-term repercussions with observing customers (Porath, MacInnis, and Folkes 2010). In a study examining 9,000 employees, Porath and Pearson (2010) found that 99% of participants had witnessed some form of incivility in the workplace.

Research has shown that individuals evaluate all stimuli regardless of whether they intended to do so (Bargh, Chaiken, Raymond, and Hymes 1996), and incivility in the workplace has detrimental

consequences for stakeholders in both internal (i.e. employees) and external (i.e. customers) capacities (Porath et al. 2010). Thus, it is imperative that organizations understand ways of responding when an uncivil exchange is observed by customers in order to effectively and efficiently mitigate observers' retaliatory intentions (e.g. negative word of mouth). Most importantly, a firm's response strategies should demonstrate to both the victim and observing customers that (1) the organization cares about the victim, (2) the actions of the uncivil employee are not reflective of the organization's values and culture, and (3) that similar actions will not be tolerated by the firm. An apology from the uncivil individual to the victim is a common component of a service recovery and has been shown to repair damage caused by the uncivil exchange (Risen and Gilovich 2007; Joireman, Grégoire, Devezer, and Tripp 2013). The present research contributes to existing service failure and recovery literature by 1) understanding observing customers' retaliatory intentions following observation of an uncivil exchange between two employees, and 2) examining the influence of four apology components (timeliness, responsibility, remorse, and self-initiation).

In both marketing and services literatures, apologies represent a form of compensation a firm extends to a victim who has experienced a service failure (Smith, Bolton, and Wagner 1999). Somewhat surprisingly, literature has yet to examine

the impact of an apology on those who merely observe the uncivil act and subsequent apology. To better understand how observing customers react after witnessing an apology, this research focuses on the following two research questions: (1) Does an apology (from the uncivil employee to the victim employee) influence an observing customer's likelihood to engage in negative word-of-mouth or return patronage?; and (2) Which apology characteristics have an influence on an observing customer's likelihood to engage in negative word-of-mouth or return patronage?

CONCEPTUAL BACKGROUND

Incivility

Andersson and Pearson (1999) define incivility as "low-intensity deviant behavior with an ambiguous intent to harm a target that violates workplace norms for mutual respect" (p. 457). Porath and Pearson (2010) suggest incivility involves "...inconsiderate words and deeds that violate conventional norms of workplace conduct" (p. 21). Specific instances of workplace incivility vary but often involve treating an employee in a demeaning, disrespectful, or aggressive manner (Dormann and Zapf 2004; Grandey, Dickter, and Sin 2004) that may manifest more frequently as uncivil behavior as opposed to severe acts of aggression (Goldberg and Grandey 2007). Building from previous works (e.g. Andersson and Pearson 1999; Porath and Pearson 2010), the present research defines incivility as "any act by one employee that is directed at and displays a lack of respect for another employee."

Consumers are 'moral watchdogs' (Folger and Skarlicki 2005; Porath et al. 2011). Skarlicki and Kulik (2004) note that "...third-parties care about employee mistreatment... because mistreatment violates moral and social norms" (p. 191). In

general, customers do not tolerate uncivil behavior (Huang 2008; Porath et al. 2010, 2011) because they understand it is unfair to the victim and counter to the way people should be treated. Consequently, customers that observe incivility empathize with the victim (Porath and Erez 2009) and may be a source of emotional support for the victim (Henkel et al. 2017). Additionally, Porath et al. (2010) found that observing customers desire to punish uncivil employee and may take it a step further and actively consider punishment against the organization (Porath et al. 2011).

Theoretical background

Deontic Justice is a judgment about the morality of an outcome, process, or interpersonal interaction (Cropanzano, Goldman, and Folger 2003; Porath et al. 2011) grounded in the belief that "people value justice simply because it is moral" (Colquitt and Greenberg 2001, p. 221). Societal norms suggest that acts of incivility are incongruent with how people should be treated. To determine when a moral violation has occurred, individuals analyze the situation in terms of what *should* have happened (Folger and Cropanzano 1998). Observers of incivility may respond instinctively and heuristically rather than rationally, allowing intuition to guide feelings about what is right or wrong.

Deontic justice is experienced by both unaffiliated third parties and victims (Folger 2001; Rupp and Bell 2010). In the present study, an observing customer who observes an employee act uncivilly to another employee will have a strong desire to see the uncivil employee held accountable for the unjust actions. By extension and association, the observing customer's desire for accountability will extend to the firm as well, being as the firm has employed the individual with questionable morals. The study also seeks to understand the reactions

of observing customers, when the victim receives a sincere apology from the uncivil employee and the observing customer feels that the uncivil employee has done the moral, right thing.

Dependent Variables

Research on customer retaliation primarily adopts the perspective of a customer who has been the victim of a poor service experience (Funches, Markley, and Davis 2009; Grégoire and Fisher 2008). Justice-based models assert that a service failure represents a violation of some norm, motivating customers to pursue measures of restoring fairness (Grégoire and Fisher 2008). The present research suggests that observing customers who seek to retaliate against the uncivil employee or the firm will choose one of two alternatives: fight or flight, either of which may have a significant impact on future firm performance.

O'Reilly and Aquino (2011) suggest that an individual's behavior in response to observing an injustice is motivated by one of two goals (Higgins 1997, 1998): approach or avoidance. If the approach motivation is activated, the observer will be motivated to "fight" by punishing the uncivil individual and/or supporting the victim. In cases where the avoidance motivation is activated, the observer will enact a "flight" stance and will be motivated to remove him or herself from the situation. The enacted motivation will guide the observing customer's behavior in response to the uncivil incident.

Word-of-mouth is a common behavioral response examined in the services literature (e.g. Grégoire and Fisher 2008; Hirschman 1970). Positive word-of-mouth communicates to a firm and others that an organization has satisfied or exceeded expectations, but negative word-of-mouth typically expresses a customer's dissatisfaction with an organization, often

intended to protect others from a similar sub-standard experience.

Negative word-of-mouth is defined as a customer's efforts to share his or her experience, and to denigrate a service firm to friends and family (Grégoire and Fisher 2008). Research has shown that negative word-of-mouth does not always come from the victim (Porath et al. 2011). This study also found support for the notion that incivility in a service environment can be profoundly detrimental to customers' service experience and may lead to a deteriorating customer-firm relationship or more severe negative consequences (Huang 2008).

Research has also shown that both victims and observers of incivility in the workplace feel less committed to the organization (Pearson and Porath 2005) and would consider actions that denigrate the firm or push others away from the firm (Porath et al. 2011). Patronage Reduction is defined as efforts to reduce the frequency of his or her visits, spend less per visit, and/or to frequent competitors more intensively (Grégoire and Fisher 2006). Somewhat surprisingly, observers may be less forgiving of a perpetrator than the victim, even going so far as to avoid the uncivil individual altogether (Green, Burnette, and Davis 2008). In line with this study, Grégoire and Fisher (2008) suggest that customers may avoid a firm because he/she does not want to repeat the negative experience.

Independent Variables

Marketing literature on apologies is rather limited, and often includes an apology only in dichotomous terms: present or absent (e.g. Smith et al. 1999; Tax, Brown, and Chandrashekar 1998; Wirtz and Mattila 2004); sincere or insincere (Basford, Offermann, and Behrend 2014). An apology is a common and socially responsible type of behavior that follows some act of indiscretion (Schlenker 1980). Conventional

wisdom would suggest that an apology after a transgression is an important step in the reconciliation process (Fehr and Gelfand 2010). Apologies promote forgiveness (Exline, Baumeister, Bushman, Campbell, and Finkel 2004), improve trust (Kim, Ferrin, Cooper, and Dirks 2004), help repair damaged relationships (Tomlinson, Dineen, and Lewicki 2004), and communicate that similarly offensive behaviors will not occur in the future. In the present research, we define an apology as a statement or expression of regret or acknowledgement of an offensive act.

Apologies can be an effective form of service recovery, potentially turning an angry victim into a relatively satisfied one (Bradley and Sparks 2009; Davidow 2003). However, the mere presence of an apology may not be sufficient to mitigate the negative effects of an act of incivility. Arguably more critical than whether or not an apology is offered is how an apology is delivered. Apologies differ and their delivery can have a profound impact on how well the apology is received (Roschk and Kaiser 2013). Thus, exploring an apology's structure and delivery in order to assess the effect on an observing customer's retaliatory intentions is worthwhile.

Although apologies vary greatly across situations, past research has provided evidence that comprehensive apologies are more likely to result in forgiveness (Darby and Schlenker 1982; Scher and Darley 1997). This research investigates the relative importance of four critical factors commonly associated with a sincere apology: timeliness, remorse, initiation, and responsibility. While the number of possible characteristics of an apology is lengthy, this study focuses on the four previously mentioned because of their inclusion in earlier work on apologies (Fehr and Gelfand 2010; Jehle, Miller, Kimmelmeier, and Maskaly 2012; Roschk and Kaiser 2013)

and because an observing customer can easily identify and distinguish between each of the characteristics.

Timeliness

In some cases, an apology may precede the action that necessitates an apology. For example, a waiter may apologize to a customer if the restaurant is out of a particular menu item before the customer places their order. More often, an apology is a corrective action that follows an egregious act (Bradley and Sparks 2009). Timeliness of an apology is defined as the speed with which the uncivil employee offers an apology following an uncivil incident.

Customers appreciate when a firm responds quickly to a service failure (Blodgett et al. 1997). Lewicki and Bunker (1996) found that in the aftermath of a wrongdoing, the timeliness of an offender's apology is an important element in whether or not restorative action is effective. The timeliness of an apology is an informational cue for both the victim and observers about the wrongdoer's personality, disposition, and retaliatory intentions. A substantially delayed apology may create doubts within the victim that an apology will ever be offered whereas a timely apology shows that the uncivil employee recognizes the wrongdoing while also reducing the time the victim has to make subjective interpretations about the uncivil employee's true intent or disposition.

H1a: For an observing customer, witnessing a timely apology reduces the likelihood the observing customer will engage in negative word-of-mouth about the firm.

H1b: For an observing customer, witnessing a timely apology reduces the likelihood the observing customer

will reduce his or her patronage with the firm.

Responsibility

Scher and Darley (1997) note that “admission of responsibility...is a necessary feature of an apology because it conveys to the listener that the speaker is aware of the social norms that have been violated and therefore conveys that the speaker will be able to avoid the offense in future interactions” (p. 129). In a qualitative study by Basford (2013), admitting responsibility was a theme that emerged as contributing to the perceived sincerity of an apology; subjects that recalled their leader accepting responsibility for their actions as part of the apology rated the apology as more sincere than leaders who apologized but did not explicitly acknowledge his or her responsibility. Similarly, an observing customer is likely to view an apology that includes some admission of responsibility as more sincere than one that does not accept responsibility. This study proposes that an uncivil employee’s personal acceptance of responsibility will be viewed positively by observing customers.

H2a: For an observing customer, witnessing an apology in which the uncivil employee accepts responsibility for his or her uncivil behavior reduces the likelihood the observing customer will engage in negative word-of-mouth about the firm.

H2b: For an observing customer, witnessing an apology in which the uncivil employee accepts responsibility for the uncivil behavior reduces the likelihood the observing customer will reduce his or her patronage with the firm.

Initiation

Initiation, the third characteristic of an apology, is defined as the impetus for delivering the apology. The notion of initiation is a recurring characteristic of a service recovery effort found in previous research (e.g. Smith et al. 1999). Although an apology is commonly regarded as an appropriate response following an uncivil incident, it is not always the case that the uncivil individual will willingly apologize; some may only apologize if ordered to do so. Initiation of an apology refers to whether or not the perpetrator’s apology occurred due to an internal factor (e.g. personal guilt or remorse) or an external factor (e.g. coerced by another party). When a perpetrator is proactive in offering an apology, it communicates to the victim and observers that the uncivil employee feels guilt or remorse for the uncivil action. An apology that is motivated by internal circumstances (i.e. guilt or remorse) should be more effective at reducing negative outcomes as compared to an apology that was motivated by external circumstances (e.g. Jehle et al. 2012).

Schleien, Ross, and Ross (2010) found that children reacted more favorably to a spontaneous (internally motivated) apology as compared to an apology that was extended because the parent ordered the uncivil child to do so (externally motivated). Interestingly, Risen and Gilovich (2007) showed that a victim’s perception of the offender remained unchanged for both voluntary and coerced apologies. In contrast, observers respond quite differently to internally versus externally motivated apologies. Prior works found that observers liked the offender less and punished the offender more if the apology was coerced (Darby and Schlenker 1982, 1989) and that only an internally-initiated apology led to an observer’s forgiveness of the perpetrator (Risen and Gilovich 2007).

H3a: For an observing customer, witnessing an apology that is initiated by the uncivil employee rather than coerced by someone else, reduces the likelihood the observing customer will engage in negative word-of-mouth about the firm.

H3b: For an observing customer, witnessing an apology that is initiated by the uncivil employee rather than coerced by someone else reduces the likelihood the observing customer will reduce his or her patronage with the firm.

Remorse

Remorse is defined as the feeling of guilt or shame for a wrongful act (Boyd 2011). According to Scher and Darley (1997) an “apology without an expression of remorse generally seems to be perfunctory or formal” (p. 130). In the aftermath of a transgression, a remorseful statement serves as an indicator that the uncivil employee recognizes the behavioral error and acknowledges that he or she should have behaved differently (Boyd 2011). Darby and Schlenker’s (1982) study found that apologies with a remorse component reduced the victim’s desire to punish the offender. An apology without any expression or indication of remorse may leave both the victim employee and other observing customers to speculate if or when the uncivil employee will engage in similarly offensive or inappropriate behaviors in the future. An expression of remorse and empathy has been shown to have a positive impact on an apology’s effectiveness and perceived sincerity (Roschk and Kaiser 2013). This study posits that a genuine statement of remorse will positively influence the observer’s perception of the uncivil employee. By extension, these positive effects will extend

to the firm as well, as the uncivil employee is viewed as a representative of the firm.

H4a: For an observing customer, witnessing an apology in which the uncivil employee expresses remorse for his or her uncivil behavior reduces the likelihood the observing customer will engage in negative word-of-mouth about the firm.

H4b: For an observing customer, witnessing an apology in which the uncivil employee expresses remorse for the uncivil behavior reduces the likelihood the observing customer will reduce his or her patronage with the firm.

METHODOLOGY

Study Design

This research project examines the influence of apology characteristics on an observer’s retaliatory intentions. Participants were presented a scenario whereby customers observe an uncivil incident between two employees in a restaurant setting. This scenario was chosen inasmuch as dining is a commonly occurring service environment where observation of employee interactions is likely. Each participant read a series of scenarios created by manipulating two levels for each of the four apology components (timeliness, remorse, responsibility, and initiation). A full factorial design consisting of four treatments and two levels per treatment required 16 scenarios (2^4). Given the two settings for each scenario (restaurant context: upscale or casual), 32 scenarios were required.

Unlike many studies that rely on the number of participants to increase power, the number of scenarios is the primary driver of increased power (Karren and Barringer 2002). The goal is to present enough scenarios to yield realistic results

without having too many scenarios that might lead to participant fatigue. Participants were randomly assigned by Qualtrics into one of two experiment settings (Casual vs. Upscale) and asked to answer all scenarios (16) related to the setting. Internal validity is addressed through random assignment by Qualtrics by decreasing systematic error and balancing the number of subjects per experimental setting. Thus, any difference between the groups is a result of the manipulations or by chance.

Instrument

ANOVA allows for a study to determine if any differences exist between combinations of treatment variables. In this study, restaurant context (upscale/casual) was manipulated between subjects to test the effects of apology components across different settings. Restaurant context was consistent across scenarios for each participant. (A sample scenario is provided in Appendix A.)

The treatment variable levels included in the instrument were established in prior literature. The timeliness construct has primarily been conceptualized in the service failure and recovery literature as a dichotomous variable of timely/untimely (e.g. Blodgett et al. 1997; Davidow 2003). For this study, we included the same timely/untimely dichotomous treatment. Responsibility has been included in earlier works (e.g. Tomlinson et al. 2004), also as a dichotomous variable of accepted responsibility/did not accept responsibility; we utilized the same descriptors in our scenario. Initiation was included in the service failure and recovery literature as a dichotomous variable of spontaneous/coerced (e.g. Jehle et al. 2012; Risen and Gilovich 2007), and thus remained the same in our instrument. The final treatment variable, remorse, is typically

found as a dichotomous variable of expressed remorse/did not express remorse (Boyd 2011; Lazare 2004), and therefore was included similarly in the present study. 5-point Likert scales were utilized to measure the dependent variables. The items measuring the dependent variables (negative word-of-mouth, patronage intentions) were adapted from scales previously created by Grégoire and Fisher (2008) and Grégoire et al. (2009). To reduce participant fatigue, single items were chosen to represent each dependent variable.

Sample

Participants were recruited using Amazon's Mechanical Turk (MTurk). A total of 374 participants attempted the study. The average completion time for each participant was 11 minutes, with a standard deviation of 3 minutes. Participants greater than 2 standard deviations from the mean were excluded, resulting in 76 participants being removed. An additional 28 were excluded due to failing the check questions (22) or completing all scenarios (6). Thus, the analysis was performed on the remaining 270 completed responses.

Analysis

After reading each scenario, participants indicated their intention to engage in each retaliatory behavior on a scale of one to seven that ranged from "very unlikely" to "very likely." A single-item measured each of the retaliatory behaviors: 1) negative word-of-mouth and 2) return intentions. To adjust the data in order to reduce the impact of an overpowered study, we calculated an average for each subject's response for the eight high and eight low questions. Dummy coding was used to determine which questions portrayed each of the apology characteristics as high/low. Once this process was completed, the one-way

analysis of variance (ANOVA) technique was used to determine whether the dichotomous groups have statistically different dependent means for each treatment level (Tabachnick and Fidell 2007). ANOVA was also used to compare the dependent variable means of each treatment between blocking variable groups.

RESULTS

Hypothesis 1 examined the influence of an apology's timeliness on an observing customer's negative word-of-mouth (NWOM) or patronage reduction intentions. There were no significant differences in NWOM intentions for an observing customer who witnessed a timely as compared an untimely apology ($F_{1, 538} = 3.469$, $p = .063$, partial $\eta^2 = .006$, observed power = .460). The analysis for Hypothesis 1b revealed a statistically insignificant difference ($F_{1, 538} = 2.606$, $p = .107$, partial $\eta^2 = .005$, observed power = .364). These results suggest that an apology's timeliness may not have a significant impact on an observing customer's NWOM or patronage intentions.

Hypothesis 2 examined the extent to which the uncivil employee accepted responsibility for his/her behavior would influence an observing customer's NWOM or patronage reduction intentions. Results from hypothesis 2a indicate significant differences between responsibility acceptance levels on an observing customer's NWOM ($F_{1, 538} = 7.762$, $p = .006$, partial $\eta^2 = .014$, observed power = .794). Mean NWOM scores were higher for observing customers after witnessing an apology in which the uncivil employee *accepts responsibility* ($M = 3.296$, $SD = .984$) as compared to witnessing an apology in which the uncivil employee *did not accept responsibility* ($M = 3.048$, $SD = 1.079$).

In support of hypothesis 2b, significant differences between the responsibility levels on patronage reduction intentions were found ($F_{1, 538} = 6.686$, $p = .010$, partial $\eta^2 = .012$, observed power = .733) with respondents in the *accepts responsibility* category ($M = 3.227$, $SD = .950$) reporting higher means scores than those in the *did not accept responsibility* category ($M = 3.006$, $SD = 1.037$).

Hypothesis 3 considered whether the influence of an apology being initiated by the uncivil employee or someone else (e.g. manager) would impact an observing customer's NWOM and patronage intentions. Results show significant differences exist between the initiation levels related to NWOM ($F_{1, 538} = 9.850$, $p = .002$, partial $\eta^2 = .018$, observed power = .880), supporting hypothesis 3a.

Supporting hypothesis 3b, results show a statistically significant difference in patronage intentions ($F_{1, 538} = 15.061$, $p = .000$, partial $\eta^2 = .027$, observed power = .972) for individuals who witnessed an apology initiated by the uncivil employee compared to those who witnessed an apology initiated by the manager. Respondents reporting higher mean scores after witnessing an apology *initiated by the uncivil employee* ($M = 3.285$, $SD = .954$) than after witnessing an apology *initiated by the manager* ($M = 2.949$, $SD = 1.056$).

An uncivil employee's self-initiation demonstrates a level of sincerity that is inherently expected as the moral, right response following an uncivil response. Uncivil behaviors are offensive to observers, though we as a society do recognize our own propensity to act inappropriately from time to time. When an unacceptable behavior occurs, deontic justice suggests that observers and victims expect the offender to react in a way that restores balance to the social interaction. A self-initiated apology demonstrates that the individual is cognizant

of the social infraction and personally desires to repent (Folger 2001).

Hypothesis 4 postulated that an apology containing a specific statement of remorse would have an influence on an observing customer's retaliatory intentions. Significant differences indeed exist between the two remorse levels of the independent variable ($F_{1, 538} = 9.622$, $p = .002$, partial $\eta^2 = .018$, observed power = .872), supporting hypothesis 4a Respondents reported higher mean NWOM scores after witnessing a remorseful apology ($M = 3.310$, $SD = .980$) as compared to witnessing an unremorseful apology ($M = 3.034$, $SD = 1.081$), suggesting that a remorseful apology does influence an observing customer's intention to share NWOM about the firm.

Consistent with hypothesis 4b, the analysis revealed a statistically significant difference ($F_{1, 538} = 10.466$, $p = .001$, partial $\eta^2 = .019$, observed power = .898) in patronage intentions for individuals who witnessed a remorseful apology as compared to the observing customer scenarios that did not include a remorse component. Respondents reported higher mean scores after witnessing an apology with a statement of remorse ($M = 3.255$, $SD = .954$) than after witnessing an apology without a statement of remorse ($M = 2.978$, $SD = 1.033$).

Remorse is a central component in restoring a sense of deontic justice. Observers seek an overt demonstration that the uncivil individual recognizes the inappropriateness of the social interaction. Delivery of a remorseful apology also informs observers and the victim that the behavior is not a central component of the uncivil individual's demeanor. Finally, the remorseful component demonstrates to others that the behavior will not continue and should not be considered as reflective of the organizational culture.

DISCUSSION & MANAGERIAL IMPLICATIONS

This study empirically demonstrates the influence of four distinct apology characteristics on an observing customer's NWOM and patronage intentions after witnessing an act of employee incivility directed at another employee. This study originally hypothesized that each of the four apology characteristics would have a mitigating effect on an observer's future retaliatory intentions. Our results found support for a majority of the hypotheses, suggesting that observing customers are less likely to engage in NWOM or reduce their patronage after witnessing an apology from an uncivil employee that 1) accepts responsibility, 2) is self-initiated, and 3) expresses remorse.

This study contributes to the existing marketing literature by exploring how the characteristics of an apology influence the retaliatory intentions of observing customers. This study considers an alternative perspective from previous works by considering four distinct, yet common, characteristics of an apology and how each component influences the retaliatory intentions of an observing customer. Specifically, we found that although apology timeliness is commonly recognized as an important factor in determining an apology's sincerity, it appears to have little significance for observing customers. However, when an offender accepts responsibility for their behavior, initiates the gesture, and projects a sense of remorse, observing customers are less likely to react negatively toward the firm.

Managerial Implications

The results of this study inform marketers of the value in considering apologies as a multi-faceted act. For onlookers, an apology offers insight into the offender's character as well as the organizational culture.

Consequently, employee behavior in the presence of customers provides information on the larger organizational culture. As a result, managers should recognize that when employees behave in an uncivil manner, observing customers are likely to hold the firm accountable.

While timeliness was not found to be significant, the timeliness of an apology may still have an impact on an observing customer's retaliatory intentions. If an apology is delayed considerably, the observing customer may miss the apology altogether, which may suggest to the observing customer that an apology was not rendered. The absence of an apology may imply that the organizational culture does not adhere to moral and social norms. Our findings suggest that an apology that is coerced from a manager does not have a positive influence on an observing customer's NWOM or patronage intentions; managers should be cautioned in coercing a uncivil employee to apologize, as observing customers may view the apology as insincere. With regard to responsibility, managers should encourage employees to take responsibility for their actions and hold employees accountable. While a manager may not seek to become a referee between employees, accepting responsibility for behaviors is important to maintaining a positive organizational culture.

Employment hiring practices that focus on an employee's moral identity and social etiquette may provide insight into how employees may affect the organizational culture. Due to the nature of a service environment, employees work in close proximity with one another and disagreements are not uncommon. When these disagreements occur, it is important that all parties adhere to moral and social norms in order to maintain a positive organizational culture. An apology that follows a disagreement reinforces a positive

organizational culture. Managers should recognize the value of an apology, not only for the victim but also in terms of its effect on observing customers. Managers could instruct employees on social etiquette, including the merits of including each of the apology characteristics.

LIMITATIONS AND FUTURE RESEARCH

Limitations

This study recognizes a number of limitations related to the study design and planned methodology. This study includes only scenario-based experiments in a restaurant context. The chosen research design resulted in a number of limitations including 1) generalizability and 2) external validity. Due to the singular context (restaurant), the findings may not be generalizable to other service contexts such as an airline, when other factors (e.g. loyalty programs) may play a role in retaliatory intentions such as patronage.

Experimental designs increase internal validity, though external validity may be limited due to the contrived nature of the experiment. Future research could use different settings and methodologies to replicate and extend the present findings. In order to test each variable while holding all other variables constant, this research relied on experimental analysis, which introduces its own set of challenges regarding the realism of the scenario. Although the severity manipulation was tested for realism and severity was captured as a bipolar variable (high versus low), actual situations may fall somewhere along a spectrum of low to high severity. Each uncivil situation is different and managers must evaluate the severity, risks, and benefits associated with each situation.

With regard to participant fatigue, the number of independent and dependent variables related to this particular study may

be a limiting factor. A pre-test was conducted with a test group to ensure that the instrument was understood. Verbiage was modified for clarification based on feedback from the pre-test participants. In reality, subjects are not presented with multiple options, which vary the combination of apology components. Moreover, presenting the series of apology characteristics in rapid succession may not accurately present a realistic scenario in which a customer may be asked to make a behavioral assessment. Thus, presenting the apology characteristics in a different format (e.g. video) may enhance the subject's ability to accurately evaluate his/her own retaliatory intentions.

Future Directions

This unique study lends itself to a number of future directions. Future directions could examine the verbal components of *how* an apology was delivered to the victim. Additional examination of verbal cues such as intensity of the uncivil action (normal speaking level vs raised voice) and tone of the discourse (passive aggressive vs aggressive) merit further examination. Porath et al. (2011) also suggested that context of incivility (e.g. employee competence, mocking others) may influence an observer's desire for deontic justice.

REFERENCES

- Andersson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *Academy of management review*, 24(3), 452-471.
- Bargh, J. A., Chaiken, S., Raymond, P., & Hymes, C. (1996). The automatic evaluation effect: Unconditional automatic attitude activation with a pronunciation task. *Journal of experimental social psychology*, 32(1), 104-128.

While organizations are aware of high intensity incivility (e.g. aggression and violence), low intensity incivility (e.g. racial slurs, sexist comments) may also warrant further study.

Consumers learn about brands through word-of-mouth (Kuo, Hu, and Yang 2013). As Libai, Bolton, Bugel, de Ruyter, Gotz, Risselada, and Stephen (2010) suggested it is important to understand the differences between (direct) observational learning and (indirect) negative word-of-mouth. A direct comparison of the impact of direct versus indirect learning is needed in order to understand the differential impact of each type of learning. While much research has focused on indirect learning methods (e.g. negative word-of-mouth), direct learning may have a far greater impact on those customers who observe uncivil incidents.

Contact Author:

Todd McClure
University of Central Missouri
tmclure@ucmo.edu
660-864-6165

- Basford, T. E. (2013). Leader apologies: How content and delivery influence sincerity appraisals. *International Journal of Business and Social Science*, 4(5).

- Basford, T.E, Offermann, L. R., & Behrend, T. S. (2014). Please accept my sincerest apologies: Examining follower reactions to leader apology. *Journal of Business Ethics, 119*(1), 99-117.
- Blodgett, J. G., Hill, D. J., & Tax, S. S. (1997). The effects of distributive, procedural, and interactional justice on postcomplaint behavior. *Journal of Retailing, 73*(2), 185-210.
- Boyd, D. P. (2011). Art and artifice in public apologies. *Journal of business ethics, 104*(3), 299-309.
- Bradley, G. L., & Sparks, B. A. (2009). Dealing with service failures: The use of explanations. *Journal of Travel & Tourism Marketing, 26*(2), 129-143.
- Colquitt, J. A., & Greenberg, J. (2001). Doing justice to organizational justice. *Theoretical and cultural perspectives on organizational justice, 217-242*.
- Cropanzano, R., Goldman, B., & Folger, R. (2003). Deontic justice: The role of moral principles in workplace fairness. *Journal of Organizational Behavior, 24*(8), 1019-1024.
- Darby, B. W., & Schlenker, B. R. (1982). Children's reactions to apologies. *Journal of Personality and Social Psychology, 43*(4), 742.
- Darby, B.W., & Schlenker, B. R. (1989). Children's reactions to transgressions: Effects of the actor's apology, reputation and remorse. *British Journal of Social Psychology, 28*(4), 353-364.
- Davidow, M. (2003). Organizational responses to customer complaints: What works and what doesn't. *Journal of service research, 5*(3), 225-250.
- Dormann, C., & Zapf, D. (2004). Customer-related social stressors and burnout. *Journal of occupational health psychology, 9*(1), 61.
- Exline, J. J., Baumeister, R. F., Bushman, B. J., Campbell, W. K., & Finkel, E. J. (2004). Too proud to let go: narcissistic entitlement as a barrier to forgiveness. *Journal of personality and social psychology, 87*(6), 894.
- Fehr, R., & Gelfand, M. J. (2010). When apologies work: How matching apology components to victims' self-construals facilitates forgiveness. *Organizational Behavior and Human Decision Processes, 113*(1), 37-50.
- Folger, R. (2001). Fairness as deonance. *Theoretical and cultural perspectives on organizational justice, 3-33*.
- Folger, R., & Cropanzano, R. (1998). *Organizational justice and human resource management* (Vol. 7). sage publications.
- Folger, R., & Skarlicki, D. P. (2005). Beyond Counterproductive Work Behavior: Moral Emotions and Deontic Retaliation Versus Reconciliation.
- Funches, V., Markley, M., & Davis, L. (2009). Reprisal, retribution and requital: Investigating customer retaliation. *Journal of Business Research, 62*(2), 231-238.
- Goldberg, L. S., & Grandey, A. A. (2007). Display rules versus display autonomy: emotion regulation, emotional exhaustion, and task performance in a call center simulation. *Journal of occupational health psychology, 12*(3), 301.
- Grandey, A. A., Dickter, D. N., & Sin, H. P. (2004). The customer is not always right: Customer aggression and emotion regulation of service employees. *Journal of Organizational Behavior, 25*(3), 397-418.

- Green, J. D., Burnette, J. L., & Davis, J. L. (2008). Third-party forgiveness: (Not) forgiving your close other's betrayer. *Personality and Social Psychology Bulletin*, 34(3), 407-418.
- Grégoire, Y., & Fisher, R. J. (2008). Customer betrayal and retaliation: when your best customers become your worst enemies. *Journal of the Academy of Marketing Science*, 36(2), 247-261.
- Grégoire, Y., Tripp, T. M., & Legoux, R. (2009). When customer love turns into lasting hate: the effects of relationship strength and time on customer revenge and avoidance. *Journal of Marketing*, 73(6), 18-32.
- Higgins, E. T. (1997). Beyond pleasure and pain. *American psychologist*, 52(12), 1280.
- Higgins, E.T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. *Advances in experimental social psychology*, 30, 1-46.
- Hirschman, A. O. (1970). *Exit, voice, and loyalty: Responses to decline in firms, organizations, and states*. Harvard university press.
- Huang, W. H. (2008). The impact of other-customer failure on service satisfaction. *International Journal of Service Industry Management*, 19(4), 521-536.
- Jehle, A., Miller, M. K., Kemmelmeier, M., & Maskaly, J. (2012). How Voluntariness of Apologies Affects Actual and Hypothetical Victims' Perceptions of the Offender. *The Journal of social psychology*, 152(6), 727-745.
- Joireman, J., Grégoire, Y., Devezer, B., & Tripp, T. M. (2013). When do customers offer firms a "second chance" following a double deviation? The impact of inferred firm motives on customer revenge and reconciliation. *Journal of Retailing*, 89(3), 315-337.
- Karren, R. J., & Barringer, M. W. (2002). A review and analysis of the policy-capturing methodology in organizational research: Guidelines for research and practice. *Organizational Research Methods*, 5(4), 337-361.
- Kellerman, B. (2006). When should a leader apologize and when not?. *Harvard business review*, 84(4), 72-81.
- Kim, P. H., Ferrin, D. L., Cooper, C. D., & Dirks, K. T. (2004). Removing the shadow of suspicion: the effects of apology versus denial for repairing competence-versus integrity-based trust violations. *Journal of applied psychology*, 89(1), 104.
- Kuo, Y. F., Hu, T. L., & Yang, S. C. (2013). Effects of inertia and satisfaction in female online shoppers on repeat-purchase intention: The moderating roles of word-of-mouth and alternative attraction. *Managing Service Quality: An International Journal*, 23(3), 168-187.
- Lazare, A. (2004). *On apology*. Oxford University Press.
- Lewicki, R., & Bunker, B. (1996). Developing and maintaining trust in work relationships. *Trust in organizations: Frontiers of theory and research*, 114.
- Libai, B., Bolton, R., Bugel, M.S., de Ruyter, K., Gotz, O., Risselada, H., & Stephen, A. T. (2010). Customer-to-Customer Interactions: Broadening the Scope of Word of Mouth Research. *Journal of Service Research*, 13(3), 267-282.

- O'Reilly, J., & Aquino, K. (2011). A model of third parties' morally motivated responses to mistreatment in organizations. *Academy of Management Review*, 36(3), 526-543.
- Pearson, C. M., & Porath, C. L. (2005). On the nature, consequences and remedies of workplace incivility: No time for "nice"? Think again. *The Academy of Management Executive*, 19(1), 7-18.
- Porath, C. L., & Pearson, C. M. (2010). The cost of bad behavior. *Organizational Dynamics*, 39(1), 64-71.
- Porath, C. L., & Erez, A. (2009). Overlooked but not untouched: How rudeness reduces onlookers' performance on routine and creative tasks. *Organizational Behavior and Human Decision Processes*, 109(1), 29-44.
- Porath, C. L., Macinnis, D., & Folkes, V. (2010). Witnessing incivility among employees: Effects on consumer anger and negative inferences about companies. *Journal of Consumer Research*, 37(2), 292-303.
- Porath, C. L., MacInnis, D., & Folkes, V. (2011). It's Unfair Why Customers Who Merely Observe an Uncivil Employee Abandon the Company. *Journal of Service Research*, 14(3), 302-317.
- Risen, J. L., & Gilovich, T. (2007). Target and observer differences in the acceptance of questionable apologies. *Journal of personality and social psychology*, 92(3), 418.
- Roschk, H., & Kaiser, S. (2013). The nature of an apology: An experimental study on how to apologize after a service failure. *Marketing Letters*, 24(3), 293-309.
- Rupp, D. E., & Bell, C. (2010). Retribution, moral self-regulation and self interest in the decision to punish: A moral motives extension of the deontic model of justice.
- Scher, S. J., & Darley, J. M. (1997). How effective are the things people say to apologize? Effects of the realization of the apology speech act. *Journal of Psycholinguistic Research*, 26(1), 127-140.
- Schleien, S., Ross, H., & Ross, M. (2010). Young children's apologies to their siblings. *Social Development*, 19(1), 170-186.
- Schlenker, B. R. (1980). *Impression management: The self-concept, social identity, and interpersonal relations* (pp. 21-43). Monterey, CA: Brooks/Cole Publishing Company.
- Singh, J., & Wilkes, R.E. (1996). When consumers complain: A path analysis of the key antecedents of consumer complaint response estimates. *Journal of the Academy of Marketing Science*, 24(4), 350-365
- Skarlicki, D. P., & Kulik, C. T. (2004). Third-party reactions to employee (mis) treatment: A justice perspective. *Research in organizational behavior*, 26, 183-229.
- Smith, A. K., Bolton, R. N., & Wagner, J. (1999). A model of customer satisfaction with service encounters involving failure and recovery. *Journal of marketing research*, 356-372.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Experimental designs using ANOVA*. Thomson/Brooks/Cole.
- Tax, S. S., Brown, S. W., & Chandrashekar, M. (1998). Customer evaluations of service complaint experiences: implications for relationship marketing. *The Journal of Marketing*, 60-76.

- Tomlinson, E.C., Dineen, B.R., and Lewicki, R.J. (2004). The road to reconciliation: Antecedents of victim willingness to reconcile following a broken promise. *Journal of Management*, 30(2), 165-187.
- Wirtz, J., & Mattila, A. S. (2004). Consumer responses to compensation, speed of recovery and apology after a service failure. *International Journal of Service Industry Management*, 15(2), 150-166.

THE INFLUENCE OF AVAILABLE ALTERNATIVES AND VARIABLE EXPECTATIONS ON SATISFACTION

Con Korkofingas, Macquarie University, Australia

ABSTRACT

This paper examines the impact of the characteristics of available alternatives and expectation variance on customer satisfaction within a choice framework. Typical models for customer satisfaction use a disconfirmations paradigm based on the gap between mean expectations of product performance and actual product performance. This may not adequately explain satisfaction if expectations for the alternatives available have both mean and range expectations. Range expectations potentially create different contexts and expectation sub-zones which may moderate satisfaction levels. Using a designed choice experiment, this paper examines the impact of a given disconfirmation on satisfaction levels by joint manipulation of attribute levels of available alternatives and expectation variance for a key experience attribute. Results suggest satisfaction measurements depend on the attributes levels of both chosen and not-chosen alternatives, the level of expectation variance of all alternatives and interactions between these two factors. Given satisfaction judgments vary with these contexts, managers need to account for available alternatives when eliciting and assessing customer satisfaction measurements.

Keywords: Expectation Variability, Choice Experiment, Satisfaction Measurement

INTRODUCTION

Customer satisfaction/dissatisfaction (CSD) is postulated, within the relevant marketing literature, to be a key driver of customer loyalty and post-purchase behaviours including word-of-mouth,

customer complaints and repeat purchasing. Given this relevance, basic CSD models have been applied in business contexts to assist in predictions of future revenues, profits, and market shares. However, CSD scores and associated CSD models have been poor predictors of these key performance indicators (KPI's) (Reicheld 1995; Brandt 1997; Westbrook 1987, 2000; Williams and Visser 2002). Although typically the literature supports the premise CSD influences post-purchase behaviours, estimated relationships are weak and heavily context dependent.

One possible reason for the weakness in these CSD models is the use of mean only rather than range expectations. Range expectations have important implications for formation of CSD judgements. Expectation ranges are typically bounded by minimum and maximum expectations which potentially demarcate different expectation "zones" where CSD judgements may differ. A product experience within the expectation range is likely to be "tolerated" by the consumer with minimal impact on CSD judgements. In contrast, product experiences outside the expectation range (less than the minimum or greater than the maximum) will potentially significantly impact CSD judgments. For example, consider a pizza home delivery service with point only expectations for delivery time of 20 minutes (expected mean). Any actual delivery time greater than 20 minutes is likely to engender dissatisfaction. The dissatisfaction is assumed to increase proportionately the more the actual delivery exceeds 20 minutes. However, if range expectations apply (minimum of 10 and a

maximum of 30), *any* actual delivery time between 10 and 30 minutes is likely to be considered “normal” by the consumer and within a “tolerance” zone. Customers are likely to be satisfied with their delivery experience. In contrast, any actual delivery time exceeding 30 minutes (“intolerance” zone) will likely engender dissatisfaction. CSD models and associated analyses which assume only point expectations are thus likely to mis-interpret CSD measurements and mis-represent key relationships.

CSD judgments may also depend on the expectation distributions of not-chosen alternatives. In the pizza example, a delivery time within 10 to 30 minutes was considered within tolerance. However, suppose the mean expectation for the next best alternative is 25 minutes. An actual delivery time between 10 and 25 minutes may potentially be judged differently to delivery times between 25 and 30 minutes. In the former case, delivery time (X) is within tolerance ($10 < X < 30$ minutes) but there is no perception of value foregone since delivery time is less than the expected mean of the not-chosen alternative (25 minutes). In the latter case, delivery is still within tolerance ($10 < X < 30$ minutes) but a perception of value foregone may exist since experienced delivery time is greater than the expected mean of the not-chosen alternative. Thus, expectation sub-zones may be demarcated by the expected mean of the foregone alternative with likely differential impacts on CSD in each sub-zone.

The above example considered point only expectations for the not-chosen alternative.

Creation of expectation sub-zones is potentially further complicated when expectation *ranges* for all alternatives are considered. This research provides a framework where the impact of expectation ranges of all alternatives on expectation zones and hence CSD can be assessed. There are many studies which examine the impact of expectation ranges on CSD and post-experience judgments (Anderson and

Sullivan 1993, Rust 1997; Rust et al 1999; Wirtz and Bateson 1999, Wirtz and Mattilla 2001) and other studies which consider the impact of available alternatives on regret and post-purchase behaviour (Abendroth 2001; Bui, Krishen and Bates 2009; Inman, Dyer and Jia 1997; Taylor 1997, Tsiros and Mittal 2000). However, none of these studies consider how expectation ranges for *all* alternatives impact on expectation zones and subsequently CSD within a comprehensive choice framework.

This paper makes *three* important contributions to the literature; First it builds on concepts of expectation zones and extends this to include predictive expectation variance for *all* alternatives within an experimental choice framework. Second, the paper provides evidence of how not-chosen alternatives impact on expectation zones and hence on CSD judgements. Typically, analysis of available alternatives has been primarily focussed on regret and not on expectation zones and subsequent impacts on CSD. Third, this paper synthesises separate literature involving expectation zones, expectation variance and available alternatives into a single coherent framework. This allows for a proper assessment of how these factors and the contexts they generate impact on expectation zones and subsequently on CSD measurements. The study provides relevant insights which can assist researchers in possible recalibration of CSD models and proper elicitation of CSD scores.

In the next section, relevant literature is discussed, and the research hypotheses are presented. The choice experiment designed to assess the impact of expectation ranges and consideration sets on CSD is explained in Section 3. In Section 4, analysis and results from the choice experiment are presented. Finally, limitations and conclusions are presented in Section 5.

LITERATURE REVIEW AND RESEARCH HYPOTHESES

There are very few papers in the CSD literature which *jointly* examine the impact of expectation variance and available alternatives on expectation zones and CSD in a single framework. As such, the relevant literature concerning expectation variance or ranges and available alternatives will be examined separately and then synthesised to align with the research objectives of the paper.

Expectation Variance and Expectation Ranges

Consideration of expectation zones in the CSD literature evolved from discussion of the different *types* of expectations relevant in consumer decisions. Woodruff, Cadotte and Jenkins (1983) posited consumers held both normative and predictive expectations of product performance. When simultaneously applied, these different expectations created ranges of acceptable attribute performance (zone of “tolerance”) and unacceptable performance (intolerance - for negative disconfirmations). The authors further postulated the zone of tolerance would act as a mediator between confirmation/disconfirmation and CSD.

The notion of expectation ranges was further developed by other CSD researchers. Oliver (1997) introduced a zone of “indifference” (defined as a range which fulfilled the consumer’s needs) within the zone of tolerance. Zeithaml et al. (1993) and Zeithaml and Bitner (2000) suggested the “tolerance” zone was a range of expected product levels between desired and adequate levels of performance. Santos and Boote (2003) used multiple expectation standards (ideal, should, desired, predicted) to create different disconfirmation zones and posited different CSD responses (delight, satisfaction, acceptance, and dissatisfaction) in these zones. Overall, these papers theorise the interplay of different expectations create expectation ranges and expectation zones which moderate CSD judgements.

However, expectation ranges and expectation zones may also occur even when predictive expectations only are considered. Natural variation in product or service generation processes engender variable product or service attribute outcomes. Due to this natural variation and/or through previous product or service experiences, consumers typically form distributional rather than point predictive expectations. These distributional expectations are then typically incorporated into consumer’s decision-making processes (Markowitz 1952; Pratt 1964; Arrow 1965; Tversky and Kahnemann 1974; Schoemaker 1982; Hogarth 1987).

Assuming distributional expectations can be characterised by their first two moments (mean, variance), expectations can be approximated by ranges centred around the expected mean and bounded by minimum and maximum expectations (Kroll, Levy and Markowitz 1984; Meyer and Rasche 1992; Boyle and Coniff 2008). The expected range extremes (minimum, maximum) are likely to demarcate different expectation zones. Product experiences between minimum and maximum expected values may be considered as normal and not lead to dissatisfaction. This is equivalent to the “tolerance” zone. However, experiences less than the expected minimum (for attributes correlated positively with overall value) are outside the “tolerance” zone potentially leading to dissatisfaction. Similarly, experiences which exceed the expected maximum may lead to consumer delight.

Changing expectation variance leads to changes to expectation ranges and expectations zones with subsequent implications for CSD. When variance increases (decreases) the minimum and maximum will be further from (closer to) the expected mean creating a wider (narrower) zone of tolerance. This was empirically tested by Wirtz and Mattilla (2001) who concluded, for small discrepancies from mean expectations,

higher expectation variance led to higher evaluation of perceived performance and lower evaluations of disconfirmation (relative to the lower variance case). For larger discrepancies, (experienced levels outside expectation range boundaries) different expectation variance did not impact on performance evaluations or disconfirmation measurements. Related evidence has found predictive expectation variance explained future choice decisions ((Anderson and Sullivan (1993), (Rust (1997)) and consumer perceptions of quality and future behavioural intentions (Rust et al (1999)).

Overall, these studies provide evidence that expectation variance moderates the impact of product experiences on perceived disconfirmations and/or future purchase intentions. Although there is little *direct* evidence of the impact of expectation variance on CSD, the Wirtz and Mattila (2001) study suggests *increasing* expectation variance will, all else being equal, lead to changes in expectation zones with *higher* evaluation of product/service performance and *lower* disconfirmation perception. Potentially, this leads to relatively higher CSD judgements and suggests hypothesis H1;

H1: For a given negative disconfirmation, all else being equal, an increase in expectation variance for a chosen alternative will positively impact CSD.

Expected Means of Alternatives

Expectation zones and subsequent CSD perceptions can also be impacted by expected means of not-chosen alternatives. Suppose expectations are point only expectations and the expected means of the chosen and the next best alternatives are Q_1 and Q_2 respectively with $Q_1 > Q_2$. Consumers may be indifferent to experiences within the zone Q_1, Q_2 since any experience in this zone exceeds the expected value of the next best alternative Q_2 . However, outcomes in the zone below Q_2 may significantly impact post-

experience judgements including CSD. In this zone, consumers experience both disconfirmation (experienced value $< Q_1$) and a perception of value foregone from not choosing the alternative (experienced value $< Q_2$).

For example, suppose a consumer has a choice between two broadband services (A, B) with expected download speeds (average) of 50Mb/s and 35Mb/s respectively and chooses service A. The consumer will likely be disappointed with experienced speeds (determined via speed test websites or file downloading time) less than 50Mb/s (Q_1). However, for experienced speeds greater than 35Mb/s (Q_2), the consumer's level of disappointment may be tempered by the perception the not-chosen alternative would not have been better. In contrast, the consumer may feel a disproportionate level of disappointment or dissatisfaction if experienced download speed is less than the expected download speed of the alternative. The expected mean of the foregone alternative (35Mb/s) likely demarcates different expectation sub-zones ($<35\text{Mb/s}$, $35\text{-}50\text{Mb/s}$,) with CSD judgements different in each sub-zone.

There are no studies, to our knowledge, which primarily focus on how available alternatives influence expectation zones. There are, however, a few studies in the literature which investigate the impact of available alternatives on CSD. Taylor (1997) posited unchosen alternatives affect CSD when the chosen alternative did not meet expectations but had little effect when expectations were met. Using two separate studies, the evidence overall supported the posited link between consideration set and CSD. These findings were supported by Machin (2016) who found the availability of alternatives and the various decision strategies employed impacted on CSD measurements. However, Abendroth (2001) found no significant interaction between disconfirmation and quality of foregone alternatives although negative disconfirmation caused a *re-evaluation* of

an unknown, foregone alternative. Overall, the above studies provide *some* evidence to suggest the quality of available alternatives impacts on CSD.

There are several studies which examine the impact of foregone alternatives in decision processes, but they are mainly focussed on regret. However, a few of these studies include both regret and CSD (although as a typically secondary consideration). In general, the evidence suggests there is an association between regret and CSD. Boles and Messick (1995) and Tsiros (1998) found, under certain conditions, regret and satisfaction or rejoicing and dissatisfaction can be concurrently experienced. Utilising a generalised expected utility model, Inman, Dyer and Jia (1997) found the level of regret influences the amount of satisfaction experienced. Bui, Krishen and Bates (2009) showed increasing the level of regret decreases CSD and increases brand switching intention. The Tsiros and Mittal (2000) study showed a significant negative relationship between regret and CSD (Study 2) although ANOVA analysis showed knowledge of foregone alternatives was not significant in explaining CSD.

Overall, the evidence from the above studies suggests regret (perceived value foregone) and CSD are separate but *negatively* correlated post-experience measures. A negative correlation between regret and CSD is *consistent* with the notion that changes to perceived value foregone may change the demarcation of expectation zones. Since regret typically increases with higher quality alternatives foregone, increasing the quality of not-chosen alternatives, all else being equal, potentially impacts on expectation zones and decreases CSD (for negative disconfirmations). This suggests hypothesis H2;

H2: For a given negative disconfirmation, all else being equal, increases in the mean expectations of not-chosen alternatives will negatively impact CSD judgments.

Expectation Variance of Not-chosen Alternatives

The impact of changes to expectation variance of not-chosen alternatives on expectation zones and CSD is unclear. There are no studies, of which we are aware, which directly analyse the impact of expectation variance of not-chosen alternatives on expectation zones and CSD. Chen and Jia (2012) investigated the impact of performance uncertainty of foregone alternatives on regret and future purchase intention with results indicating re-purchase intention was impacted by the performance uncertainty of the not-chosen alternative (Study 1).

Given a preference for risk aversion, we expect increased uncertainty of the not-chosen alternative would increase consumer preference for the chosen alternative. However, increased expectation variance of a not-chosen alternative will potentially impact on expectation zones and on CSD. In the broadband example cited earlier, if expectations of the alternative change from a mean of 35Mb/s to a range of 30 to 40Mb/s, expectation sub-zones may change. Potentially, the indifference zone marker will shift to 40 Mb/s (maximum expectation of not-chosen alternative) from 35Mb/s. Product experiences in the range 35 to 40Mb/s may be viewed differently and engender a different perception of foregone value. Assuming regret or value foregone is negatively related to CSD, we expect CSD judgements to be overall, relatively lower when expectation variance of a not-chosen alternative increases. This suggests hypothesis H3;

H3: For a given negative disconfirmation, all else being equal, increases in the variance of expectations of not-chosen alternatives will negatively impact on CSD judgments.

Expectation Ranges for All Alternatives

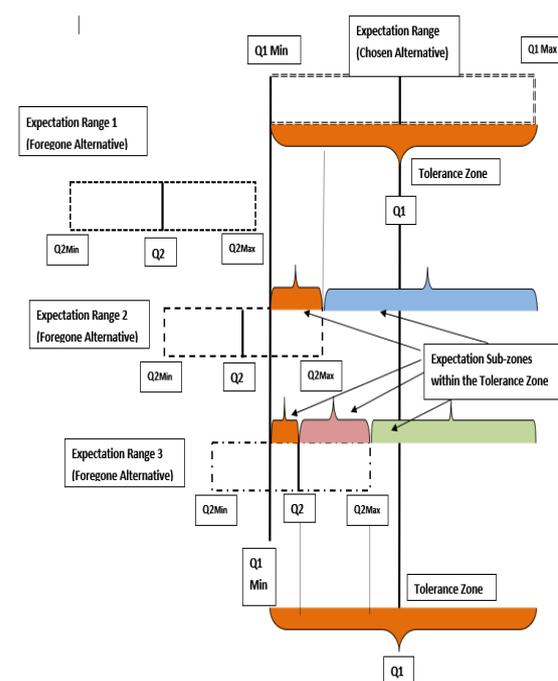
Consideration of distributional expectations for all alternatives is likely to further complicate the demarcation of expectation sub-zones. When expectation variance of all alternatives is considered, minima and maxima for the chosen and next best alternatives (Q_{1min} , Q_{2min} , Q_{1max} , Q_{2max}) become relevant in addition to mean expectations Q_1 and Q_2 . Different relative positions of these key expectation markers potentially provide different contexts with different expectation sub-zones with relatively different impacts on CSD.

There are three contexts of interest in this paper (for negative disconfirmations) generated by changing the relative positions of Q_{1min} (tolerance zone marker) and key expectation markers for value foregone (Q_{2max} , Q_2). These three contexts are characterized by a different ordering of these expectation markers as follows; ($Q_2 < Q_{2max} < Q_{1min}$), ($Q_2 < Q_{1min} < Q_{2max}$) and ($Q_{1min} < Q_2 < Q_{2max}$). These three contexts represent circumstances where the expectation range of the not-chosen alternative is not within the tolerance zone ($Q_2 < Q_{2max} < Q_{1min}$), partially within the tolerance zone ($Q_2 < Q_{1min} < Q_{2max}$) and mostly within the tolerance zone ($Q_{1min} < Q_2 < Q_{2max}$). The contexts are assumed to represent three distinct levels of regret or value foregone with perceived value foregone increasing from the first to last context. A representation of the three contexts appears in Figure 1.

The overall expectation range for the chosen alternative including the tolerance zone is shown at the top of Figure 1 including the key expectation markers Q_{1min} , Q_1 and Q_{1max} . Three different expectation ranges (1-3) representing the three contexts are shown for the not-chosen alternative. In the first context (Expectation Range 1), there is no overlap between the expectation ranges of the chosen and foregone alternatives since $Q_{1min} > Q_{2max}$. Judgements arising from product experiences (Q_e) which fall within the tolerance zone will be minimally impacted

by any sense of value foregone since $Q_e > Q_{2max}$. The tolerance zone is not affected by the expectation range of the not-chosen alternative.

FIGURE 1: Diagrammatic Representation of Expectation Sub-zones



However, for Expectation Range 2, there is an overlap between the two expectation ranges since $Q_{2max} > Q_{1min}$. This potentially creates two expectation sub-zones ((Q_{1min}, Q_{2max}) and (Q_{2max}, Q_1)) within the tolerance zone. Consumer's CSD perceptions of Q_e which fall within the first sub-zone (Q_{1min}, Q_{2max}) may be augmented by perceptions of foregone value since $Q_e < Q_{2max}$. Thus, product experiences in the overall tolerance zone might engender different CSD responses depending on which expectation sub-zone the product experience falls.

Expectation Range 3 provides a context where both Q_2 (expected mean of the not-chosen alternative) and Q_{2max} exceed Q_{1min} . Potentially, this demarcates the overall tolerance zone into three

expectation sub-zones ((Q_{1min} , Q_2) (Q_2 , Q_{2max}) and (Q_{2max} , Q_1)). The impact of product experiences on CSD would potentially be different in each expectation sub-zone with perceptions of value foregone greatest for Q_e which fall in the sub-zone (Q_{1min} , Q_2).

To provide further clarity, consider the broadband service example introduced earlier. Suppose the expected download speed range (tolerance zone) of the chosen service (Service A) is between 40 and 60 Mb/s (expected mean is 50Mb/s). The three contexts would be represented respectively by three different expected download speed ranges for Service B of 30 to 38 Mb/s (no overlap between the expected ranges), 34 to 42 Mb/s (minor overlap with the expected maximum but *not* the expected mean of service B within the tolerance zone) and 38 to 46 Mb/s (substantial overlap where both the expected maximum and expected mean of Service B are within the tolerance zone).

The three contexts (from lowest to highest) represent an upward shift in the overall expectation range of the not-chosen alternative and an increasing perception of value foregone. Since regret or value forgone is negatively correlated with CSD, we expect, for a given disconfirmation, CSD measurements to generally decrease as the expectation range of the alternative shifts upwards. However, any impact on CSD will likely be moderated by the relative positions of Q_{1min} , Q_2 , and Q_{2max} . This suggests hypothesis H4:

H4: For a given negative disconfirmation, all else being equal, CSD measurements will generally decrease as the expectation range of the not-chosen alternative shifts upwards and closer to the expectation range of the chosen alternative.

To provide evidence for all the hypotheses above a choice experiment was designed to provide various experience contexts based

on different expectation ranges for both alternatives. The specifics of the experiment are described in the next section.

EXPERIMENTAL DESIGN AND PROCEDURE

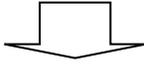
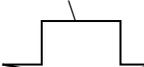
Design

The experiment for this study was a two-stage choice experiment. In the first stage, respondents were introduced to a scenario concerning laptop batteries and were then asked to make a choice between two alternative brands. The second stage of the experiment involved a hypothetical product “experience” with the respondent’s chosen alternative. At the end of the second stage of the experiment, a relevant CSD measure was elicited. Both stages were conducted using a small self-completed survey booklet.

The introductory scenario information (Stage 1.a) asked respondents to imagine they were using a laptop computer for their work or study commitments. Further, it was suggested there was a high likelihood the respondent would be working in an environment where fixed power sources were not readily available, and they would need a long-life laptop battery. To fulfil this need there were two possible options of long-life battery (PowerPlus (P) and Charged (C)) available.

Respondents were then directed to separate mock advertisements for P and C (Stage 1.b) which contained the attributes and attribute levels (expected hours usage and price (\$)) of both brands. Expected hours (under normal usage) was presented in the mock advertisements with an expected mean (highlighted) and expected minimum and maximum hours. Respondents were asked (via instructions in the survey booklet) to consider the mock advertisements and then indicate their preferred choice. After making their choice, respondents were directed via an

FIGURE 2: Stages and Key Characteristics of the Two-Stage Experiment

Stage	Purpose	Characteristic
1	<p>a. Experiment Introduction</p>  <p>b. Determine Pre-Experience Choice</p>  <p>c. Based on Choice in 1.b. respondent directed to different section of survey booklet</p>	<p>Experiment Pre-amble</p> <p>Single choice scenario presented</p> <p>Predictive attribute level expectations presented in mock advertisements for both alternatives</p> <p>Instruction after choice page to go to either “Yellow” or “Green” sealed section of survey booklet.</p>
2	<p>a. Product experience with chosen alternative</p>  <p>b. Elicitation of Customer Satisfaction</p>	<p>Hypothetical product experience with chosen brand – Disconfirmation of expected hours usage of 2.5 hours</p> <p><i>(Placed at top of right-hand page)</i></p> <p>Initial mock advertisements (Stage 1.a) information shown opposite <i>(left hand page)</i> to hypothetical product experience information</p> <p>5-point CSD scale (Very Unsatisfied (1) to Very Satisfied (5))</p> <p><i>(Placed at the bottom of right-hand page)</i></p>

instruction in the survey booklet (Stage 1.c) to go immediately to one of two sealed sections (Stage 2) in the survey booklet. There were two coloured sealed sections (green, yellow) which corresponded to a respondent's choice of either P or C (respectively).

The sealed sections contained Stage 2 of the experiment. In Stage 2.a, information was provided summarising the hypothetical performance (mean hours usage before recharge for a period of three months after purchase) of the battery chosen in Stage 1.b. This information was shown at the top of the right-hand page of the survey booklet. For all respondents, the hypothetical performance of their chosen brand was a disconfirmation of -2.5 hours from the expected mean hours usage provided in the mock advertisements in Stage 1.b. For example, if the expected mean hours in Stage 1.b for P was 12, the mean experienced hours usage in Stage 2.a (in the green section) was 9.5 hours.

After examining the summary hypothetical product experience information, respondents were asked, via instructions in the survey booklet, to indicate CSD with the product experience (Stage 2.b) using a five-point CSD scale (Very Satisfied – Very Unsatisfied). Due to time and response reliability concerns, it was decided to elicit only one measure of CSD in the survey. To assist respondents in recalling pre-experience expectations, the mock advertisements in Stage 1.b were shown again on the left-hand page of the survey booklet.

For simplicity, the laptop batteries were characterised by three key attributes (expected mean hours, expected range of hours usage and price) with each attribute having only two possible levels to reduce experimental size. The attributes, attribute levels and the disconfirmation of - 2.5 (from expected mean hours) were chosen

after preliminary pilot tests. Although using more disconfirmation levels would have been desirable, this would entail many more experimental combinations requiring a much larger sample size. Given the practical concerns of obtaining a large enough sample, it was decided to only use a single disconfirmation level. Additionally, the choice of a standard disconfirmation of -2.5 with different levels of mean hours allows for examination of scale impacts. It is possible a disconfirmation of -2.5 hours will impact more greatly when the expected mean hours usage is 12 (21 % disconfirmation) than when it is 7 hours (36% disconfirmation).

The attribute levels for expected mean hours usage and price differ for P and C for the following reasons; one of the aims of the experiment was to contrast situations where the experienced product usage would be in some cases within, and in other cases outside, different expectation ranges for each of the alternatives. Providing non-identical attribute levels for each alternative contrasts the two alternatives and allows for clear distinction between tolerance zones and expectation ranges for chosen and non-chosen alternatives. With identical attribute levels for both brands, 50% of the relevant experimental combinations would have identical expected mean hours and expected variance for both alternatives. These tolerance zones and expectation ranges for chosen and foregone alternatives (whichever brand was chosen) would completely overlap. This would not provide relevant information on how expectation ranges of foregone alternatives impact on tolerance zones. Additionally, experiment realism and validity are enhanced with non-identical attribute levels. It is unlikely, in real world consumer choices that all product attributes (apart from brand) will be identical.

With the chosen attribute levels for each brand, 75% of all experimental combinations have expected mean hours usage of P exceeding the expected mean

hours usage of C. To some extent, the higher expected mean hours for P in these combinations was balanced by C having a

TABLE 1: Attributes and Levels for Choice Experiment

Attribute	PowerPlus (P)	Charged (C)
Mean Hours Usage (Hrs)	12 or 11	11 or 7
Range (Hrs)	6 or 2	6 or 2
Price (\$)	140 or 110	120 or 100
Disconfirmation (Hrs)	2.5	2.5

TABLE 2: One Possible Scenario Combination in Stage 1

Alternative	Expected Mean Hours	Variability around Expected Mean	Expected Hours Range	Price (\$)
PowerPlus	12	2	11 to 13	140
Charged	7	6	4 to 10	100

lower price. In the other 25% of experimental combinations, the expected mean and range of hours usage were identical for both alternatives.

Price has been included explicitly in the experiments for several reasons; first, the inclusion of price in the choice scenarios enhances the validity of the first stage choice measurement given price would almost certainly be considered by consumers when choosing products in real circumstances. Second, price is the monetary value exchanged by the consumer under the expectation of receiving an equivalent product value in return. If experienced product value is less than overall expected value (as measured by price), consumers may perceive an unfairness in exchange leading to dissatisfaction (Oliver and Swan 1989; Bolton, Warlop and Alba 2003; Hess, Ganesan and Klein 2003; Homburg, Hoyer and Koschate 2005; Herrman, et al 2007). Third, there is evidence from a broad range of empirical studies supporting a link between price and/or price tolerance and

CSD (Anderson 1996; Voss, Parasumaran and Grewal 1998; Iglesias and Guillen 2004; Estelami and Bergstein 2006; Low, Lee and Cheng 2013; Pantouvakis and Bouranta 2104; Chen et al 2015; Ali, Amin and Ryu 2016).

In total, there were six attributes (three for each of the two alternatives) each with two levels giving a full factorial of 64 combinations. Each combination was constructed by using one level of each attribute for each alternative. For example, from Table 1, one possible choice combination is outlined in Table 2 below (using the left-side levels for each attribute for P and the right-side levels for each attribute for C in Table 1). Within Table 2, the expected hours range shown is the overall expectation range *around* the expected mean generated by the specific values of expected mean hours and variance around the expected mean.

The relevant expectation zone contexts were generated by applying the factorials of the experimental design. Building on Table 2, Figure 3 provides a

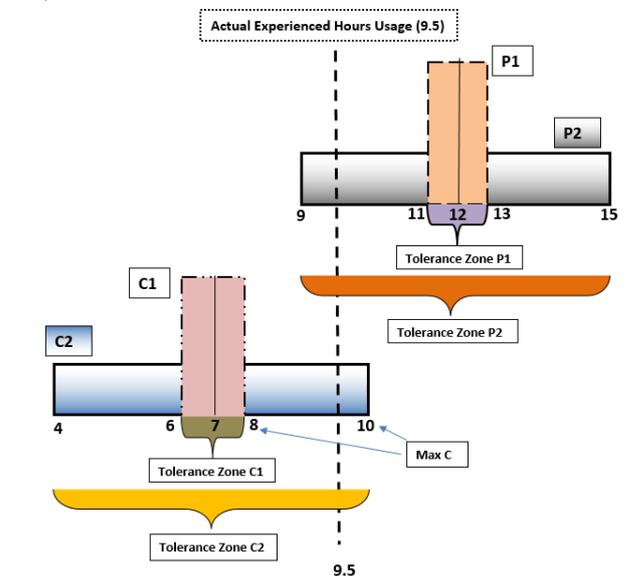
diagrammatic representation of four additional scenario combinations based around varying the expected variance (2 and 6 hours) of both P and C. Assuming the expected hours for P and C remain as 12 and 7 hours respectively, changing the variance of P and C, creates four different overall expected ranges around P and C (P1, P2, C1 and C2). For example, the combination (P1, C1) is based on the variance being equal to 2 for both P and C. This creates an expectation range of (11 to 13) for P and an overall expectation range of (6 to 8) for C. In this scenario, if P is chosen, a disconfirmation of 2.5 hours will generate experienced hours of 9.5 (12-2.5) for P. The experienced hours for P are outside the tolerance zone for P and outside the expectation range for C. However, for the combination (P2, C2), the variance for both P and C is assumed equal to 6. This generates expectation ranges for P and C of (9 to 15) and (4 to 10) respectively. If P is chosen, the disconfirmation of 2.5 hours will generate experienced hours of 9.5 for P which lies within the tolerance zone for P and lies within the expectation range for C. The other combinations (P1, C2) and (P2, C1) and associated tolerance zone/expectation ranges are similarly generated by using by assuming variance levels of P and C as (2, 6) and (6, 2) respectively. Using the levels of expected mean, expected variance and price indicated in Table 1 will generate 64 distinct combinations or scenarios.

Procedure

There were 64 different survey booklets produced (each with *one* combination of the full factorial) with each different survey booklet replicated 8 times (512 surveys produced in total). Although a sample of eight respondents for each combination seems small, the major focus of the study is the *overall* combined impact across varied attribute levels. The overall sample size needed to accommodate larger replications per combination would have been impractical and prohibitive. Each survey

booklet consisted of cover page instructions on how the survey should be completed, and an initial section containing pre-experience scenario information, mock advertisements, and a choice elicitation question.

FIGURE 3: Diagrammatic Representation of Four Selected Experimental Combinations



The instructions at the end of this section of the survey asked respondents to proceed to one of two sealed coloured (green for P and yellow for C) sections containing different experience scenarios for stage two depending on the alternative chosen. Further instructions were given on the front of each sealed section on how to complete the second stage of the survey.

The required number of respondents were recruited from an undergraduate marketing class. Participation in the survey was voluntary (no course credit was offered) with the survey presented to students as an additional class exercise during scheduled class time. The 512 survey booklets were allocated randomly to

each of the respondents in the class. The survey took approximately 10 minutes to complete.

RESULTS AND ANALYSIS

Analysing First Stage Choices

Overall, in the first stage, 399 (78%) of 512 respondents chose P based on expectations engendered by the mock advertisements. The larger % for P was not entirely unexpected given there were more experimental combinations (48 out of 64 = 75%) where P had higher expected mean hours usage than C. Binary logit analysis of first stage choices (P or C) was undertaken to check the relevance of the chosen attributes and attribute levels in determining brand choice. Output from the binary logit estimation appear in Table 3.

For the binary logit analysis $P = 1$ (focal) and $C = 0$. The variables (attributes) in Table 3 are dummies with the levels in parentheses representing the **highest** value of the attribute with an associated dummy code equal to 1. Overall, the significance of the Log Likelihood test, the pseudo- R^2

measures and the Correct Prediction % indicate model fit is reasonable. All variable coefficients are significant (Range_P significant between 5 and 10%) and correctly signed apart from Price_C which is not significant. This means that expected hours, expected variance for both brands and price of P all drive first-stage brand choice.

The significance of the variance coefficients (Range_P, Range_C) suggests consumers factor in expectation range information for both alternatives into initial choice decisions. These expectation ranges potentially form the tolerance/intolerance zones which impact on evaluations of product experiences. Variables representing interactions of the expected mean and variance variables for both P and C were tried (not shown here) but were not significant in explaining brand choice. This suggests the impact of expected variance on brand choice is not related to the level of expected mean hours.

TABLE 3: First Stage (Pre-experience) Choice ($P = 1$)

<i>Variable</i>	<i>B</i>	<i>S.E.</i>	<i>Wald</i>	<i>df</i>	<i>Sig.</i>	Expo (B)
Constant	-1.872	0.172	117.834	1	0	0.154
Average (12)	-0.409	0.126	10.565	1	0.001	0.664
Average (11)	1.388	0.168	68.445	1	0	4.007
Range_P (6)	0.229	0.124	3.383	1	0.066	1.257
Range_C (6)	-0.259	0.125	4.325	1	0.038	0.772
Price (140)	0.526	0.127	17.148	1	0	1.692
Price_C (120)	-0.076	0.124	0.382	1	0.537	0.926

Diff Log Likelihood	136.105	Sig. Δ LL (χ^2 , 6)	0.000	Correct Prediction %	83.40%
Cox & Snell R^2	0.233	Nagelkerke R^2	0.358	McFadden R^2	0.252

Satisfaction (CSD)

An initial investigation of overall CSD scores (elicited in Stage 2.b) was undertaken to provide a benchmark for the assessment of CSD sub-sample distributions in subsequent analyses. The distribution of CSD scores for each separate brand is shown in Table 4.

The negative disconfirmation of -2.5, as expected, generated greater %'s of "Unsatisfied" and "Very Unsatisfied" responses compared to "Satisfied" and "Very Satisfied" category responses. There is no significant difference between the CSD distributions of P and C (χ^2 , 4 p-value = 0.309). The mean CSD (based on a numerical scale of 1 (*Very_Unsat*) to 5 (*Very_Sat*)) is slightly higher for P (2.80) than C (2.63) which may reflect that in more experimental combinations the expected mean hours for P exceeded those for C.

The CSD distributions shown in Table 4 however, represent average CSD for P and C across all experimental conditions. To provide evidence for the research hypotheses of the study, analysis of sub-sample CSD distributions is required. However, given there were only 113 respondents who chose C in the first stage brand choice, sub-dividing C would likely create sub-samples too small for reliable statistical inference. Combining P

and C samples would also be problematic since it is likely P and C choosers will not be homogeneous. Given these arguments, it was decided to focus all subsequent analysis only on the relatively large sub-sample of respondents (n=399) who chose P.

Assessing Expectation Variance for the Chosen Alternative (P choosers only)

To assess the impact of expectation variance on CSD, separate sub-samples of P choosers based on the different levels of expected variance (Range = 2 or 6) were created. The relevant CSD distributions for these sub-samples are presented in Table 5.

From Table 5, the two CSD distributions are significantly different (χ^2 statistic test (p-value =0.03). Compared to the high variance CSD distribution (Range_6), the low variance CSD distribution (Range_2) has lower mean (2.66 compared to 2.94) and higher %'s in the dissatisfied categories (*Very_Unsat*, *Unsatisfied*). The preliminary evidence suggests, for a given disconfirmation, an increase in expectation variance for the chosen alternative appears to *increase* CSD scores. This provides support for H1. An increase in expectation variance expands the tolerance zone around the chosen alternative leading to higher CSD evaluations.

TABLE 4: Satisfaction (CSD) for both P and C Choosers (N = 512)

	P (n=399)	%P	C (n= 113)	%C
Very_Unsat (1)	32	8.00%	10	8.80%
Unsat (2)	157	39.30%	52	46.00%
Neither (3)	82	20.60%	21	18.60%
Sat (4)	116	29.10%	30	26.50%
Very_Sat (5)	12	3.00%	0	0.00%
\bar{x}	2.80		2.63	

TABLE 5: CSD for Different Expected Hours Ranges of P (P Choosers, N = 399)

	Very_Unsat	Unsatisfied	Neither	Satisfied	Very_Sat	Total
Range_P = 2	18	96	37	50	6	207
$\bar{x} = 2.66$	8.70%	46.40%	17.90%	24.20%	2.90%	100%
Range_P = 6	14	61	45	66	6	192
$\bar{x} = 2.94$	7.30%	31.80%	23.40%	34.40%	3.10%	100%
Total	32	157	82	116	12	399
	Pearson $\chi^2_{,4}$	10.741		p-value	0.03	

TABLE 6: CSD for Different Mean Hours of C (P Choosers, N = 399)

	Very_Unsat	Unsatisfied	Neither	Satisfied	Very_Sat	Total
C_Mean = 7	15	83	58	81	7	244
$\bar{x} = 2.93$	6.10%	34.00%	23.80%	33.20%	2.90%	100.00%
C_Mean = 11	17	74	24	35	5	155
$\bar{x} = 2.59$	11.00%	47.70%	15.50%	22.60%	3.20%	100.00%
Total	32	157	82	116	12	399
	Pearson $\chi^2_{,4}$	14.166		p-value	0.007	

Assessing Mean Expectations of Not-Chosen Alternatives (P choosers only)

To assess the overall impact of the quality of foregone alternatives on CSD, sub-samples based on the different expected mean hours for the alternative C (7 or 11) were created. Table 6 shows the CSD distributions for these sub-samples.

From Table 6, the two CSD distributions are significantly different (χ^2 statistic test (p-value = 0.007). Compared to the low expected mean case (C Mean = 7), the higher expected mean case (C_Mean = 11) has lower mean CSD score (2.59 compared to 2.93) and higher % numbers in the dissatisfied categories (*Very_Unsat*, *Unsatisfied*). This suggests, all else equal, higher expected means for not-chosen alternatives will lead to *decreased* CSD scores which supports H2.

Assessing Expectation Variance of Not-Chosen Alternatives (P choosers only)

The impact of expectation variance of not-chosen alternatives on CSD was tested by creating separate sub-samples based on the different levels of expected variance for C (Range = 2 or 6). The relevant CSD distributions for these sub-samples are presented in Table 7.

The two CSD distributions in Table 7 are significantly different (χ^2 statistic test (p-value = 0.022). Mean CSD scores are lower (2.65 compared to 2.95) for higher expected variance of the foregone alternative (Range_2) compared to lower expected variance (Range_6). Overall, there are greater % numbers in the dissatisfied CSD categories (*Very_Unsat*, *Unsatisfied*) for the higher expected variance case. This suggests higher expected variance for not-chosen

TABLE 7: CSD for Different Range Hours of C (P Choosers, N = 399)

	Very_Unsat	Unsatisfied	Neither	Satisfied	Very_Sat	Total
C_Range = 2	12	63	43	68	5	191
$\bar{x} = 2.95$	6.3%	33.0%	22.5%	35.6%	2.6%	100.00%
C_Range = 6	20	94	39	48	7	208
$\bar{x} = 2.65$	9.6%	45.2%	18.8%	23.1%	3.4%	100.00%
Total	32	157	82	116	12	399
	Pearson $\chi^2_{,4}$	11.394		p-value	0.022	

TABLE 8: Different Contexts for D and R Combinations

Context	Experienced P (Q_e) Compared to P Range Min (Q_{1min})	Experienced P (Q_e) Compared to Key C Range Markers
1. D = Low, R = Low	$Q_e > Q_{1min}$ (Tolerance)	$Q_e > Q_{2max}$
2. D = Low, R = Med	$Q_e > Q_{1min}$ (Tolerance)	$Q_2 < Q_e < Q_{2max}$
3. D = Low, R = High	$Q_e > Q_{1min}$ (Tolerance)	$Q_e < Q_2 < Q_{2max}$
4. D = High, R = Low	$Q_e < Q_{1min}$ (Intolerance)	$Q_e > Q_{2max}$
5. D = High, R = Med	$Q_e < Q_{1min}$ (Intolerance)	$Q_2 < Q_e < Q_{2max}$
6. D = High, R = High	$Q_e < Q_{1min}$ (Intolerance)	$Q_e < Q_2 < Q_{2max}$

Assessing Expectation Ranges of All Available Alternatives (P choosers only)

To assess how the expectation ranges for both alternatives potentially impact on expectation zones and CSD measurements, six sub-samples CSD distributions were created. The sub-samples reflect the three relevant expectation zone profiles discussed in section 2.4 ($(Q_2 < Q_{2max} < Q_{1min})$, $(Q_2 < Q_{1min} < Q_{2max})$ and $(Q_{1min} < Q_2 < Q_{2max})$) and two disconfirmation levels ($(Q_{1min} < Q_e)$, $(Q_{1min} > Q_e)$). The two disconfirmation levels are included to assess if the impact of shifts in the expectation range of the not-chosen alternative are moderated by whether the product experiences is within or outside the tolerance zone. To create the six-sub-samples each of the three expectation zone profiles (R) was crossed with each disconfirmation level (D). The three

expectation profiles (R) were classified respectively as “Low”, “Med” and “High” since each implies a different level of perceived regret or value forgone. Disconfirmation levels similarly were classified as (“Low”, “High”). The sub-sample contexts are listed and characterized in Table 8.

The CSD distributions for the relevant sub-samples are shown in Table 9. Since most of the counts in the “*Very Satisfied*” cells were ≤ 2 , this category was merged with the “*Satisfied*” category. Some of the counts in the “*Very Unsatisfied*” category are low (below the recommended cell count (≥ 5) for χ^2 testing) however since the focus of this study is on negative disconfirmation it was decided to retain “*Very Unsatisfied*” as a distinct category.

TABLE 9: CSD - Different (D/R) Contexts (P Choosers, N = 399)

Context	Very_Unsat	Unsat	Neither	Sat	Totals
1. D=Low, R=Low	3	16	17	26	62
$\bar{x} = 3.06$	4.80%	25.80%	27.40%	41.90%	
2. D=Low, R=Med	4	18	18	23	63
$\bar{x} = 2.95$	6.30%	28.60%	28.60%	36.50%	
3. D=Low, R=High	7	27	10	23	67
$\bar{x} = 2.73$	10.40%	40.30%	14.90%	34.30%	
4. D=High, R=Low	5	22	10	23	60
$\bar{x} = 2.85$	8.30%	36.70%	16.70%	38.30%	
5. D=High, R=Med	5	27	11	16	59
$\bar{x} = 2.64$	8.47%	45.80%	18.64%	27.10%	
6. D=High, R=High	10	47	14	17	88
$\bar{x} = 2.43$	11.40%	53.40%	15.90%	19.30%	
					399
	Pearson $\chi^2_{,15}$	p-value	0.034		

TABLE 10: Ordinal Regression for CSD (P Choosers, N = 399)

	Variables	Estimate	Std. Error	Wald	Sig.
Threshold	<i>Very_Unsat</i>	-1.892	0.313	36.44	0
	<i>Unsatisfied</i>	0.634	0.292	4.723	0.03
	<i>Neither</i>	1.566	0.299	27.413	0
	<i>Satisfied</i>	4.355	0.408	113.726	0
Location	Ave_P (12)	0.232	0.186	1.556	0.212
	Ave_C (11)	-0.637	0.196	10.569	0.001
	Range_P (6)	0.481	0.186	6.669	0.01
	Range_C (6)	-0.71	0.194	13.407	0
	Price_P (140)	-0.346	0.188	3.407	0.065
	Price_C (120)	0.166	0.185	0.802	0.37
	Ave_C (11) * Range_C (6)	-0.515	0.193	7.135	0.008

Model Δ Log Likelihood	40.97	Cox & Snell R^2	0.097	Test of Parallel Lines Δ LL	21.228
Sig. Model Δ LL (χ^2, τ)	0.000	Nagelkerke R^2	0.104	Sig. Δ LL (χ^2, τ_1) - Parallel	0.454

Overall, Table 9 provides evidence of differences in the CSD distributions across the six contexts (p-value (0.034) for relevant χ^2 test). Mean CSD scores are higher for contexts where D = Low; within the tolerance zone (3.06, 2.95 and 2.73) compared to the corresponding contexts when D = High (2.85, 2.64, 2.43). Additionally, the %'s in the dissatisfied CSD categories (*Very_Unsat*, *Unsat*) are lower for contexts when D = Low compared to contexts when D = High. As expected, disconfirmations which lie within the tolerance zone are associated with higher CSD scores compared to identical disconfirmations that lie outside the tolerance zone.

In terms of R, mean CSD scores decrease with increasing levels of R as the expectation range of the not-chosen alternative shifts upward. This occurs for contexts where disconfirmation is both within or outside the tolerance zone. Additionally, the %'s in the dissatisfied CSD categories (*Very_Unsat*, *Unsat*) increase with the increasing levels of R no matter the level of D. The increased % in the dissatisfied categories is mirrored by decreases in the higher CSD (*Neither*, *Sat*) categories.

However, decreases to CSD with increasing R are not uniform across contexts. The decrease in CSD scores with increasing R depends on the level of disconfirmation. When D = Low i.e. ($Q_{1min} < Q_e$), an increase of R from "Low" to "Medium" has only a marginal impact on CSD compared to an increase in R from "Medium" to "High". In contrast, when D = High ($Q_e < Q_{1min}$), there is a more uniform decrease in CSD category %'s as R moves from "Low" to "Medium" and then from "Medium" to "High". Additionally, the decrease in the higher CSD category (*Neither*, *Sat*) %'s as R moves from "Low" to "High" is almost all from "*Sat*" when D = High but predominantly from "*Neither*" when D = Low.

The evidence suggests upwards shifts in the expectation range of the not-

chosen alternative, all else being equal, will have a negative impact on CSD scores. Thus, the preliminary evidence supports H4. Key expectation range markers for the not-chosen alternative potentially create expectation sub-zones within tolerance zones which impact on CSD judgments and measurements.

Analysis of CSD using Ordinal Regression

On the preliminary evidence of Tables 5-7 and 9, expectation variance for the chosen brand and both the expected mean and variance of the not-chosen alternative impact on CSD scores. However, the above analyses assess the impact of each of the above factors on CSD separately. Simultaneous estimation of the impact of the factors on CSD provides additional insights and can be analyzed using ordinal regression. The results from the ordinal regression provide additional evidence to determine conclusions for the postulated hypotheses.

An ordinal logistic regression was estimated with CSD as the dependent variable and all product attributes as independent variables. The independent variables are coded as binary dummies with the number in brackets signifying the attribute level coded as 1. The variable (Ave_C (11) * Range_C (6)) was included to test for interaction between the expected mean and expected range of the not-chosen alternative C. The ordinal regression estimates are presented in Table 10.

Overall, the model is significant although the explanatory power of the model (pseudo-R²) is low. The test of parallel lines for the CSD threshold categories is *not rejected* indicating marginal impacts are similar across all CSD categories. All the CSD threshold category coefficients are significant supporting the assumption of distinct CSD scale categories.

The independent variables are mostly significant ($\alpha = 5\%$) apart from Ave_P, and Price_C (Price_P is significant

at $\alpha > 6.5\%$). Importantly, expectation ranges, the quality of available alternatives and the interaction variable (Ave_C, Range_P, Range_C and Ave_C (11)* Range_C (6)) are all significant and have expected signs. The insignificance of Ave_P is likely explained by the small gap between the two levels (12, 11) of this variable in the experiment. (Price_C) may not be significant due to only P choosers being included in this analysis and/or the relatively low importance of price in initial choice decisions.

The positive coefficient on Range_P (6) indicates there is a *decreased* probability of a *lower* CSD category rating when Range_P = 6 compared to when Range_P = 2. Thus, for a given disconfirmation, a higher expected range of the chosen alternative (i.e. larger zone of tolerance) will lead to relatively *higher* CSD scores. This reaffirms the preliminary evidence of Table 5 and further supports H1.

The negative coefficient on Ave_C (11) indicates there is an *increased* probability of a *lower* CSD category rating when Ave_C = 11 compared to when Ave_C = 7. Thus, for a given disconfirmation, a higher expected mean of the foregone alternative will lead to relatively *lower* CSD scores for the chosen alternative. This reaffirms the preliminary evidence of Table 6 and further supports H2.

Similarly, the negative coefficient on Range_C (6) indicates an *increased* probability of a *lower* CSD category rating when Range_C = 6 compared to Range_C = 2. For a given disconfirmation, a higher expected variance of the not-chosen alternative leads to relatively *higher* CSD scores. This affirms the preliminary evidence of Table 7 and further supports H3.

The variable (Ave_C (11) * Range_C (6)) is designed to estimate potential interaction between the expected mean and range of C. In experimental combinations containing both Ave_C = 11 and Range_C

= 6, the expected mean of C (Q_2) is at *least* as large the expected minimum (Q_{1min}) of P. This contrasts with experimental combinations containing the base level of Ave_C = 7 and Range_C = 2). In these combinations, the maximum of C is always lower than the expected minimum of P ($Q_{2max} < Q_{1min}$). The significant negative coefficient on the interaction variable suggests CSD scores will be *lower* for scenarios with (Ave_C = 11 and Range_C = 6) compared to the base level (Ave_C = 7 and Range_C = 2). This suggests CSD scores are lower in experimental combinations where the expected mean of the not-chosen alternative is within the tolerance zone compared to combinations where it is not. In conjunction with the preliminary evidence of Table 9, this indicates support for H4.

Overall, the results of the ordinal regression confirm the results from Tables 5 -7 and 9 establishing support for all hypotheses H1 - H4.

CONCLUSIONS, IMPLICATIONS, AND LIMITATIONS

This research investigates how attribute expectation variance and the quality of available alternatives impact on expectation zones and CSD. The evidence shows, for a given disconfirmation, expectation variance is relevant for consumer decision making and for CSD judgements. This is consistent with the findings of Anderson and Sullivan 1993; Rust 1997; Rust et al. 1999; Wirtz and Bateson 1999; Wirtz and Mattilla 2001. The findings support the notion of “tolerance” zones which impact consumer judgments and perceptions (including CSD) about the performance of the chosen product (Oliver 1997; Woodruff et al. 1983; Zeithaml et al. 1993; Zeithaml and Bitner 2001). Unlike the previous studies however, the current study confirms the link between expectation variance, expectation zones and CSD utilising a two-stage choice-based experiment. In this study, CSD scores were significantly higher when experienced performance was within

the “tolerance” zone compared to alternative cases where experienced performance was outside this zone. The expected mean of available alternatives was also significant in determining CSD. Changing the relative gap between expected mean hours of the two product alternatives generated significantly different post-experience CSD judgments. This supports previous findings of Bui, Krishen and Bates 2009; Inman et al. 1997; Taylor 1997; Tsiros and Mittal 2000 (Study 1)) but is contrary to the findings of Abendroth 2001; Tsiros and Mittal 2000 (Study 2). The primary focus of many of these studies however, unlike the current study, was regret and not CSD. Both the tabular and ordinal regression analysis of this study indicate the expected mean of the not-chosen alternative is relevant in explaining CSD judgments no matter if product experience is within or outside the tolerance zone.

There is also evidence expected variance of the not-chosen alternative significantly impacts on CSD judgements. No previous study has directly examined the impact of the expected variance of not-chosen alternatives on CSD. In this study, for a given product experience, higher expectation variance of the not-chosen alternative, leads to significantly lower CSD measurements. Changing expectation variance of the not-chosen alternative will change its expectation range and change key expectation markers (minimum, maximum). This is most likely due to changing demarcation of relevant expectation sub-zones which potentially impact on CSD.

In this study, upward shifts in the expectation range of the not-chosen alternative lowered CSD scores for a given disconfirmation. CSD scores were lower the more the expectation range of the alternative overlapped with the tolerance zone. When the expected maximum of the not-chosen alternative was within the tolerance zone, CSD scores were marginally lower than when the expected

maximum was outside the tolerance zone. However, significantly lower CSD measurements occurred when the expected mean of the not-chosen alternative was inside the tolerance zone.

The findings of this study are important for both researchers and managers. The evidence clearly suggests CSD measurements are moderated by contexts generated by the interplay of expected mean and expected variance of all alternatives. Given this, it clearly suggests CSD modelling and analysis of CSD scores needs to incorporate expected means and variances for all relevant alternatives. Most CSD models and academic analyses however, consider either the consideration set or expectation ranges for the experienced product but not both. Ignoring one or the other of these factors is likely to lead to erroneous conclusions about the impact of given product experiences and disconfirmations on CSD. Further, and importantly for managers, conclusions from CSD analyses may lead to erroneous predictions of future purchase intentions and behaviour. Such erroneous predictions may then lead managers to make sub-optimal future product-related decisions.

Incorporating attribute expectation means and variance of all alternatives into practical CSD research is, however, problematic. Typically, CSD studies are based around customer surveys. Elicitation of expectation variance or range measures for relevant attributes involves considerable survey expansion and increased completion time. Yet, given the potential for erroneous conclusions if context is ignored, managers should, look to obtain suitable contextual information when eliciting CSD measures from customers.

An alternative approach may be an increased role for designed experiments. Designed experiments allow for known consideration sets and given attribute expectations for all alternatives. Additionally, many confounding factors which affect CSD studies can be controlled. While choice experiments do have

limitations, they can provide relevant information to help improve CSD modelling and thus provide relevant predictions. Potentially, elements of designed choice experiments can be combined with customer CSD surveys which may lead to further improvement in CSD predictions.

The research has several limitations; for mainly operational reasons the size of the experiment was limited to a choice between two alternatives with a relatively small number of attributes. There were only two levels of each of the attributes and only one negative disconfirmation level was examined. The limited number of alternatives and attributes reduces the realism of the experiment. Expanding the number of alternatives and attribute levels would increase realism and provide more comprehensive evidence to assess the relevant hypotheses. Further, an expansion of the experiment to accommodate different product experiences (different disconfirmation levels) within the design would be beneficial. There was only one level of disconfirmation in this experiment which was applied to a single quantifiable attribute. Application of different disconfirmation levels would provide additional evidence. Further application of disconfirmations to more than one attribute simultaneously or to qualitative attributes may produce different results.

The single measures for CSD and expectations provide further limitations. CSD was measured using only a single 5-point scale. Further refinement of the measures of CSD may be appropriate with seven or ten-point scales providing greater sensitivity. Possible comparison of different measures of CSD would provide generalizable evidence. Further, expectations were predictive only with no account of other type of expectations (normative, average etc). Additionally, although regret was not the focus of this study, it was not measured directly but was assumed to vary with relevant changes to

expected means and variances of the foregone alternative.

Other limitations concern manipulation checks and analysis of scale effects. Although the research focuses on differences and relativities between experimental conditions, inclusion of manipulation checks would provide additional benchmarks to compare results. The experimental design attribute levels for P and C were chosen to generate different experience/expectation contexts to assess the hypotheses of the study. However, they also generated a relatively low number of C choosers which meant results could only be realistically assessed on P choosers. A larger sample or reverting to a fractional design may be necessary to generate more repetitions of the various combinations than the eight used in this experiment. Further, the closeness of the levels of expected mean for P meant analysis of scale effects was not viable.

From a theoretical perspective, the research was primarily focussed on decision outcomes and not with decision processes and strategies. Arguably, inclusion of different alternatives or a wider range of expectations may alter consumer's decision-making strategies decision strategies (Machin 2016) or even change the nature of the consideration set (Yaniv and Schul 1997). Additionally, changes to expected ranges for attributes may engender doubts in consumer's minds about other attributes or the overall quality of the product. This may impact on their product evaluations, choices and post-experience judgments. This was not considered in this research but provides an avenue for further development and research.

Additionally, for generalisability, the results need to be applied across different product and service categories. The product used in the experiment (laptop battery) was chosen because it only has a small number of distinguishing attributes. Applying the framework to more complex products or services with a larger number of

attributes might provide experimental challenges and yield different results. Despite these possible challenges, application of this framework to other product types would provide broader and more conclusive evidence to assess the conclusions of the study.

Given the limitations noted above, this research provides evidence, within a closed choice framework, of the how expectation variance and quality of not-chosen alternatives impact on CSD measurements. Based on these insights, researchers should attempt to include these factors in their CSD studies and analyses. They can combine experiments such as the one in this study with conventional CSD methods to

improve CSD modelling and analysis. Such improvements can reduce CSD model misspecification errors and mitigate erroneous conclusions by managers and business about linkages between CSD measurements and post-experience behaviours.

Contact author: Con Korkofingas, Dept. of Marketing, Macquarie University Business School, Sydney, Australia
email:con.korkofingas@mq.edu.au

REFERENCES

- Abendroth, Lisa J. (2001), "Disentangling Regret from Expectancy-Disconfirmation" *Advances in Consumer Research*, 28, 371-372.
- Ali, Faizan, Muslim Amin & Kisang Ryu (2016), "The Role of Physical Environment, Price Perceptions, and Consumption Emotions in Developing Customer Satisfaction in Chinese Resort Hotels." *Journal of Quality Assurance in Hospitality & Tourism*, 17, (1) 45-70.
- Anderson, Eugene.W. and M.W. Sullivan (1993), "The Antecedents and Consequences of Customer Satisfaction for Firms." *Marketing Science*, 12, (Spring), 125-143.
- Anderson, Eugene.W. (1996), "Customer Satisfaction and Price Tolerance." *Marketing Letters*, 7, (3), 265-274.
- Anderson, Eugene.W. (1998), "Customer Satisfaction and Word of Mouth." *Journal of Service Research*, 1, (1), 5-17.
- Arrow, K.J. (1965), "The Theory of Risk Aversion." in *Aspects of the Theory of Risk Bearing*, 35, Helsinki, Yrjo Jahnsolin Saatio.
- Boles, T. L., and D. M. Messick (1995), "A Reverse Outcome Bias: The Influence of Multiple Reference Points on the Evaluation of Outcomes and Decisions" *Organizational Behaviour and Human Decision Processes*, 61, 262-275.
- Bolton, Lisa E., Luk Warlop, and Joseph W. Alba. "Consumer Perceptions of Price (Un)Fairness." *Journal of Consumer Research*, 29, (4), 474-91.
- Boyle, Gerry, and Dennis Coniffe (2008), "Compatibility of Expected Utility and μ/σ Approaches to Risk for a Class of Non-location Scale Distributions", *Economic Theory*, 35, 343-366.
- Brandt, R. (1997), "Satisfaction Studies Must Measure What a Customer Wants and Expects", *Marketing News*, 31, 17.
- Bui, M., A. S. Krishen and K. Bates (2001), "Modelling Regret Effects on Consumer Post-purchase Decisions" *European Journal of Marketing*, 45 (7/8), 97-111.
- Chen, Chiang-Ming, Ho-Wen Yang, Eldon, Y. Li and Chia-Chang Liu (2015), "How Does Hotel Price Influence Guest Satisfaction by the Moderating Influence of Room Occupancy." *International Journal of Hospitality Management*, 49, 136-138.
- Estelami, Hooman and Heather Bergstein, (2006), "The Impact of Market Price Volatility on Consumer Satisfaction with

- Lowest-Price Refunds.", *Journal of Services Marketing*, 20, 3, 169-177.
- Herrmann, Andreas, Lan Xia, Kent B. Monroe and Frank Huber (2007), "The Influence of Price Fairness on Customer Satisfaction: An Empirical Test in the Context of Automobile Purchases," *Journal of Product & Brand Management*, 16, (1), 49-58.
- Hess, R.L., S. Ganesan, and N. M. J. Klein (2003), "Service Failure and Recovery: The Impact of Relationship Factors on Customer Satisfaction." *Journal of the Academy of Marketing Science*, 31, (March), 127-145.
- Hogarth, R. (1987), *Judgement and Choice*. New York: John Wiley & Sons.
- Homburg, Christian, Wayne D. Hoyer and Nicole Koschate (2005), "Customers' Reactions to Price Increases: Do Customer Satisfaction and Perceived Motive Fairness Matter.?" *Journal of the Academy of Marketing Science*, 33, 1, 36 - 49.
- Iglesias, Marta Pedraja, and M. Jesus Yagüe Guillén, (2004), "Perceived Quality and Price: their Impact on the Satisfaction of Restaurant Customers.", *International Journal of Contemporary Hospitality Management*, 16, 6, 373-379
- Inman, J. Jeffrey, James S. Dyer and Jianmin Jia (1997), "A Generalized Utility Model of Disappointment and Regret Effects on Post-Choice Valuation." *Marketing Letters*, 8, (2), 229-238.
- Kroll, Yoram, Haim Levy and Harry M. Markowitz (1984), "Mean-Variance Versus Direct Utility Maximisation" *Journal of Finance*, 39, 47-61.
- Low, Wen-Shinn, Jeng-Da Lee and Soo-May Cheng (2013) "The Link Between Customer Satisfaction and Price Sensitivity: An Investigation of Retailing Industry In Taiwan." *Journal of Retailing and Consumer Services*, 20, (1), 1-10.
- Machin, Jane E. (2016), "Choosing by Selecting or Rejecting: How Decision Strategy Influences Consumer Satisfaction." *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 29, 1-27.
- Markowitz, H.M. (1952), "Portfolio selection", *Journal of Finance*, 7, 77-91.
- Meyer, Jack and Robert H. Rasche (1992), "Sufficient Conditions for Expected Utility to Imply Mean-Standard Deviation Rankings: Empirical Evidence Concerning the Location and Scale Condition" *Economic Journal*, 102, January, 91-106.
- Oliver, Richard L. (1997), "Satisfaction: A Behavioural Perspective on the Consumer." Irwin McGraw-Hill, NY.
- Oliver, Richard L. and John E. Swan (1989), "Consumer Perceptions of Interpersonal Equity and Satisfaction in Transactions: A Field Survey Approach." *Journal of Marketing*, 53, (April), 21-35.
- Pantouvakis, A and N. Bouranta (2014), "Quality and Price--Impact on Patient Satisfaction." *International Journal of Health Care Quality Assurance*, 27, (8), 684-96.
- Pratt, J. W. (1964), "Risk Aversion in the Small and in The Large." *Econometrica*, 32, 122-136.
- Reicheld, Frederick R. (1995), "Satisfied Customers Come Back for More." *American Banker*, 160, November, 13-14.
- Rust, Roland T. (1997), "What You Don't Know about Customer-Perceived Quality: The Role of Customer Expectation Distributions." *Marketing Science*, 18, 1, 77-92.
- Rust, Roland T., J. Jeffrey Inman, Jianmin Jia and Anthony Zahorik (1999), "What You Don't Know about Customer-Perceived Quality: The Role of Customer Expectation Distributions." *Marketing Science*, 18, (1), 77-92.
- Santos, Jessica and Jonathan Boote (2003), "A Theoretical Exploration and Model of Consumer Expectations, Post-Purchase Affective States and Affective Behaviour" *Journal of Consumer Behaviour*, 3, 2, 142-156.
- Schoemaker, P. J. H. (1993), "The Expected Utility Model: Its variants, Purposes, Evidence and Limitations" *Journal of Economic Literature*, 20, 529-563.
- Taylor, Kimberley A. (1997), "A Regret Theory Approach to Assessing Consumer

- Satisfaction", *Marketing Letters*, 8, 2, 229-238.
- Tsiros, M. (1998), "Effect of Regret on Post-Choice Evaluation: The Case of More than Two Alternatives" *Organisational Behaviour and Human Decision Processes*, 76, 48-69.
- Tsiros, M. and V. Mitall (2000), "Regret: A Model of its Antecedents and Consequences in Consumer Decision Making" *Journal of Consumer Research*, 26, 4, 401-417.
- Tversky, Amos and Daniel Kahnemann (1974), "Judgment Under Uncertainty: Heuristics and Biases" *Science*, 185, 1124-1131.
- Voss, G. B., A. Parasuraman, and D. Grewal (1998), "The Roles of Price, Performance, and Expectations in Determining Satisfaction in Service Exchanges." *Journal of Marketing*, 62, (4), 46-61.
- Westbrook, Robert A. (1987), "Product/Consumption-Based Affective Responses and Post-Purchase Processes." *Journal of Marketing Research*, 24, August, 258-270.
- Westbrook, Robert A. (2000), "Towards a Managerial Research Agenda for Customer Satisfaction." *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behaviour*, 13, 17-25.
- Williams, Roger and Rolf Visser (2002), "Customer Satisfaction: It is Dead but Will Not Lie Down." *Managing Service Quality* 12, 3, 194-200.
- Wirtz, Jochen and John E.G. Bateson (1999), "Introducing Uncertain Performance Expectations in Satisfaction Models for Services." *International Journal of Service Industry Management*, 10, 1, 82-99.
- Wirtz, Jochen and Anna S. Mattila (2001), "The Impact of Expected Variance in Performances on the Satisfaction Process" *International Journal of Service Industry Management*, 12, 3/4, 342-357.
- Woodruff, Robert B., Ernest R. Cadotte and Roger L. Jenkins (1983), "Modelling Consumer Satisfaction Processes Using Experience-Based Norms," *Journal of Marketing Research*, 20, August, 296-304.
- Zeithaml, Valerie A., Leonard L. Berry and A. Parasuraman (1993), "The Nature and Determinants of Customer Expectations of Service" *Journal of the Academy of Marketing Science*, 21, Winter, 1-12.
- Zeithaml, Y.A. and Mary Jo Bitner (2000), "Services Marketing-Integrating Customer Focus Across the Firm" NY, McGraw-Hill

APPENDIX 1: Example of Mock Advertisements in Stage 1

(example shown as per Table 2 attribute levels)

PowerPlus 

New LONG-lasting laptop battery!!!

Battery Life (Average): 12 hours**

** (Hours quoted are **average** hours and the quoted use depends on normal usage. The minimum hours usage in normal conditions is 11 and maximum hours usage is 13)

Only \$140!

Suitable for all laptop models

Charged 

More portable power for your laptop!!

Battery Life (Average): 7 hours**

** (Hours quoted are **average** hours and the quoted use depends on normal usage. The minimum hours usage in normal conditions is 4 and maximum hours usage is 10)

Only \$100!

Suitable for all laptop models

THE DEFINITIONS OF DYSFUNCTIONAL CONSUMER BEHAVIOR: CONCEPTS, CONTENT, AND QUESTIONS

David Aron, Dominican University
Olivia Kultgen, Dominican University

ABSTRACT

The purpose of this research is to explore gaps in the understanding of dysfunctional consumer behavior (DCB) that might provide direction for future research and help firms understand the blind spots that might exist in their provision of satisfying consumer outcomes. From the marketer's perspective there are several questions that exist both inside and outside the mind of the consumer that would be of great value in helping avoid DCB and move toward an improved relationship with dissatisfied customers. In this project, numerous definitions of the various types of DCB from over the past 30 years are examined. Here, 18 of these terms are evaluated and a set of questions are presented to the marketer: when does DCB take place, what provokes it, and what does the dissatisfied consumer hope to gain from their actions. The current research raises these questions but to answer these questions, further investigation is needed.

*Keywords: consumer satisfaction
dissatisfaction retaliation dysfunction
grudgeholding*

THE DEFINITIONS OF DYSFUNCTIONAL CONSUMER BEHAVIOR: CONCEPTS, CONTENT, AND QUESTIONS

A customer dissatisfied by the experience and outcome of a transaction can react in any of a number of ways and at different times during the course of the consumer decision-

making process and consumption experience. A recent example can serve as an illustration. Rae, a lifelong Chicago Blackhawks hockey fan, attended a recent game on "Marian Hossa Night," and expected to receive a free souvenir bobble-head doll commemorating the recently retired Blackhawks star. She entered the first stadium gate she saw, only to see the attendant hand the last doll in the case to the person immediately in front of her in line. She looked around and saw that other gate attendants had several dolls remaining, but Rae was unable to get their attention in the crush of fans entering the stadium. Frustrated, Rae walked toward the customer service station and as she pushed through the throng, she observed several other stadium employees, scanning tickets, letting people in, handing out bobble-head dolls, but each one refused to give her a souvenir because she had already entered through another gate.

Once Rae reached the customer service station, she took her place in line, behind a woman in a wheelchair. This older woman started shouting at the customer service representative even as she moved toward the counter. Her voice grew louder as she complained about the poor parking and lack of spaces reserved for handicapped fans. As she railed against the team's facilities and its treatment of its fans, the angry woman looked around her, seeking the support of those still in line, or at least hoping that other fans were hearing of her plight. The service desk attendants listened calmly but had no

response other than to promise that that team cared about its fans, and that if she filled out a paper report form, the team would reply. The woman refused, promising that if she couldn't talk to someone "higher-up" then she would go online to share her anger and frustration at the Blackhawks and their lack of accessibility. As the woman left the counter, she screamed "I hope you never win another game" and then reached out to knock over a stanchion in place to keep the line organized. "I'm never coming back!"

Rae realized a new perspective to her complaint but still felt betrayed by the team. Seeing the exhausted faces of the service booth attendants, she simply asked for her own form to fill out. After all, she got a good deal on the otherwise expensive tickets and at this point, Rae just wanted to watch the hockey game. As Rae wrote, she calmly spoke of her own displeasure and admonished the service attendants. "This is no way to treat loyal fans and I hope this helps you plan better for next time."

In the above example, the marketer (here, the Chicago Blackhawks) clearly wanted to manage the service encounter with an established process, by putting irate customers in a line, having them talk to trained associates, and, if worse comes to worst, giving them a form to fill out. As the woman ahead of Rae in line showed, dissatisfied customers can defy that process and behave in what might be called a dysfunctional manner (Moschis and Cox, 1989; Harris and Reynolds, 2003; Fisk, Grove, Harris, Keefe, Daunt, Russell-Bennett, and Wirtz, J., 2010; Aron, 2016). Dysfunctional customer behavior (DCB) is defined as "actions by customers who intentionally or unintentionally, overtly or covertly, act in a manner that, in some way, disrupts otherwise functional service encounters" (Harris and Reynolds 2003 p.145). Hunt, *et al* (1988) had earlier introduced consumer grudgeholding, another

multifaceted response that can be considered a dysfunctional behavior. This sort of response can be seen as a way to cope with a customer's real or perceived grievance against the firm (Aron 2001), to the point that consumers forsake rational behaviors and purchases in order to make a point.

"We live in an age of rage" (Davey, 2019) and the above example illustrates only a few of the many ways a customer might respond to consumer dissatisfaction. This also demonstrate how negative outcomes and responses can occur at different stages of the consumption process, before the product, service, or experience has been received. In his seminal work, Hirschman presented three broad types of responses to consumer dissatisfaction: exit, voice, and loyalty. The voice response, among the responses illustrated in the above example, involves the consumer informing employees, managers, or anyone else about the unsatisfactory outcome or situation (Hirschman 1970). Sargeant and West (2001) added more specific categories for complaining behavior. *Vocal* describes the situation when consumers express their displeasure directly to the offending company. *Private* describes negative word-of-mouth behavior and *third party* (also studied by Singh and Wilkes, 1996), describes when the consumer seeks help from an outside party, such as a lawyer, regulatory agency, or the Better Business Bureau. Third party voice directed toward other potential and current customers, known as word-of-mouth, has also been widely studied (e.g., Richins 1983) but in a pre-social media context. In our current digital environment, the responses can be faster, louder, and consumer behavior is shared by not be some or even many, but by potentially millions of fellow customers (Aron, 2016).

The foundational ideas of exit and voice as the means of consumer response to dissatisfaction have led to a number of research studies focused on gaining a better

understanding the different ways that exit and voice might be implemented by the customer, and the different ways that a firm might seek to prevent dysfunctional versions of such responses, such as grudgeholding and retaliation. Interestingly, the studies of these collective players, dissatisfied customers and the firms that they blame, have not proven to be equally fruitful. Consumer responses can include complaining to boycotting to vandalism to Twitter and other social media platform campaigns to anti-brand websites and other kinds of dysfunctional behaviors. On the other hand, the movements of marketers are generally limited to the proactive, like have trained employees and a service script (and don't upset the customer in the first place), to the reactive, such as respond promptly to complaining behavior and repair the damage immediately.

The purpose of the current research is to bring the concepts of dysfunctional consumer behavior to the surface and consider new ways of understanding their importance. This is intended to provide paths for future research in the realm of dysfunctional consumer behavior. To this end, the current study presents 18 different terms describing various types of consumer responses that might be considered dysfunctional, as defined by Harris and Reynolds: "actions by customers who intentionally or unintentionally, overtly or covertly, act in a manner that, in some way, disrupts otherwise functional service encounters" (Harris and Reynolds 2003 p.145). These definitions are meant to be representative of the state of research on DCB, if not exhaustive. The next part of this project will be to explore if three key questions about the interaction between a firm and a customer to see how these questions might be addressed:

- Does the term suggest a flashpoint, that is, does it help the marketer understand a crucial point in an encounter or

relationship that may lead "a consumer (to realize) that his or her grievance has become intolerable, perhaps irreparable, and in need of a response"? (Aron, 2001, p. 112)

- Does the term suggest when in the consumer decision-making process, as described by Oliver (2010), such a flashpoint might occur?
- Does the term indicate what the consumer hopes or expects to happen as a result of their dysfunctional behavior?

This third question is not about a desire for equity or justice or fairness, issues that have been explored and theories that have been developed by outstanding marketing scholars. However, relevant to the firm is a question of whether the dissatisfied customer hope to save this relationship, leave the relationship, or even punish the marketer for its misstep. This question must be explored further. From the managerial perspective, in an environment where consumers share information faster, at a scale that was beyond comprehension when much of the existing research was created, the marketing implications must be considered. These include an exploration of at what point a consumer is pushed toward dysfunctional behavior. To what lengths, in defiance of economic rationality and even of the law, will a customer go to act on DCB? What can a firm do to avoid its destruction?

Definitions of Dysfunctional Consumer Behavior

A review of the current and recent terminology in the area of dysfunctional consumer behavior reveals an array of definitions, nomenclature, and terminology but with little sense of order or taxonomy. One substantial and comprehensive review of DCB is that of Fisk *et al.* (2010), and since that time several other terms have been introduced to the catalog of dysfunctional

consumer responses and coping mechanisms. The following terms for dysfunctional consumer behavior are included in the current study (listed alphabetically):

Aberrant consumer behavior (Fullerton and Punj, 1992; Budden and Griffin, 1996)
Brand hate (Fetscherin, 2019)
Consumer boycotts (Friedman 1985, in Klein, Smith, and Craig, 2004)
Consumer brand sabotage (Kähr, Nyffenegger, Krohmer, and Hoyer 2016)
Consumer grudgeholding (Hunt, Hunt, and Hunt, 1988; Huefner and Hunt, 2000; Aron, 2001)
Consumer immoral retaliation (Loureiro, Haws, and Bearden, 2017)
Deviant consumer behavior (Moschis and Cox, 1989)
Desire for consumer vengeance (Bechwati and Morrin, 2003)
Dysfunctional customer behavior (DCB) (Harris and Reynolds 2003)
Guerrilla consumer behavior (Koprowski and Aron, 2013)
Jaycustomer (Lovelock 1994; Harris and Reynolds, 2004)
Negative twist behaviors (Arnould, Price, and Zinkhan, 2004)
Online firestorms (Pfeffer, Zorbach, and Carley, 2013)
Pinocchio Customers (Harris, Fisk, and Sysalova 2016)
Problem Customers (Bitner, Booms, and Mohr, 1994)
Retaliation (Huefner and Hunt, 2000)
Store avoidance (Otto, Parry, Payne, Huefner, Hunt, 2004)
Vengeance (Kim and Smith, 1993)

*The definitions of these terms can be found in Appendix 1.

The manner in which these definitions were selected is like that of a content analytic approach. The sample was defined as terms and phrases used in the academic marketing literature that met the definition of dysfunctional consumer behavior presented by Moschis and Cox (1989), and thus research published in 1989 and thereafter was examined. A notable example of work published *before* that year

and of substantial influence on the body of research on consumer dissatisfaction is that of Hunt, *et al* (1988) on consumer grudgeholding. Therefore, the year 1989 was used as more of a “soft” boundary and referenced works from before 1989 were also considered, spanning to the present day. The objective here was to investigate academic marketing research on DCB with a spectrum of synonymous terms in mind, such as:

consumer revenge, avoidance, retaliation, and blame. This sample is substantial but more convenient than random (Harker 1999) or exhaustive. When a relevant research article was found, the definition of this relevant term, the unit of analysis, was added to the data set. A total of 18 unique definitions was agreed upon by the authors.

At first glance, these labels are similar in that they refer to the unhappy, customer or customers and some element of the consumer response. From the above, the response is generally behavioral but not always. While the word “behavior” or “misbehavior” is specifically mentioned several times, other terms refer to a category or set of actions like “retaliation,” “vengeance,” and “sabotage” or emotional terms like “desire” and “hate.” This acknowledges that there is more going on here than simply a bad behavior.

It is important to acknowledge that some terms that are intentionally *not* included among those describing dysfunctional consumer behavior. The term “demon customers” (Selden and Colvin, 2003) refers to customers that are deemed unprofitable to an organization. Another such term is that of “harbinger customers,” referring to early adopters whose purchases have been found to signal that a product will fail in the marketplace (Simester, Tucker, and Yang, 2019). However, in the cases of both demon customers and harbinger customers, there is really no dysfunctional consumer behavior or even harmful intent involved. These customers are not responding to a negative experience or coping with their dissatisfaction. These terms refer to undesirable customers but without any overt or covert dysfunctional coping behavior. The demon customers and harbinger customers might not even be dissatisfied at all. Another term not included in the following discussion is consumer misbehavior, offered as a synonym for shoplifting (Tonglet, 2002).

Also excluded, the label consumer vigilante. As visceral as this term is, it has been left out of consideration because it was presented as a dysfunctional consumer behavior in the popular press in *Business Week* (Mcgregor, 2008); however, in the academic marketing literature, vigilantism actually is considered to be a pro-brand behavior (Muniz and Schau, 2007).

The following section will explore the proposed research questions in greater detail. Then, further discussion will be followed by conclusions that might be offered and recommendations for future research.

CONCEPTUAL QUESTIONS

To summarize the questions stated above:

- Do the terms for dysfunctional consumer behavior suggest a flashpoint?
- Do the terms suggest when such a flashpoint might occur?
- Do the terms indicate the consumer’s desired outcome in terms of their relationship with the marketer?

Flashpoint

The term flashpoint was used in the marketing literature as a metaphor (Aron, 2001). In the natural sciences, a flashpoint is literally the lowest temperature at which a volatile substance will ignite. Thus, the term can be used in this context to describe the moment at which a customer realizes that his or her grievance has become intolerable, and in need of a response. As Aron wrote, “the strong and negative emotional reaction experienced by the consumer might be called a flashpoint that provokes avoidance behavior against the marketer.” (Aron 2001, p. 109). This term was first used in the context of consumer grudgeholding but can be expanded to apply to any DCB, starting with the emotional flashpoint leading a negative attitude, based on the emotion involved in the dissatisfying experience.

Wright and Larsen (1987) shared an example, referring to the not only the grudgeholding but also the retaliation and irrational behaviors brought about by fans whose college football team was excluded from post-season games.

Just as different substances have different flashpoints, there are going to be different variables that influence when a customer experiences their flashpoints. Sometimes it may be one incident, sometimes it is an accumulation of events that ignite the response. Therefore, the concept of a flashpoint resulting in DCB is offered as a channel for future research.

Stages of the Consumer Decision-Making Process

Regarding when the flashpoint might occur, the experience of any consumer behavior is not limited to the purchase itself or even the post purchase performance of the product or service. To go back to the hockey example,

Rae's experience with the hockey game started well before the event even started. Consider the stages of the consumer decision-making process as illustrated by Oliver (2010), described here and presented in Table 1. Oliver interprets the consumer decision-making process as one of four stages, Alpha, Beta, Gamma, and Delta. The first stage, Alpha, is the preference forming stage and occurs before any decision is made beyond entering the marketplace in search of a consumption-based answer to an issue or problem. The second stage, Beta, brings the consumer to the point of selecting a brand at the cost of forgoing the other available options. The purchase itself does not occur until the Gamma stage. Tensions at this stage include forgone options, similar to those experienced at the Beta stage, and also concerns about the still unexperienced performance of the product or service that has been purchased.

TABLE 1: Purchase decision phases (Oliver, 2010, p. 266)

Phase	Description	Focus of certainty	Psychological Response
Alpha	Predecision	Desirability of alternatives	Decision conflict
Beta	Postdecision, prepurchase	Desirability of chosen versus forgone alternatives	Apprehension
Gamma	Postpurchase, prepossession and postpossession, preusage	Desirability of forgone alternatives Performance adequacy of chosen alternatives	Apprehension, performance adequacy, self-doubt
Delta	Usage, postusage	Consequences of performance, future performance	Regret, guilt, resignation, (dis)satisfaction

The fourth stage, Delta, includes the use of the product or service itself, with all of the benefits and deficits involved (Oliver, 2010).

In Rae’s case, the positive elements might include recognizing the need to purchase a birthday gift for her partner, who is also a hockey fan. Her search would be a limited one, centered on local games, and her alternatives would consist of the set of games that fit into both parties’ schedules. The purchase itself, and finding a good deal on the tickets, would be positive experiences as would Rae’s anticipation of revealing the gift to her husband. This all occurs before the game itself is experienced and well before any outcome is known.

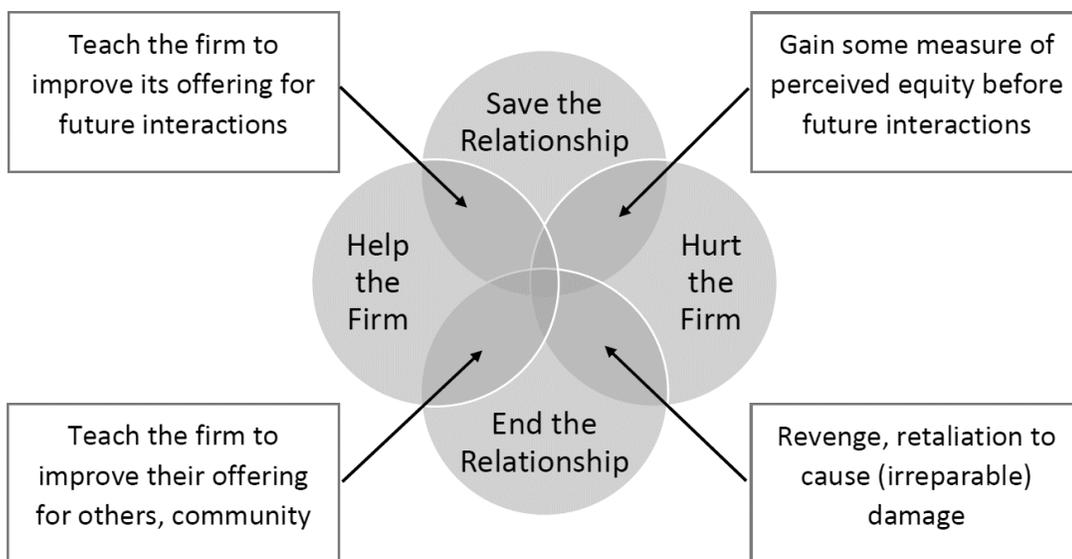
Similarly, consumer dissatisfaction can occur at any of the stages presented by Oliver as well. Rae might feel undue pressure to select the “perfect” gift, perhaps recalling her partner’s past underwhelming responses to her best efforts. Rae might dread other

elements of the broader experience, such as the long commute into the city, the notoriously unsafe neighborhood surrounding the hockey arena, or, as illustrated by the woman ahead of Rae, the stressful parking situation at the stadium. Clearly, a number of these factors are out of the marketer’s control yet might still be counted by the customer as integral parts of the consumption experience. Furthermore, each of these stages is an interaction unto itself, and as the example illustrates, high and intense levels of dissatisfaction can be experienced even when a customer first walks into the store.

Outcomes

It seems clear from the hockey example that Rae wanted to teach the Blackhawks how to better deal with their fans, in hopes of creating a better experience. On the other

FIGURE 1: Outcomes of Dysfunctional Consumer Behavior



hand, the woman in front of Rae demonstrated no such good will and shouted about the destruction of the team's fortunes. We can look at these kinds of motivation from these overlapping perspectives, illustrated in Figure 1.

- Does the consumer, through their behavior, want ultimately to help the firm, or hurt the firm?
- Does the consumer, through their behavior, want ultimately to save their relationship with the firm, or end it?

An examination of the overlaps among the circles in this Venn diagram yields some interesting outcomes. For example, the overlap between "hurt the firm ("HURT") and "end the relationship ("END") seems to get at the heart of the perception of DCB and many of the terms discussed herein. In this case, the dissatisfied customer responds to their outcome by causing harm to the marketer with the intent of gaining some measure of revenge. The explanations of the remaining overlaps, however, may not be as obvious.

The overlap between "help the firm ("HELP") and "save the relationship ("SAVE") suggests that the consumer is engaging in behavior to remediate the firm, perhaps not realizing the damage or costs suffered by the marketer due to this behavior.

The overlap between HELP and END suggests that the consumer has given up on the benefit of maintaining any relationship with this particular marketer and perhaps has no intention of returning, but also realizes that the firm will remain in business despite their DCB. In this case, the dissatisfied customer strives to educate the firm for the benefit of other customers and members of their community.

The overlap between HURT and SAVE seems akin to earlier research on grudge theory (Baumeister, Exline, and Sommer 1998). Grudge theory suggests that the

harmed party (in this case, a dissatisfied consumer) may want to maintain their relationship with the offending party (the firm), but not before gaining some measure of equity in compensation for the firm's missteps. The customer might engage in some act of revenge or retaliation, but only to the point of believing that justice has been restored. However, as described by Baumeister, *et al.*, the original offending party believes that a new imbalance has been created, and so seeks to restore equity through further retaliatory action. The cycle continues *ad infinitum*. More practically, though, the marketer would be foolish to strike back again, thereby ending the vicious circle of retaliation in hopes of restoring the relationship and preventing further damage.

Are there other overlaps, perhaps even more nuanced than the responses described above? One can ponder the placement on this diagram of other consumer behaviors such as reducing the relationship with a firm (SAVE) but not ending it completely, perhaps while seeking other firms or vendors as a replacement or waiting until a contract expires (END). Another example is that of maintaining a relationship in the sense that a customer will no longer make purchases from a marketer but will continue to actively, vocally boycott a firm. In such a scenario, the relationship exists (SAVE) with the intention of hurting the firm (HURT) while warning the community, but conceivably with the intention of resuming the relationship if and only if desired changes are made by the firm (HELP). An even more sinister response by a dissatisfied customer might be ostensibly staying in a relationship with a firm but only to continue antagonize employees or troll the organization by posting negative comments or reviews on social media.

DISCUSSION

A dissatisfied customer has a range of options, which can be reduced to

Hirschman's categories of exit, voice, and loyalty. The world has changed since those options were outlined, and each of exit, voice, and loyalty branches into digitally enhanced and widely shared directions that can lead to easily and instantly to DCB.

Understanding the consumer experience, its touchpoints, and its outcomes, have substantial implications for consumers and for firms (Lemon and Verhoef 2006). What outcome, then, does a customer really want, beyond the expected outcome from a particular transaction? Consumers and customers that engage in dysfunctional behavior are not acting in an economically rational way and in fact might be hurting themselves in terms of monetary, psychological, and physical expenditures. The question remains: does a grudgeholding or retaliating consumer, a dysfunctional customer, want to teach the firm a lesson in the remedial sense or in the vindictive sense? Does the customer want to punish the firm so it can learn from its mistakes and become a better partner, thereby continuing the business relationship? Or does the customer want to hurt the company and gain some measure of revenge, with no intention of maintaining a relationship?

What might lead a consumer to express dysfunctional responses instead of following a store-defined process? Why would a dissatisfied customer choose to walk away and to stay away versus seek revenge? Why might a customer try to teach the firm a lesson in providing strong customer service, instead of, colloquially speaking, teach the firm a lesson they'll never forget? While the motivations might be similar, the environment has changed.

The definitions explored in this project pertain to certain elements of the DCB phenomenon. The current research offers an attempt to weave these definitions using the common thread to the consumer

decision-making process as expressed by Oliver (2010).

The concepts of dysfunctional consumer behaviors including consumer grudgeholding and retaliation were built around only limited underlying theory dedicated to DCB, beyond that posited by Baumeister, *et al.* Instead, like much marketing theory, the understanding of grudgeholding and retaliation is based on theories and concepts developed in the areas of psychology and sociology

Further exploration of these definitions, conducted by means of content analysis may reveal that there are indeed important and often nuanced distinctions among these designations and the purpose of the current study is to conceptualize, clarify, and begin to organize these into a more coherent system of nomenclature.

When the dissatisfied consumer acts out against the firm, whether it is to seek fairness, win a dispute, or even seek vengeance, the marketer can only react. No matter how many precautions the firm might take, "We live in an age of rage," as Davey wrote. Whether it's a particularly difficult consumer, a clerk having a bad day, or the firm's decision that being proactive costs too much money, there's no way to protect against dysfunctional consumer behavior. The purpose of this research is to understand gaps in our understanding of dysfunctional consumer behavior that might not only provide direction for future research but also help firms understand the blind spots that might exist in their provision of satisfying consumer outcomes. The motivations and desired outcomes for consumers, as well as the implications for marketers and firms, are of great importance to researchers and practitioners alike. The circumstances that push a customer toward their inappropriate and perhaps irrational response have been explored and include issues such as seeking justice, seeking equity, seeking some

measure of revenge, dissonance reduction. From the marketer's perspective there are several questions that exist both inside and outside the mind of the consumer that would be of great value in helping avoid DCB and move toward an improved relationship with dissatisfied customers.

The current study examined numerous definitions of the various types of DCB that have been posited for over 30 years, dating back to the work of Hunt *et al* (1988) and Moschis and Cox (1989). In the decades since, many names and many definitions relating to DCB have been presented but the questions remain. This research evaluated 18 of these terms (including DCB and grudgeholding) against a set of questions meant to go beyond consumer behavior theory and move toward questions of great relevance to the marketer: when does DCB take place what provokes it, and what does the dissatisfied consumer hope to gain from their actions. It is important to note that the current research raises these questions but to answer these questions, further investigation is needed. This is

particularly vital in this era of dramatic, rapid, and scalable consumer-to-consumer communication. The power of the consumer voice has grown beyond anything Hirschman, Moschis and Cox, or Hunt *et al* might have imagined, even in light of their enormous contributions to the research of consumer behavior. Furthermore, the implications to firms are substantial, in terms of their costs to satisfy customers, replace lost customers, and prevent or anticipate dysfunctional consumer response through measures such as hiring and training social media listeners and developing customer service protocols.

Contact Author:

David Aron
 Professor of Marketing
 Dominican University
 7900 W. Division Street, River Forest, IL
 60305
 Tel. 708-524-6681
 Email: daron@dom.edu

REFERENCES

- Arnould, E., L. Price and G. Zinkhan (2004), *Consumers*. Boston, MA: McGraw-Hill.
- Aron, D. (2001). Consumer grudgeholding: Toward a conceptual model and research agenda. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 14.
- Aron, D. (2016). Digital dysfunction: Consumer grudgeholding and retaliation in the digital era. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 29.
- Baumeister, R.F., J.J. Exline, and K.L. Sommer (1998). The victim role, grudge theory, and two dimensions of forgiveness. In E.L. Worthington Jr., (Ed.) *Dimensions of forgiveness: Psychological research & theological forgiveness* (pp. 79-104). Philadelphia: Templeton Foundation Press.
- Bechwati, N. N. and M. Morrin (2003), Outraged consumers: Getting even at the expense of getting a good deal, *Journal of Consumer Psychology*, 13 (4), 440-453.
- Bitner, M.J., B.H. Booms, and L.A. Mohr (1994). Critical service encounters: The employee's viewpoint. *Journal of Marketing*, 58 (October), 95-106.
- Budden, M. C., and T.F. Griffin (1996). Explorations and implications of

- aberrant consumer behavior. *Psychology and Marketing*, 13(8), 739–740. doi: 10.1002/(sici)1520-6793(199612)13:8<739:aid-mar1>3.0.co;2-g
- Davey, N. (2019, December 12). 2019 customer service trends: How are companies serving consumers in the age of rage? Retrieved from <https://www.mycustomer.com/service/contact-centres/2019-customer-service-trends-how-are-companies-serving-consumers-in-the-age>.
- Fetscherin, M. (2019). The five types of brand hate: How they affect consumer behavior. *Journal of Business Research*, 101, 116-127. 10.1016/j.jbusres.2019.04.017.
- Fisk, R., S. Grove, L. Harris, D. Keefe, K. Daunt, R. Russell-Bennett, R. and J. Wirtz (2010). Customers behaving badly: A state of the art review, research agenda and implications for practitioners. *Journal of Services Marketing*, 24 (6), 417-429.
- Friedman, M. (1999). *Consumer boycotts: Effecting change through the marketplace and the media*. New York: Routledge.
- Fullerton, R.A. and G. Punj (1992). “Choosing to misbehave: A structural model of aberrant consumer behavior” in *Advances in Consumer Research*, 20 (L. McAlister and M.L. Rothschild, Eds.), Provo, UT: Association for Consumer Research, pp. 570-574.
- Harker, M. (1999). Relationship marketing defined? An examination of current relationship marketing definitions. *Marketing Intelligence & Planning*, 17, 13-20.
- Harris, L.C., R. Fisk, and H. Sysalova (2016). Exposing Pinocchio customers: Investigating exaggerated service stories. *Journal of Service Management*, 27 (2), 63-90.
- Harris, L.C. and K. L. Reynolds (2003). The consequences of dysfunctional customer behavior. *Journal of Service Research*, 6 (2), 144-161.
- Harris, L.C. and K. L. Reynolds (2004). Jaycustomer behavior: An exploration into the types and motives in the hospitality industry. *Journal of Services Marketing*, 18 (5), 339-357.
- Hirschman, A. O. (1970) *Exit, Voice and Loyalty: Responses to Decline in Firms, Organizations and States*. Harvard University Press, Cambridge, MA.
- Huefner, J. C, and H. K. Hunt (2000), Consumer retaliation as a response to dissatisfaction. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 13 (1), 61 -82.
- Hunt, H. K., H.D. Hunt, and T.C. Hunt (1988), Consumer grudge holding. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 1,116-18.
- Kähr, A., B. Nyffenegger, H. Krohmer, and W. D. Hoyer (2016) When hostile consumers wreak havoc on your brand: The phenomenon of consumer brand sabotage. *Journal of Marketing*, 80 (3), 25-41.
- Kim, S. H., and R. H. Smith (1993). Revenge and conflict escalation. *Negotiation Journal*, 9, 37–43.
- Klein J. G., N. Smith and J.A. Craig (2004) Why we boycott: consumer motivations for boycott participation. *Journal of Marketing*, 68, 3, 92-109.
- Koprowski, W. and D. Aron (2013). Planning for the apes: Coping with guerrilla consumer behavior when the courts won’t help. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 26.
- Lemon, K.N. and P.C. Verhoef (2016). Understanding customer experience throughout the customer journey.

- Journal of Marketing*, 80 (November), 69-96.
- Loureiro, Y. K., K.L. Haws, and W.O. Bearden (2017). Businesses beware. *Journal of Service Research*, 21(2), 184-200. doi: 10.1177/1094670517738366
- Lovelock, C.H. (1994). *Product Plus: How Product and Service Equals Competitive Advantage*. New York: McGraw-Hill.
- Mcgregor, J. (2008). "Consumer vigilantes." Retrieved September 21, 2016, from <https://www.bloomberg.com/news/articles/2008-02-20/consumervigilantes>
- Moschis, G.P. and D. Cox (1989). "Deviant consumer behavior" in *Advances in Consumer Research*, 16 (T.K. Srull, Ed.), Provo, UT: Association for Consumer Research, pp. 732-737.
- Muniz, A.M. and H.J. Schau (2007). Vigilante marketing and consumer-created communications. *Journal of Advertising*, 36 (3), pp. 187-202.
- Oliver, R. L. (2010). *Satisfaction A Behavioral Perspective on The Consumer*. Oxfordshire: Routledge.
- Otto S.D., B. L. Parry, C. R. Payne, J.C. Huefner and H. K. Hunt (2004). When consumers get upset: Modeling the cost of store avoidance. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 17, 42-53.
- Pfeffer, Juergen, T. Zorbach, and K. Carley (2013). Understanding online firestorms: Negative word-of-mouth dynamics in social media networks. *Journal of Marketing Communications*. 20. 117-128. 10.1080/13527266.2013.797778.
- Richins, M. L. (1983). An analysis of consumer interaction styles in the marketplace. *Journal of Consumer Research*, 10, 73-82.
- Sargeant, A. and D. C. West (2001). *Direct and Interactive Marketing*. Oxford: Oxford University Press.
- Selden, L., and G. Colvin (2003). *Angel customers & demon customers: Discover which is which and turbo-charge your stock*. New York: Portfolio.
- Simester, D.I., C.E. Tucker and C. Yang (2019). The surprising breadth of harbingers of failure. *Journal of Marketing Research*, 56 (6), 1034-1049.
- Singh J. and W.E. Wilkes (1996). When consumers complain: A path analysis of the key antecedents of consumer complaint response estimates. *Academy of Marketing Science Journal*, 24, (4), 350-365.
- Tonglet, M. (2002). Consumer misbehavior: An exploratory study of shoplifting. *Journal Consumer Behaviour*, 1 (4), 336-354.
- Wright, N. D. and V. Larsen (1997). Complaining about the Alliance: Extending Kowalski's theory of complaining through a hermeneutical analysis of online complaining data. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 10, 170-184.

APPENDIX A:

Definitions Of 18 Types of Dysfunctional Consumer Behavior

Aberrant consumer behavior: Behavior in exchange settings which violates norms of conduct, held in disrepute by marketers and by most consumers; include 1) destruction of marketer property, vandalism 2) abuse, intimidation, and physical and psychological victimization of other consumers and marketer personnel 3) material loss through various forms of theft including insurance, credit card, and check fraud, and shoplifting (Fullerton and Punj, 1992; Budden and Griffin, 1996)

Brand hate: Consisting of 3 key emotions often displayed as disgust, contempt, and anger. The combination of these emotions is what determines the consumer's behavioral outcome such as brand switching, private or public complaining, brand retaliation, and willingness to make personal financial sacrifices to attempt to hurt the brand. (Fetscherin, 2019)

Consumer boycotts: Attempt by one or more parties to achieve certain objectives by urging individual consumers to refrain from making selected purchases in the marketplace (Friedman 1985, in Klein, Smith, and Craig, 2004)

Consumer brand sabotage: A customer's hostile aggression, toward harming the brand as compared to other types of negative consumer behavior wherein harming a brand is only a means to achieve other objectives, e.g., restoring equity. (Kähr, Nyffenegger, Krohmer, and Hoyer 2016)

Consumer grudgeholding: Extreme exit (Hunt, Hunt, and Hunt, 1988), persisting over a long period of time (Huefner and Hunt, 2000). A negative attitude toward a marketer, persisting and purposive avoidance as a means of coping with a real or perceived grievance attributed to the marketer. (Aron, 2001)

Consumer immoral retaliation: Morally inappropriate response by consumers to perceived immoral action by firm, which may also affect guiltless marketplace entities (Loureiro, Haws, and Bearden, 2017)

Deviant consumer behavior: Behavior that differs from some norm or standard, considered, by society to be undesirable, or dysfunctional (Moschis and Cox, 1989)

Desire for consumer vengeance: Retaliatory feelings that consumers feel toward a firm, such as the desire to exert some harm on the firm, typically following an extremely negative purchase experience (Bechwati and Morrin, 2003)

Dysfunctional customer behavior (DCB): Actions by customers that, intentionally or unintentionally, overtly or covertly, disrupt otherwise functional service encounters" (Harris and Reynolds 2003)

Guerrilla consumer behavior: A response by dissatisfied customers going beyond normative behavior and resorting to counterproductive, economically harmful, and even illegal activities (Koprowski and Aron, 2013)

Jaycustomer: Customers who deliberately act in a thoughtless or abusive manner, causing problems for the firm, employees, or other customers. Includes sub classifications: The Thief, The Cheat, The Belligerent, The Rule Breaker, The Vandal, The Family Feuder, The Deadbeat (Lovelock 1994; Harris and Reynolds 2004)

Negative twist behaviors: Unwanted behaviors of resistance against the company including long-term grudgeholding, theft, vandalism, negative word-of-mouth, anti-brand websites, and in rare cases physical abuse of service personnel (Arnould, Price, and Zinkhan 2004)

Online Firestorms: Huge waves of outrage created by social media users within just a few hours in reaction to any questionable statement or activity (Pfeffer, Zorbach, and Carley, 2013)

Pinocchio customers: People who undertake exaggerated word-of-mouth against the marketer or service provider (Harris, Fisk, and Sysalova 2016)

Problem customers: Unwilling to cooperate with the service provider, other customers, industry regulations, and/or laws.

Retaliation: Aggressive behavior done with the intention of getting even.... From the seller's perspective, retaliation is an ineffective consumer response because it does not identify either the cause of the problem or person offended; therefore, no corrective action can be taken. From the consumer's perspective, retaliation is primarily cathartic (Huefner and Hunt, 2000)

Store avoidance: Persistent exit caused by consumer dissatisfaction (Otto, S.D., Parry, B.L., Payne, C.R., Huefner, J.C., Hunt, H.K., 2004)

Vengeance: Customers' attempt to inflict harm in return for harm (Kim and Smith, 1993)

(RELATIVE) STATUS QUO EFFECTS ON CUSTOMER LOYALTY IN SATISFACTION AND TRUST RELATIONSHIPS IN INSURANCE

Steven A. Taylor, Ph.D., Illinois State University
E. Tice Sirmans, Ph.D., Illinois State University

ABSTRACT

The current research identifies the judgment and decision-making (J/DM) context as an additional relevant concern today for assessing consumer decision-making relative to automobile insurance. The research focuses on potential status quo effects on a satisfaction and trust model of customer loyalty, demonstrating that relative status quo contexts (relative to another consumer) appear to invoke a different J/DM model than non-comparative status quo contexts. The results demonstrate the general importance of consumer trust across both assessed contexts as a foundation for customer loyalty decisions. Satisfaction judgments, on the other hand, were found to operate only in the non-comparative scenario. The results afford important insights for insurance marketers in terms of positioning strategies based upon group membership identification versus non-comparative emphases such as price.

Keywords: Insurance, Trust, Satisfaction, Status Quo, Automobile

INTRODUCTION

The current research focuses on consumer decision-making within the context of insurance as a service industry. Deloitte (2019) projects that the insurance industry outlook for 2020 is stable. However, the marketing challenges facing the insurance industry are many, including the rise of social media marketing (Shrestha et al. 2019), digital marketing (Sahore 2019), and artificial intelligence and machine learning in

insurance marketing practices (Burri et al. 2019). In addition, Bansal (2016) notes that the insurance sector faces several environmental risks, such as macroeconomic downturns, inflation, low interest rates, unfavorable legislation, terrorist attacks and natural disasters. The insurance industry is also vulnerable to long-term risks including global aging, rising health care costs and climate change. These risks are intrinsically different from those faced by the banking sector, where risks tend to be shorter term. Insurers have long-term liabilities, which they match with long-term assets (securities). These challenges point toward the importance of contextual factors in marketing research related to insurance settings. These challenges further suggest the continued importance of long-term relationship marketing strategies as a key strategy for the long-term viability of the consumer insurance industry as a whole.

The following study presents evidence suggesting that insurance marketers should also add the decision-making context to their list of concerns. Fortunately, the service marketing literature affords some insights into the judgment and decision making (J/DM) context of insurance consumption. For example, satisfaction as a construct is well known to be important to relationship marketing theory and practice in insurance settings (Crosby and Stephens 1987, Bejou 1997, Shiu and Yu 2010, Petzer and van Tonder 2019). Pooser and Browne (2018) using a unique data set obtained from J.D. Power, link customer satisfaction ratings

to insurer profitability metrics. Their results support the notion that greater customer satisfaction leads to reduced expenses and increased profitability. A potential explanation is that more satisfied customers are more likely to remain with an insurance company and refer others to the insurer, reducing customer acquisition expenses (in addition to other known marketing returns from relationship marketing). In terms of explanatory marketing theory as an alternative explanation for Pooser and Browne's (2018) results, Homburg et al. (2009) links social identity theory to the service-profit chain (SPC) generally, and specifically to insurance contexts. The SPC proposes that a firm's financial performance can be improved through a path that connects employee satisfaction, customer orientation, customer satisfaction, and customer loyalty.

The current research contributes to our understanding of consumer J/DM in insurance contexts by building upon an evolving literature concerning status quo effects within the context of insurance. Thus, the current research investigates potential consumer status quo bias effects related to automobile insurance. Johnson et al. (1993) report a series of studies demonstrating that subjects exhibit distortions in their perceptions of risk and framing effects in evaluating premiums and benefits. Illustrations from insurance markets further suggest that the same effects occur when consumers make actual insurance purchases. One of the framing effects demonstrated by Johnson et al. (1993) involves status quo effects. Johnson et al. (1993) describe status quo bias in human J/DM as a "... strong and robust tendency to stick with what they have, the status quo, even when it is randomly determined." Kahneman et al. (1990) extend these conclusions to willingness to pay to acquire an object and the amount demanded to sell the same object.

In the current study, new empirical evidence is presented related to satisfaction and trust relationships within the context of

status-quo scenarios in consumer insurance settings vis-à-vis the context of status quo considerations. Specifically, the results suggest that the underlying satisfaction-trust relationships appear to differ when consumer J/DM in an insurance context is focused entirely on an individual's own utilitarian personal outcomes versus those outcomes relative to the perceived outcomes of other consumers. In other words, there appears to be a consequential J/DM context involving whether or not automobile insurance customers perceive themselves as individual and independent consumers, or as part of group of consumers with which they identify. As an example in the United States, USAA Insurance is known for its service to the military community and their families (a group affiliation), whereas Geico Insurance offers a positioning strategy based on low price (an individualistic consideration).

Existing Service Marketing Literature About Status Quo Bias Effects in Consumer Insurance Settings

Taylor (2012) presents results empirically linking affect (i.e., emotional concepts) to consumer loyalty decisions in an automobile insurance context. The results support the conclusions that both cognitive and affective considerations are important to consumer J/DM processes in the context of car insurance, that male and female customers may vary in their J/DM processes with car insurance, and that insurance modelers of J/DM should consider outside influences on consumers in studies, particularly marketing-related brand and price perceptions. Further, not doing so can lead to a failure to correctly predict potential action versus inaction effects associated with anticipated regret. Taylor (2012) presents further evidence linking satisfaction, regret and status quo effects to consumer loyalty decisions in an automobile insurance context. Results support (1) helping to reconcile loyalty

explanations with models of J/DM; (2) contributing to identifying the unique roles of anticipated regret, anticipated emotions generally, and satisfaction judgments specifically in the process; (3) demonstrating the need to consider status quo effects as a moderator to loyalty formation; and (4) suggesting the possibility of status quo effects influencing the role of many other concepts in explanations of loyalty formation. Taylor's (2013) evidence generally support the importance of status quo bias effects as a context for automobile insurance loyalty decisions as a key predictor of healthy marketing relationships. Taylor (2016) extends these results by demonstrating further evidence that these findings may vary by gender.

Theory Development

One observation about the research stream identified above is that the analyses are interpreted exclusively through the lens of an individual's own utilitarian perceived personal outcomes versus forming these perceptions based on outcomes relative to the perceived outcomes of other consumers. Thus, it remains a mystery whether or not the previously identified strategies by USAA versus Geico represent unique J/DM contexts. The current study extends this literature stream by considering the observed results beyond the context of a self-focused interpretive perspective to offer comparison with the formation of a relative judgment (relative to to the experience of another individual).

Thus, the research question herein involves whether or not consumers' perceptions are related to status quo decision-making scenarios as a contextual influence. There is some evidence to support the reasonableness of the identified research question. Chernev (2004) presents evidence from three experiments supporting the conclusion that the preference for the status

quo is stronger for prevention-focused than for promotion-focused consumers. This effect was demonstrated in two choice contexts: preference for the choice alternative perceived to be the status quo (experiments 1 and 2) and preference for inaction over action (experiment 3). Consumers often must choose between a course of action that preserves the status quo and a course of action that is a departure from the status quo. This research demonstrates that preference for the status quo is a function of goal orientation and, in particular, that it tends to be more pronounced for prevention-focused than for promotion-focused consumers. The preference for the status quo was examined on two dimensions: preference for the status quo alternative and preference for inaction over action. Results suggest that the impact of goal orientation on the preference for the status quo can occur independently of loss aversion—a finding consistent with the notion that goal orientation might impact choice by virtue of motivational factors such as self-regulation of anticipated regret.

The idea that status quo may represent a consumer J/DM contextual influence is further supported and explained by Loomes et al. (2009) who develop a model of status quo effects in consumer choice that is based on reference-dependent expected utility theory. In this model, the strength of the status quo effect depends on the characteristics of the relevant goods and on the individual's knowledge about and experience with those goods. This approach purports to explain why status quo effects can vary substantially from one decision context to another and why some such effects may decay as individuals develop market or other relevant experience.

Doosje et al. (2002) present a study that may help begin to explain status quo effects vis-à-vis underlying models of J/DM. Doosje et al. (2002) investigate how in-group identification in combination with

anticipated changes in the intergroup status hierarchy predicts subsequent levels of identification. Overall, low identifiers seem more instrumental than high identifiers, in the sense that the former are only prepared to affirm identification with a low status group when status improvement is imminent or has actually been realized. In terms of social identity theory, low identifiers commit themselves to the group only when their individual goals and outcomes correspond with those of the group. Pan et al. (2017), within the context of social networking, presents results related to the common and differential effects of two levels of social self-identity—relational identity and social identity—on reinforced and varied use and the moderating role of inertia on their effects on social media usage. Thus, social media usage is decomposed into reinforced and varied use and reveals the common and differential influences of two levels of social self-identity on user behavior. Sheldon and Bettencourt (2002) also present results suggesting that group inclusion may be the most important need to satisfy within group contexts. Bettencourt et al. (2006) extends this line of thinking to include self-determination theory, which provides an account of the motivational processes by which individuals seek self-expression within the context of social relationships. Bettencourt et al. (2006) assert that self-determination theory posits that humans possess both socially- and self-oriented basic psychological needs, that may conflict with one another.

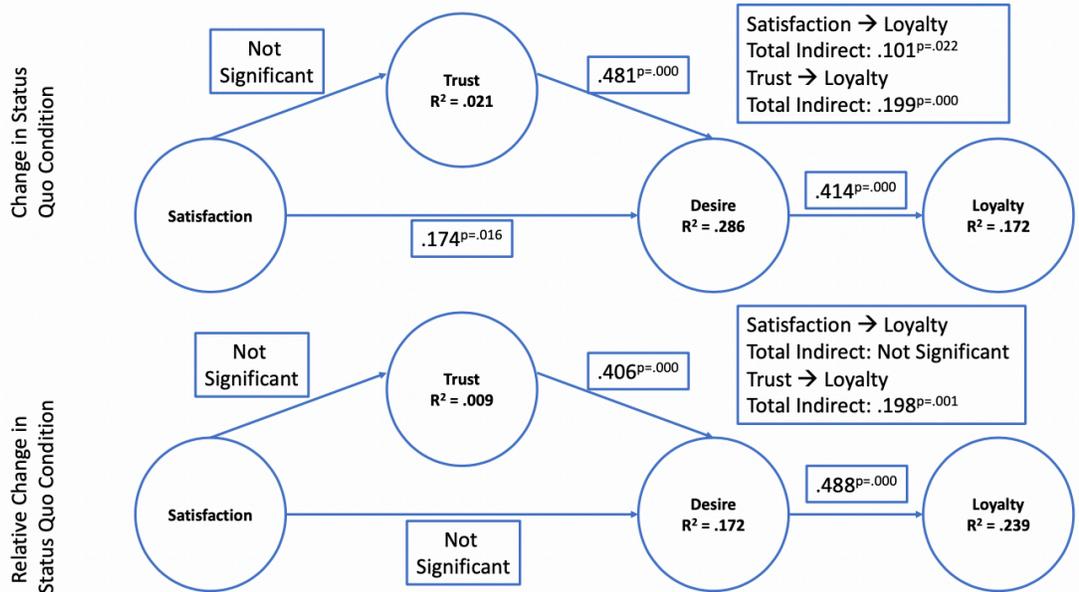
The Research Model

Figure 1 presents the research model for the current research. Guiso (2012) presents evidence that trust is particularly germane to any financial transaction, and specifically relevant to insurance markets. As noted above, the research model generally advances existing status quo research specific

to insurance contexts in the service literature through the consideration of satisfaction, trust, and commitment/loyalty as key components of relationship marketing theory and practice. Briefly, Morgan and Hunt (1994) present the influential commitment-trust theory of marketing relationships which posits that relationship commitment is a direct outcome of a marketing actor's trust. Satisfaction, while not directly measured and modeled, is theorized as likely positively related to relationship commitment. Garbarino and Johnson (1999) review the differing roles of satisfaction, trust, and commitment in customer relationships and report results demonstrating that different levels of relational commitment to a marketing relationship have an impact on the relationships between satisfaction and trust judgments with future behavioral intentions. Specifically, Garbarino and Johns (1999) report results suggesting that for the low relational customers, overall satisfaction is the primary mediating construct between the component attitudes and future intentions. For the high relational customers, trust and commitment, rather than satisfaction, are the mediators between component attitudes and future intentions. Thus, the relationships between satisfaction and trust with behavioral intentions appear to vary across levels of relational commitment. Rizan et al. (2014) present results purportedly revealing that relationship marketing tactics affected customer loyalty significantly through customer trust and customer satisfaction in the banking industry in an independent, additive fashion.

Clearly, there remains much to learn about comparative anticipated outcomes vis-à-vis insurance-related J/DM. The current research is designed to make some exploratory steps forward in this regard. The research hypotheses associated with the research model presented as Figure 1 include:

FIGURE 1: The Research Model



H1: The underlying J/DM models relating satisfaction and trust will differ based on status-quo scenarios related to perceived negative individual utility versus perceived negative individual utility in relation to non-negative outcome for another individual who did not engage in a status quo change.

H2: Satisfaction predicts loyalty to an insurer in the condition across status quo conditions.

H3: Trust predicts loyalty to an insurer in the condition across status quo conditions.

METHODS

The study involved a regionally mail-based survey to adults. The sampling frame was

purchased from an external body, and 7,000 surveys were sent to random adults in the county of the university of the researcher. A new \$1 bill was included in each physical mailing to encourage response. Appendix A presents the scenarios between the change in status quo versus the relative change in status quo conditions. All measures for the research model were derived from existing studies in the literature, including those for satisfaction and loyalty (Thomson et al. 2005), desire (Perugini and Bagozzi 2001), and trust (Bansal et al. 2004). The data were analyzed using SPSS and Mplus. SPSS was used to identify data description, whereas Mplus was used to conduct confirmatory factor analyses to validate measurement models, and to empirically test the predictive structural model associated with Figure 1, including both direct and indirect predictive effects. Close to 790 usable surveys were returned,

representing an overall response rate of over 10%. However, missing data reduced the usable sample to 395 surveys (185 for the individual perspective and 210 for the relative or comparative standard). There were also 271 male and 124 female usable responses. The respondents' ranged from 20-

93 years of age. The respondent pool is characterized as being generally loyal to their automobile insurers with 79.4% of respondents expressing that they have had an ongoing relationship with their current automobile insurer for at least the last four years.

TABLE 1: Correlation Matrix

	Satisfaction	Trust	Desire	Loyalty
Satisfaction	.918/.937 .933/.809			
Trust	.136 .268	.976/.971 .933/.921		
Desire	.121 .279	.384 .646	.907/.994 .726/.932	
Loyalty	.175 .431	.483 .711	.417 .525	.959/.949 .662/.632

Note: Cells on the diagonal include construct reliability and variance extracted scores. Off diagonal scores represent latent construct correlations. The first row represents Scenario 1 and the second row represents Scenario 2.

TABLE 2: Measurement Invariance Assessments

Model	Number of Parameters	χ^2	Degrees of freedom	P-value
Configural	96	232.748	142	.000
Metric	86	247.665	152	.000
Scalar	76	256.070	162	.000

Models Compared	Number of Parameters	χ^2	Degrees of freedom	P-value
Metric against Configural		14.917	10	.1351
Scalar against Configural		23.322	20	.2732
Scalar against Metric		8.405	10	.5893

The confirmatory factor analyses support using the obtained data for purposes of model assessment: $\chi^2 = 256.07$; $df = 162$; $RMSEA = .054$; $CFI = .981$; $TLI = .973$; $SRMR = .051$. Table 1 presents the latent variable correlation matrices by gender for the research model in Figure 1. Table 2 demonstrates that the measurement model does not exhibit issues related to measurement invariance. The two-group (gender) confirmatory factor analysis produced fit indices of $\chi^2 = 232.748$; $df = 142$; $RMSEA = .057$; $CFI = .982$; and $TLI = .977$.

RESULTS

Figure 1 presents the results. In the change in status quo condition (all reported path coefficients are standardized). Table 3 summarizes the results by research hypothesis. First, the overall hypothesized difference between individualistic changes in status quo condition versus relative changes in

status quo conditions (H1) is confirmed by the data. This suggests that the underlying J/DM models vary across the two conditions, thereby representing unique J/DM contexts. Second, the relative role of satisfaction varies between the two J/DM conditions. In the straight change in status quo condition, satisfaction plays a relevant role as an indirect effect on customer loyalty, through motivation as desire. However, the results suggest that satisfaction plays no significant role in the J/DM model within the (group) context of relative status quo change. Third, trust appears to play a strong and significant role in the J/DM models under both conditions as an indirect influence on customer loyalty judgments. Finally, the relative change in status quo condition explains substantially more variance in loyalty decisions (24% versus 17%).

TABLE 3: Summary of Results by Research Hypothesis

Research Hypothesis	Change in Status Quo Condition	Relative Change in Status Quo Condition
H1: The underlying J/DM models relating satisfaction and trust will differ based on status-quo scenarios related to perceived negative individual utility versus perceived negative individual utility in relation to non-negative outcome for another individual who did not engage in a status quo change.	Confirmed. The two models in Figure 1 differ in terms of relevant concepts predicting consumer satisfaction choices.	
H2: Satisfaction predicts loyalty to an insurer in the condition across status quo conditions.	Confirmed by a statistically significant indirect effect.	Not confirmed as an indirect effect.
H3: Trust predicts loyalty to an insurer in the condition across status quo conditions.	Confirmed by a statistically significant indirect effect.	Confirmed by a statistically significant indirect effect.

DISCUSSION

The results suggest significant implications for insurance marketers, both theoretically and in practical terms. Practically, questions as to the efficacy of marketing strategies such as the previously described alternative positioning strategies between USAA (as part of identifiable group) versus Geico (cost savings) have largely typically ignored potential differences in the underlying J/DM models. This assumption appears to potentially attenuate the validity of obtained results. Consequently, the results presented herein demonstrate evidence supporting the theoretical conclusion that insurance marketers should consider adding J/DM context into their modeling considerations when analyzing consumer data. Importantly, we encourage insurance marketers to not assume that the results reported herein generalize across insurance settings. For example, the identified model differences we demonstrate relative to automobile insurance may or may not also be apparent in other types of insurance (e.g., health, life, homeowners, etc.). We interpret the results to support a general practice of assessing all insurance marketing models across a wide variety of different contexts, including those within the realm of J/DM.

The identified status quo effects suggest additional important research implications for insurance markets. It is likely that the simple models presented in the current research do not fully appreciate the complexity inherent in the formation of loyalty decisions by all insurance consumers. Additional concepts and relationships should be explored by service marketers researchers in future research. For example, Ponder et al. (2016) present results indicating that intimate relationships in a professional service context are characterized by interactive communication and social bonds, and that the variables act as full mediators of the trust-commitment relationship. Frank and Lamiraud (2009) state that the United States and other nations rely on consumer choice and price competition

among competing health plans to allocate resources in the health sector, highlighting the importance of the efficiency consequences of adverse selection in health insurance markets and other aspects of consumer choice. Frank and Lamiraud (2009) present results suggesting that as the number of choices offered to individuals grow their willingness to switch plans given a set of price dispersion differences declines allowing large price differences for relatively homogeneous products to persist. Pendzialek et al. (2016) consider the role of price elasticity and health insurance and demonstrate that the occurrence and intensity of status quo bias may vary by settings, concluding that the general reluctance of individuals to switch health insurance when not necessary is a common argument as to why price elasticity is relatively low in almost all settings. The potential effects of status quo bias occur when individuals are forced to choose a (new) health plan. Finally, there are a plethora of research questions that could be explored from incorporating the rapidly evolving general J/DM literature. For example, Dean et al. (2014) report the Limited Attention Status Quo Bias Model which purports to explain status quo bias through an emphasis on focusing limited attention.

LIMITATIONS

The primary limitation of the reported study concerns the usable response rate. Readers are encouraged to consider the obtained response rate in interpreting the results reported herein.

Contact Author:

Steven A. Taylor, Ph.D., Illinois State University
Distinguished Professor of Marketing
Illinois State University
Email: staylor@ilstu.edu

REFERENCES

- Bansal A. (2016), "Systemic importance of insurance companies—An empirical analysis." *Willis Towers Watson Technical Paper*. 2016 Mar 2;2741068.
- Bansal, H., Irving, G. and Taylor, S. (2004), "A three-component model of customer commitment to service providers", *Journal of the Academy of Marketing Science*, 32 (3), pp. 234-50.
- Bejou, David. (1997), "Relationship marketing: evolution, present state, and future." *Psychology & Marketing (1986-1998)* 14.18: 727.
- Bettencourt, B. Ann, Lisa Molix, Amelia E. Talley, and Kennon M. Sheldon (2006), "Psychological need satisfaction through social roles." *Individuality and the Group: Advances in Social Identity* (2006): 196-214.
- Burri, Rama Devi, Ram Burri, Ramesh Reddy Bojja, and SrinivasaRao Buruga (2019). "Insurance Claim Analysis using Machine Learning Algorithms." *International Journal of Advanced Science and Technology* 127 (1): 147-155.
- Chernev, Alexander (2004), "Goal orientation and consumer preference for the status quo." *Journal of Consumer Research* 31.3: 557-565.
- Dean, Mark, Özgür Kıbrıs, and Yusufcan Masatlioglu (2017), "Limited attention and status quo bias." *Journal of Economic Theory* 169: 93-127.
- Frank, Richard G., and Karine Lamiraud (2009), "Choice, price competition and complexity in markets for health insurance." *Journal of Economic Behavior & Organization* 71.2: 550-562.
- Friedman, Sam, Michelle Canaan, Nikhil Gokhale, and Prachi Ashani (2019), "2020 Insurance Outlook," *Deloitte Insights*, Deloitte.com, Posted 03 December 2019, [online] <https://www2.deloitte.com/us/en/insights/industry/financial-services/financial-services-industry-outlooks/insurance-industry-outlook.html>.
- Garbarino, Ellen, and Mark S. Johnson (1999), "The different roles of satisfaction, trust, and commitment in customer relationships." *Journal of Marketing* 63 (2): 70-87.
- Guiso, Luigi (2012), "Trust and Insurance Markets 1." *Economic Notes* 41.1-2: 1-26.
- Homburg, Christian, Jan Wieseke, and Wayne D. Hoyer (2009), "Social identity and the service-profit chain." *Journal of Marketing* 73.2, 38-54.
- Johnson, Eric J., John Hershey, Jacqueline Meszaros, and Howard Kunreuther (1993). "Framing, probability distortions, and insurance decisions." *Journal of Risk and Uncertainty* 7 (1): 35-51.
- Kahneman. Daniel, Jack L Knetsch. and Richard Thaler. (1990), "Experimental Tests of the Endowment Effect and the Coase Theorem," *Journal of Political Economy* 98, 1325-1348.
- Loomes, Graham, Shepley Orr, and Robert Sugden (2009), "Taste uncertainty and status quo effects in consumer choice." *Journal of Risk and Uncertainty* 39.2: 113-135.
- Minta, Youba (2018), "Link between Satisfaction and Customer Loyalty in the Insurance Industry: Moderating Effect of Trust and Commitment," *Journal of Marketing Management* 6.2: 25-33.

- Morgan, Robert M., and Shelby D. Hunt (1994), "The commitment-trust theory of relationship marketing." *Journal of Marketing* 58.3: 20-38.
- Pan, Zhao, Yaobin Lu, Bin Wang, and Patrick YK Chau (2017), "Who do you think you are? Common and differential effects of social self-identity on social media usage," *Journal of Management Information Systems* 34 (1): 71-101.
- Pendzialek, Jonas B., Dusan Simic, and Stephanie Stock (2016), "Differences in price elasticities of demand for health insurance: a systematic review." *The European Journal of Health Economics* 17.1: 5-21.
- Perugini, Marco, and Richard P. Bagozzi (2001). "The role of desires and anticipated emotions in goal-directed behaviours: Broadening and deepening the theory of planned behaviour." *British Journal of Social Psychology* 40.1: 79-98.
- Petzer, Daniel J., and Estelle van Tonder (2019), "Loyalty intentions and selected relationship quality constructs: The mediating effect of customer engagement." *International Journal of Quality & Reliability Management* 36.4: 601-619.
- Ponder, Nicole, Betsy Bugg Holloway, and John D. Hansen (2016), "The mediating effects of customers' intimacy perceptions on the trust-commitment relationship." *Journal of Services Marketing* 30.1: 75-87.
- Pooser, David M., and Mark J. Browne. "The Effects of Customer Satisfaction on Company Profitability: Evidence From the Property and Casualty Insurance Industry." *Risk Management and Insurance Review* 21.2: 289-308.
- Rizan, Mohamad, Ari Warokka, and Dewi Listyawati (2014), "Relationship marketing and customer loyalty: do customer satisfaction and customer trust really serve as intervening variables?." *Journal of Marketing Research & Case Studies*, 1.
- Sahore, Nidhi Sharma (2019), "Insurance Marketing through Digital Tools- Opportunities and Challenges." *Journal of Banking and Insurance Law*, 1.1: 36-41.
- Sheldon, Kennon M., and B. Ann Bettencourt (2002), "Psychological need-satisfaction and subjective well-being within social groups." *British Journal of Social Psychology* 41.1: 25-38.
- Shiu, Yung-Ming, and Tsu-Wei Yu (2010), "Internal marketing, organisational culture, job satisfaction, and organisational performance in non-life insurance." *The Service Industries Journal* 30.6: 793-809.
- Shrestha, Love Shankar, Abeer Alsadoon, P. W. C. Prasad, Haritha Sallepalli Venkata, and Amr Elchouemi (2019), "Rise of Social Media Marketing: A Perspective on Health Insurance." In *2019 5th International Conference on Advanced Computing & Communication Systems (ICACCS)*, pp. 905-909. IEEE.
- Taylor, Steven A. (2012), "Satisfaction, Regret, and Status Quo Effects on the Formation of Consumer Loyalty." *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior* 25: 24.
- Taylor, Steven A (2013), "Affect and marketing stimuli in consumer loyalty decisions to automobile insurers." *Journal of Financial Services Marketing* 18.1: 4-16.

Taylor, Steven A. (2016), "Attitude and Gender as Predictors of Insurance Loyalty," *International Journal of Psychology and Behavioral Sciences*, 6 (3), 99-102.
10.5923/j.ijpbs.20160603.01

Thomson, Matthew, Deborah J. MacInnis, and C. Whan Park (2005), "The ties that bind: Measuring the strength of consumers' emotional attachments to

brands." *Journal of Consumer Psychology* 15.1: 77-91.

APPENDIX A: The Scenarios

Scenario (Please read this CAREFULLY)

Pat is currently a customer of Insurance Company A, and recently sees a TV ad from a competitor insurance company called Company B inviting him/her to switch insurers.

- Pat perceives NO differences in either *price* or *brand reputation* between Company B and Company A when (s)he sees the advertisement.
- None-the-less, Pat decides to ACCEPT the advertised offer and switches from Company A to Company B.
- Pat then has an accident, and is 100% personally responsible for causing the accident.
- **Pat experiences MUCH POORER service quality because (s)he switched their car insurer!**

Please assume that Pat is *very similar to you* in terms of age, socioeconomic status, and how (s)he feels about car insurance and insurance companies. When in doubt, please answer as you would answer if you were Pat.

Scenario (Please read this CAREFULLY)

Both Pat and Chris are currently customers of Insurance Company A, and both recently see the same TV ad from a competitor insurance company called Company B inviting them to switch insurers.

- Both Pat and Chris perceive NO differences in either *price* or *brand reputation* between Company B and Company A when they see the advertisement.
- Pat decides to ACCEPT the advertised offer and switches to Company B. Chris, on the other hand, rejects the offer and chooses to stay with Company A as his insurer.
- Pat and Chris then both have similar accidents for which each is 100% personally responsible for causing the accident.
- Both Pat and Chris experience MUCH POORER service because of their decision.
- ***The only difference between Pat and Chris is that Pat is worse off for switching, while Chris is worse off for not switching.***

Please assume that Pat is *very similar to you* in terms of age, socioeconomic status, and how (s)he feels about car insurance and insurance companies. When in doubt, please answer as you would answer if you were Pat.

**A MODEL OF FULL-TIME PROFESSIONAL GRADUATE STUDENT
SATISFACTION:
PROGRAM DESIGN, DELIVERY, AND OUTCOMES**

**John J. Sailors, University of St. Thomas
Teresa J. Rothausen, University of St. Thomas
Michael L. De Vaughn, University of St. Thomas
Christopher P. Puto, Spring Hill College**

ABSTRACT

A model of full-time professional graduate student satisfaction is developed and tested using data from in-depth focus groups of full-time MBA students that identified facets of program satisfaction. These fell into six categories—three categories involving program design and delivery and three categories of program outcomes. The model was validated by an independent group of full-time MBA students and a measurement instrument was developed. This instrument was administered to other full-time MBA students and their data analyzed via structural equations modeling. This analysis further refined the model and estimated the path coefficients among the items and linked them to overall satisfaction, perceived value of the program, and commitment to it. We propose that this model can be adapted and generalized to other professional graduate programs.

Keywords: graduate student satisfaction, structural equation modeling, PLS

INTRODUCTION

Professional graduate programs have long been a source of reputation and revenue for law and business schools, but recent times reveal the emergence of similar programs in many of the social and hard sciences, e.g., marine science, clinical psychology, physical

therapy, etc. Academic folklore suggests that these programs, while a source of tuition revenue, do not produce loyal alumni with strong philanthropic tendencies. Rather, it is believed that undergraduate alumni form stronger benefactor bases. This latter point is an empirical issue not directly addressed in this research; however, because these graduate program alumni are also influential in recruiting new (tuition paying students) and responding to the various program ranking surveys, and because student satisfaction has the immediate benefit of influencing new student enrollment and the potential long-term benefit of expanding the alumni donor base, understanding the facets of student satisfaction merits added study. Because they have been among the flagship programs in many colleges and universities, we use a traditional full-time MBA program to develop, test, and validate our model. We first explain why we chose this group and then we explicate the development and testing of the model. In the Conclusion section, we discuss the implications of the present work for other important formats of graduate business education delivery, specifically online and hybrid programs.

Traditional full-time MBA programs often get a disproportionate share of time and attention in U.S. business schools, and the literature makes the reasons clear. Although academics may value faculty research productivity and revenue may be driven by other programs, a business school's reputation within the business community

and the broader public, for better and worse (Gioia & Corley, 2002) is driven by the reputation of its full-time MBA program (Datar, Garvin, & Cullen, 2010; Trank & Rynes, 2003), which in turn is established in large part through the high-profile rankings and ratings such as those published by *U.S. News & World Report* and *BusinessWeek*. In the realm of business, research shows that firms that effectively manage stakeholder relationships outperform those that do not (Hillman & Keim, 2001; Saeidi, Sofian, Saeidi, Saeidi, & Saeidi, 2015). Furthermore, firms care about their reputational status and therefore attempt to shape stakeholders' assessment of their performance (Balmer, 2017; Frombrun & Shanly, 1990; Harvey, Tourky, Knight, & Kitchen, 2017). While universities have many stakeholders, students are undeniably a key one, so it is logical to attend to their satisfaction. Moreover, research has shown that student satisfaction impacts the amount of effort put forth in the value co-creation process of education (Díaz-Méndez & Gummesson, 2012). Full-time students are typically focused and highly committed, having experienced significant actual and opportunity costs to participate in these programs. While student satisfaction arguably should not be the only goal of higher education (Judson & Taylor, 2014; Taylor, Hartman, & Lim, 2018; Taylor & Judson, 2011), the satisfaction of full-time MBA students is, nonetheless, for all these reasons, of great importance to business schools.

In spite of this importance, relatively little research has focused specifically on the satisfaction of full-time MBA students (but see Senk, Mallett, Prendergast, & Underhill, 2014). General business school satisfaction, covering undergraduate, full-time MBA, part-time MBA, online MBA and other programs, is more common and there is an abundance of research on student satisfaction across programs of study.

WHAT DO FULL-TIME MBA STUDENTS WANT?

One motive for attending a top U.S. full-time MBA program is that graduates can qualify for prestigious, high-paying jobs at top firms that can maximize their economic return on investment (Connolly, 2003; Datar et al., 2010). However, we argue that this motivation has been overemphasized. Although this is an important motive for some students, there may be many other benefits to a full-time MBA program that are also important to them. We argue that student satisfaction may also depend, as others have suggested, on non-monetary benefits such as “development of one’s self...and the ability to contribute to the community and society” (Clinebell & Clinebell, 2008: 102).

Moreover, much of what we know from the literature about MBA programs is based on the limited number of schools appearing on “top business schools” lists in popular press publications. This is a very narrow sample (Morgeson & Nahrgang, 2008), and it suggests that less is understood about the “next tiers” of rigorous, two-year, full-time MBA programs. Also, current trends indicate that the tight relationship between graduating from a “top twenty” MBA program and landing certain highly desired jobs may be eroding (Connolly, 2003; Datar et al., 2010), suggesting that *all* business schools will have to consider other levers, beyond specific job placement outcomes, to satisfy students.

Thus, understanding what else may be important will be critical to the ongoing health of graduate business education. As others have suggested (e.g., Gioia & Corley, 2002), one way to counter the current narrow measures of MBA program success and business school performance is to create additional measures using more diverse criteria. A valid model of key factors

contributing to the satisfaction of students with their full-time MBA programs could contribute to this discussion.

Student Satisfaction

The study of student satisfaction has been approached in various ways. On one end of the spectrum are studies that model satisfaction as one many latent variables of interest and often employ a small number of overall satisfaction measures (Alves & Raposo, 2007; Arbaugh, Baruch & Sang, 2012; Arbaugh, Bento, & Hwang, 2010; Sakthivel, Rajendran, & Raju, 2005; Wells & Daunt, 2016); at the other end are studies that explore the components of that overall satisfaction, that dig deeper into its constituent parts, its antecedents (DeShields Jr, Kara, & Kaynak, 2005; Dziewanowska, 2017; Endres, Chowdhury, Frye, & Hurtubis, 2009; Gibson, 2010; Mai, 2005; Schertzer & Schertzer, 2004).

Baruch, Bell, & Gray (2005) identify five types of capital gained by a graduate degree in business. One, termed market-value capital, pertains to placement and salary and essentially connotes improvements to one's income. There is also social capital, relating to the value accrued from networking and contacts. Scholastic capital relates to knowledge acquired about business and its operation. Cultural capital captures the social status inferred by a graduate business degree. Finally, inner-value capital refers to gains in one's sense of self-awareness, self-esteem, self-efficacy, and confidence. Increasing one's personal capital in these areas results in outcomes relating to job performance, self-efficacy, income, and career success. Presumably, improvements in these outcomes will lead to improvements in one's overall satisfaction with graduate business study.

Building off a model put forth by Keaveney and Young (1997) in an unpublished paper, DeShields Jr, Kara, &

Kaynak (2005) model student satisfaction as arising from assessments of Faculty, Advising Staff, and Classes. These assessments give rise to outcomes related to Cognitive Development, Business Skills, and Career Progress which in turn gives rise to overall satisfaction. Little information is available to examine how the measures put forth by Keaveney and Young (1997) were developed; however, gaps in the measures are implied by areas other researchers have found to be important that are not part of their framework. For example, Gibson's (2010) review includes studies that find that non-academic factors, such as the student's feeling of 'belonging' and perceptions of the institution's responsiveness and concern, contribute to student satisfaction. He also finds that educational outcomes, skills developed and preparation for the future are significant predictors of student satisfaction, as are access to and quality of campus services and facilities, though to a lesser extent than the above mentioned factors.

Athiyaman (1997) via Mai (2005) identified eight characteristics to examine the quality of university education services: 1) emphasis on teaching students well, 2) availability of staff for student consultation, 3) library services, 4) computing facilities, 5) recreational facilities, 6) class sizes, 7) level and difficulty of subject content, and 8) student workload. Perceived quality of education services were seen as then impacting student satisfaction. Shi, Drzymalski, & Guo, (2014) focus on academic, facility-related, and administrative antecedents of satisfaction.

Finally, Woodall, Hiller, & Resnick (2014) break perceptions of value (found by Alves & Raposo (2007) to predict satisfaction) into educational service attributes, placed into the groupings academic support, career enhancers, support services, lifestyle enhancers, and lifestyle facilitators. These, in turn, result in student

outcomes grouped into strategic, practical, social, and personal areas.

Missing from much of this work is grounding of the measures used in the actual experiences of students. For example, Sakthivel, Rajendran, & Raju, (2005), applying TQM concepts to higher education, describe their measurement development. Sixty operating items under these five dimensions have been developed through the variegated personal experiences and critical thinking of the present authors, supported by review of literature.

There is nothing inherently wrong with this approach, especially for theory testing. But when the orientation is more applied and the objective is to hear the voice of the customer, doing so will depend on the questions to which the customer is asked to respond. If their voice is not solicited in the development of our measures, we run great risk of not being able to gauge our performance on the dimensions that actually matter to them. For that reason, we begin with a three-phase qualitative study of full-time MBA students, followed by a validation sample of students from subsequent cohorts who did not participate in the qualitative study.

STUDY 1

Method

We adopted a grounded theory method for this study. A qualitative methodology is appropriate to study full-time MBA student satisfaction because of the lack of an existing theoretical framework that integrates the many disparate perspectives on satisfaction into a model specific to full-time MBA students. It is therefore appropriate that a grounded theory approach that relies upon exploration of this phenomenon and aims to build a broader theory is appropriate for studying this area. Second, the basic tenet of a qualitative methodology like grounded theory is that the emergent frameworks are

shaped by the people who are involved in the specific process being explored. As a result, we posited that a comprehensive understanding of the complex issues related to full-time MBA student satisfaction could be obtained by “allowing people to tell their stories unencumbered by what we expect to find or what we have read in the literature” (Creswell, 2007: 40).

Sample

To collect data, we used the theoretical sampling technique to select our interview informants based their ability to provide an understanding of the phenomenon. We sent e-mails to 129 students currently enrolled in core courses in a traditional U.S., two-year, full-time MBA program in a private Midwestern school (70 first years and 59 second years). The email asked respondents to indicate their willingness to participate in a focus group about their satisfaction. Twenty-one individuals (16%) replied (9 first- and 12 second-years; 13% and 20% respectively) indicating they would participate in the focus group.

We selected students who appeared, based on our knowledge of them, to represent a range of highly satisfied, moderately satisfied, and somewhat dissatisfied students and to get a cross-section of student demographics. The final focus group pool consisted of 15 current students (7 first- and 8 second-years). These respondents were intentionally not comparable to their cohorts in terms of sex, race, and domestic versus international status because we wanted to get a cross section of students with more and less business experience and work experience, domestic and international students, and balance on sex, age, race, and across years (first- and second-year students) as much as possible.

This is a non-random sampling scheme, which aims to dig deeper and gain greater understanding of the issues, and

develop theory rather than provide generalizations, as recommended by Corbin and Strauss (2008) for understanding complex psychological and social phenomenon. Using this methodology, the researchers can select a diverse set of theoretically relevant informants to understand the conditions under which the emergent categories hold true (Creswell, 2007). Thus, it was especially important for us to choose a diverse group of students both methodologically and substantively—the latter because we want the resultant measure to be applicable to women, domestic ethnic minorities, international students, and the more traditional full-time MBA student who is white, male, American, and between the ages of 25-35 (Datar et al., 2010), as well as for those with a diversity of needs, wants, and expectations within all of those demographic groups. Because the authors knew the students, we used the services of a professional focus group facilitator to conduct the focus group interviews.

Procedures and measures

A professional focus group facilitator was engaged who ran the focus groups based on interview protocols designed collaboratively by the first and second author and the professional facilitator (see the Appendix). The facilitator was an MBA graduate from a different program unknown to all participants, and was thus an unbiased but knowledgeable guide for data collection. Four focus groups were developed based on scheduling availability and classification as first- or second-years. The focus group interviews were conducted in May, so students were at the end of their first or second year of a traditional, two-year, full-time MBA program.

The focus-group interviews were conducted over the duration of one month. They were discovery-oriented (Deshpande, 1983), lasting between 60 and 100 minutes.

The interviews began in an exploratory manner. This allowed the interviewer to focus on each informant's phenomenological interpretations of the causes of their satisfaction or dissatisfaction with the program (Glaser & Strauss, 1967). Further, the facilitator allowed our informants to guide the flow and content of our discussion during the interview. The facilitator encouraged participants to offer examples, clarifications, and other details as they responded to questions. When she asked additional clarification questions, she took care that there was no interviewer-induced bias (McCracken, 1988) and that she was not leading participants. The one-page "pre-test" ensured that each individual's initial thoughts were captured, and the clarification questions and flip-chart list reviews provided participants opportunities to correct anything that was misunderstood or to elaborate on certain aspects, as they deemed necessary.

Focus groups were run using questions about satisfying and favorite, and unsatisfying and frustrating, elements of the program. Before commencing discussion, the facilitator asked students to fill out a one-page survey that she called a "pre-test," with the focus group questions on it (available upon request) in order to capture any thoughts not expressed due to group dynamics. During the focus group discussions, the facilitator kept lists on flip-chart paper with the participants. At the end of the session, she asked participants to examine these lists for anything missing or anything they did not agree with, and the flip chart lists were adjusted accordingly. Two of the authors observed the focus groups and took notes, but did not participate. All focus groups were also audio-recorded and later transcribed. The four focus group interviews resulted in five hours of audio recording and twenty pages of flip chart notes. As we started encountering the same themes with no new insights emerging from the data, we

determined that a case of *theoretical saturation* (Strauss & Corbin, 1998) had been reached and hence at this point we stopped the data collection process. The professional facilitator produced a report of her findings. Five forms of data were used in this analysis: flip chart lists, notes from the authors who observed the focus group interviews, student responses to the “pre-test” one-page surveys, and the report of the professional facilitator.

In addition, we consulted two books by former full-time MBA students about their experiences (Broughton, 2008; Robinson, 1994), creating lists of elements noted as contributing to satisfaction in these cases. Finally, we surveyed one business school dean with experience as a faculty member or dean in three top-twenty ranked MBA programs to create another list of elements important for full-time MBA student satisfaction. These additional steps resulted in three lists of elements important to full-time MBA student satisfaction for use in validating focus group findings.

Analysis

Key phrases identified by students as representing aspects critical to their dis/satisfaction with the program were identified from the facilitator’s report, the flip chart pages, the “pre-test,” and additional authors’ notes. The full list of key phrases is available upon request. The first author then grouped key phrases into themes representing facets or elements of the program mentioned by students across at least three of the four focus groups. This list was reviewed by the other authors. Consensus was reached through three hour-long face-to-face meetings. Based on this list, we developed the initial model and list of facets important to full-time MBA student satisfaction.

From this list of facets and the original key phrases identified in steps described above, one of the authors then developed 200 facet satisfaction items using

the MSQ question format as a model and using language from the key phrases identified in earlier steps described above. The other authors reviewed these items for cognitive consistency, ease of use, and understandability. Twenty items were eliminated due to duplication of concepts, lack of clarity, or other reasons, leaving a final set of 177 items for 33 facets. Each facet had between three and twelve associated items, with an average of just over five items per facet.

Data reliability and analytical validity are important considerations in any qualitative study. We were mindful of this throughout our data collection and analysis. Specifically, we took a number of interrelated steps following Lincoln and Guba (1985) and Silverman and Marvasti (2008) to maintain data trustworthiness, insure analytical rigor, and insure validity, including: (a) refutability, (b) constant comparison, (c) comprehensive data treatment, (d) deviant-case analysis, and (e) respondent validation.

Refutability refers to the researchers’ attempt to refute the assumed relationship between phenomena. This was done by selecting a diverse sample across age, sex, experience level, year in the program, and domestic and international groups, and then examining if findings emerging in one context could be refuted in another. This assessment suggested that most of our emergent findings were consistent across the multiple informants and informant groups. The one exception to this was the importance of others’ interest in one’s background and experiences (inclusion), which was stated more often by international students. Since full-time MBA student populations are generally more diverse than other student bodies within business schools (Datar et al., 2010), satisfaction with this element was retained in the final measure. In addition, we attempted to refute our findings by using the lists created in reading the two books on the

full-time MBA experience (Broughton, 2008; Robinson, 1994) and the list created by the dean surveyed. Although differences in language or word usage were found, these did not refute the lists we developed in the focus group data analysis outlined above.

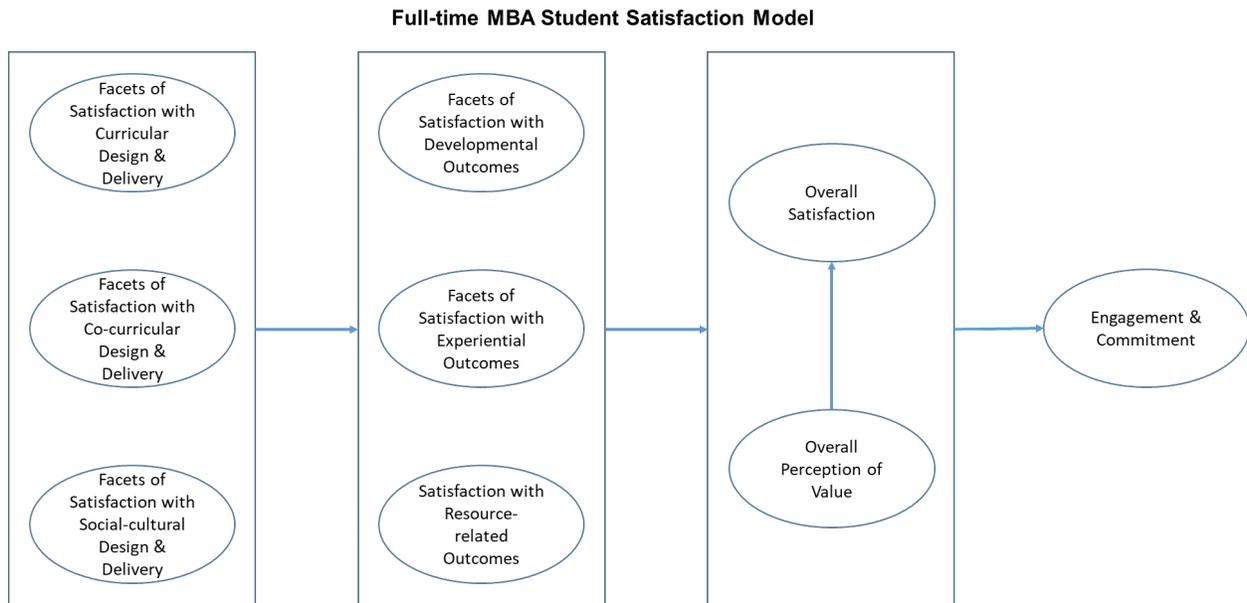
The second technique, *constant comparison* requires that the researchers search for additional cases to validate emergent findings. This is typically done by beginning data collection and analysis on a smaller scale and then subsequently expanding it based on the emergent categories. Our interviews were conducted in a recursive manner to allow for constant comparison. As new findings emerged, our additional focus groups helped us to validate these findings. We reiterate that we stopped data collection upon reaching theoretical saturation (i.e., when no further new findings emerged from additional interviews; Strauss & Corbin, 1998). The third technique is *comprehensive data treatment*, which requires the researchers to examine the data thoroughly and comprehensively prior to drawing conclusions. The last technique is *deviant case analysis* that requires the researchers to examine all cases where the findings are substantially different, and determine the underlying reasons. We report that in our data we did not find any cases that could be termed as deviant.

Finally, *respondent validation*, also known as member checks (Creswell, 2007) requires that researchers go back to some randomly selected respondents and seek their assistance in validating the findings that emerge from the data. We shared the findings of our study with 17 first- and second-year students who had not participated in the original focus groups, and who had either changed status from first- to second-years during the time of the study or were new first year students, and asked them

to perform a formal validity check. These respondents were sent copies of the model, the list of facets, the list of items for each facet, and a survey asking them to assess the extent to which the model captured elements important to full-time MBA satisfaction at three levels: the overall model, the facets, and the item levels. Eight students, six first-years and two second-years, responded to this request for validity check, for a response rate of 47%.

Respondents were asked three questions about how well the overall model captured elements important to full-time MBA student satisfaction. First, "On a 1 to 5 scale where 1 is strongly disagree and 5 is strongly agree, indicate how well the model reflects the important categories that impact full-time MBA student satisfaction." The average score for this item was 4.9 (SD=0.4; n=8). Second, "Indicate the extent to which you think this model, including the list of facets and items, captures the elements important to full-time MBA student satisfaction with a percentage." The average score on this item was 91% (SD=6%; n=8). Third, "Indicate the extent to which you think this model, including the list of facets and items, explains full-time MBA student satisfaction with a percentage." The average score for this item was 86% (SD=12%, n=8). Given the idiosyncrasies of each individual's experience of their MBA program, we were very satisfied that these results, in combination with the procedures described above, demonstrate reliability and validity.

FIGURE 1



DISCUSSION

The findings of Study 1 suggested a model which represented major categories of elements important to full-time MBA student satisfaction, a list of 33 specific facet satisfactions and 177 items that tap satisfaction with the 33 facets. In the model, two levels of factors were determined to comprise MBA student satisfaction—program elements and program outcomes; see Figure 1. The first level is comprised of three primary categories: satisfaction with curricular design and delivery facets, satisfaction with co-curricular design and delivery facets, and satisfaction with social-cultural design and delivery facets. The second level relates to satisfaction with outcomes, including satisfaction (1) with experiential outcomes (viewed as concurrent, in-program outcomes), (2) outcomes related to in student development, growth, and learning, and (3) economic and career related outcomes. The 177 items—not presented here due to space constraints—comprising the 33 facets provided the foundation for the quantitative analysis undertaken in Study 2.

STUDY 2

The purpose of this study is to empirically refine the facet satisfaction items and to test the model outlined in Figure 1. To do this we developed a survey including the 177 items developed in Study 1 and 14 other items representing overall satisfaction with the program (seven items), overall perception of value of the program (three items), and commitment to the program (four items).

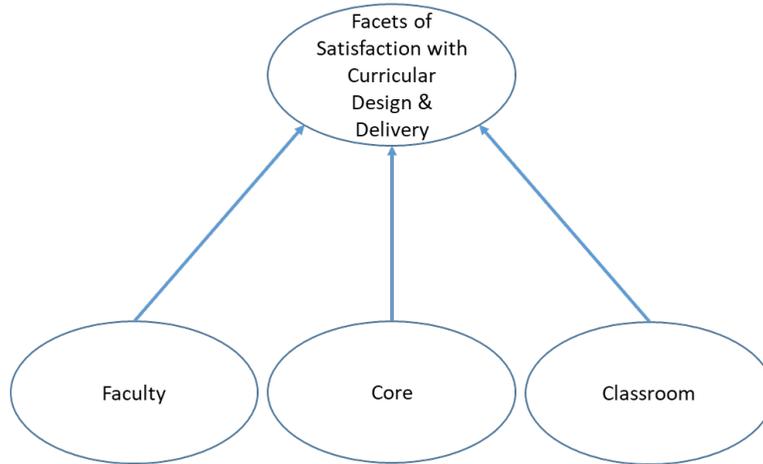
METHOD

Sample

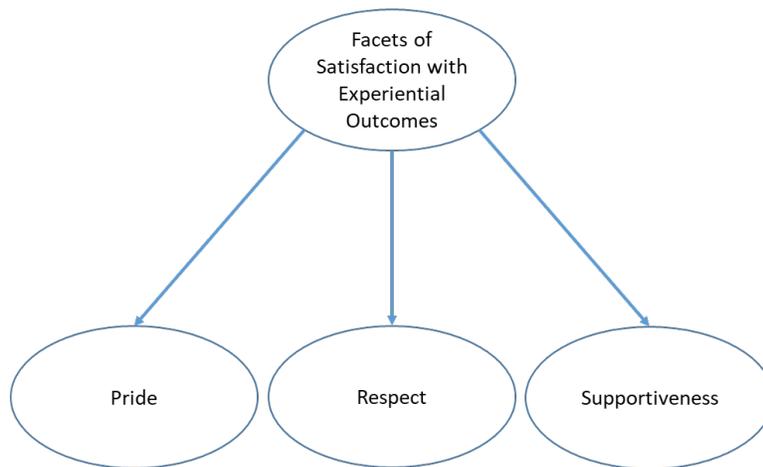
We collected data via on-line survey from first- and second-year students in the same full-time MBA program in the academic year following Study 1 as well as the next academic year; none of the students involved in the focus groups or respondent validations in Study 1 were recruited for Study 2. Following email and in-person solicitations to participate a total of 163 students completed the survey; of these, 103 were first-year and 60 were second-year students.

FIGURE 2

A. Formative Second Order Construct



B. Reflective Second Order Construct



Indicators not shown

ANALYSIS AND RESULTS

The data were modeled using the partial least squares (PLS) approach to structural equation modeling, specifically, the program SmartPLS 3.2.7 (Ringle, Wende, & Becker, 2015). PLS was selected because it is able to estimate complex models with relatively small samples, at least in comparison to

covariance based structural equation modeling (Hair, Hult, Ringle, & Sarstedt, 2017). The structural model is as depicted in simplified form in Figure 1. In fuller detail, items are modeled as reflections of the facets of satisfaction, viewed as first-order constructs. Several of these first-order constructs are associated with second-order

constructs. For example, the first-order constructs “Core”, “Electives”, “Faculty”, “Classroom”, and “Challenging Content” are related to the second-order construct “Satisfaction with Curricular Design & Delivery” (Curricular) as shown in panel A of Figure 2; this is an example of a formative second-order construct. The other formative second-order constructs are “Satisfaction with Co-Curricular Design & Delivery” (Co-curricular), “Satisfaction with Social-cultural Design & Delivery” (Social-Cultural), “Satisfaction with Developmental Outcomes” (Developmental Outcomes), and “Satisfaction with Experiential Outcomes” (Experiential Outcomes) are reflective second-order constructs, as shown in panel B of Figure 2. Note that, because second-order constructs in PLS are measured by reusing the indicators from their associated first-order constructs, formative second-order constructs always will have an R^2 of 1.00, reflective first-order constructs, if they serve as endogenous constructs in the structural model, as they do here, will have an R^2 determined by regression against the associated exogenous constructs, and the first-order constructs associated with reflective-second-order constructs will have R^2 s equal to their correlation with those second-order constructs. Finally, “Satisfaction with Resource-related Outcomes” (Careers), “Overall Satisfaction”, “Overall Perception of Value”, and “Commitment” are first-order constructs.

Following the estimation of the model we first examined item loadings and cross-loadings with two criteria: 1) items should have a loading greater than 0.70 on their own constructs, representing a minimum of 50% of the item variance being shared with the construct, and 2) items should have no cross-loading on other constructs greater than the loading on its own construct, indicating

adequate unidimensionality (Ziegler & Hagemann, 2015). Using these criteria, a total of 45 of the initial 191 items were deleted.

Next we examined construct reliability and validity for the first order constructs in the model. Cronbach’s alpha ranged from 0.72 to 0.95; composite reliability ranged from 0.84 to 0.96; average variance extracted ranged from 0.53 to 0.89. Thus, we conclude that the constructs have sufficient reliability and validity. To assess discriminant validity we examined the heterotrait-monotrait ratio of correlations (Henseler, Ringle & Sarstedt, 2015); to establish discriminant validity these should be below 0.90. Several of the facets were found to lack sufficient discriminant validity by this criteria and were combined; these are indicated in Table 1. Under satisfaction with Curricular design and delivery, Faculty and Teaching were combined; under satisfaction with Social-cultural design and delivery, Networking and Connections were combined; under satisfaction with Developmental outcomes, Leadership Experience, Leadership Evidence, and Mastery were combined; under satisfaction with Resource-related outcomes, Friendships, Business Resources, and Career were combined. This left 26 facets of satisfaction, all of which had heterotrait-monotrait ratio of correlations below 0.90. Finally, we examined whether or not multicollinearity is an issue with the estimation of the structural path coefficients and find that, with four VIFs between 3.0 and 3.5 and the remainder all < 3.0 , it is not.

Because PLS is a distribution free statistical method, significance testing must be accomplished via bootstrapping. We ran 500 bootstrapped samples to estimate standard deviations for each estimate and found that the structural paths from Social-

TABLE 1: FULL-TIME MBA STUDENT SATISFACTION FACETS AND DESCRIPTIONS OF FACETS BY CATEGORY

PROGRAM DESIGN AND DELIVERY FACETS	
Curricular	
Core	Core course content and integration
Electives	Elective track content and rigor
Faculty ^a	Professors' expertise, experience, willingness to help students, and overall caliber
Teaching ^a	Teaching quality and professors' passion for learning and relationships with students
Classroom	Classroom methodologies
New and challenging content	Levels of challenge and exposure to new types technologies, skills, and people
Co-curricular	
Professional development activities	Non-academic learning and professional development
Student organizations and clubs	Number and quality of student activities, clubs, and organizations
Career services	Quality of career services personnel and opportunities for internships and jobs
Student life and program administration	Quality of program management and people involved in program management
Size	The size of the program and student body
Facilities	Access to facilities and spaces for students to gather and study
Infrastructure	Library, information, and technology resources, convenience, and location
Organization	Organization and scheduling of courses, events, and activities
Communication	Communication in the program
Social-cultural	
Community	Sense of community, camaraderie, and collaboration
Cohort	Cohort member quality, experience levels, and culture
Networking ^b	Discussions, events, and activities among students, professors, and business community members
Connections ^b	Opportunities and connections available to the business community, internships, and jobs.
School-life balance	Levels of flexibility and school-life balance possible
Diversity	Of students, faculty, and staff

^{a, b} Indicates facets combined during Study 2 analysis due to lack of discriminant validity

PROGRAM OUTCOMES FACETS	
Experiential	
Inclusion	Level of interest of others in one’s background and contributions
Respect	Sense of being valued and respected as full-time MBA students
Supportiveness	Level of personal attention and support for learning
Pride	Reputation and brand, things unique to the program
Developmental	
Leadership experience ^c	Ability to contribute to the program
Leadership evidence ^c	Opportunities to distinguish oneself in the program
Mastery ^c	Mastery of a well-rounded variety of relevant skills including technical, leadership, communications, ethics, and social skills
Growth	Impact of program on change and transformation of the individual
Resource-related	
Friendships ^d	The friendships made while in the program
Business resources ^d	Business network and connections built while in the program
Career/job ^d	The internships and jobs acquired while in the program

OVERALL OUTCOMES	
Satisfaction	
Value	
Commitment	

FIGURE 3: FULL-TIME MBA STUDENT SATISFACTION: FINAL MODEL

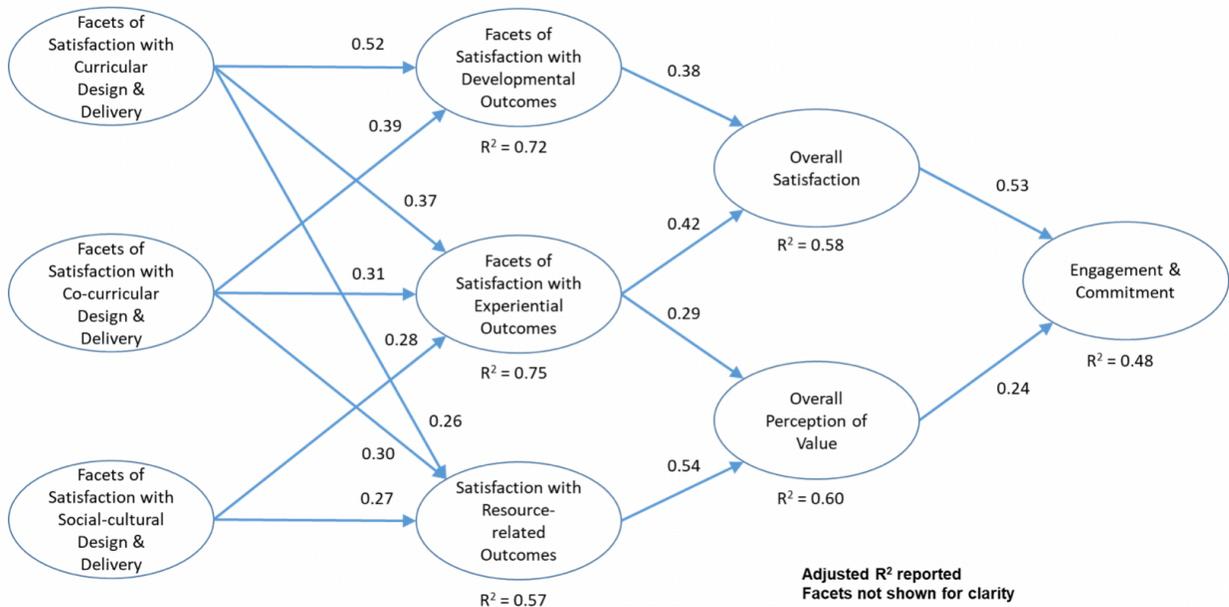


TABLE 2: PATH COEFFICIENTS TO FORMATIVE SECOND ORDER CONSTRUCTS

	Curricular
Challenges	0.14
Classroom	0.33
Core	0.24
Electives	0.16
Faculty	0.36
	Co-curricular
Career Services	0.20
Clubs	0.18
Communication	0.19
Facilities	0.12
Infrastructure	0.19
Organization	0.10
Prof Development	0.15
Size	0.16
Student Life	0.17
	Social-Cultural
Cohort	0.17
Community	0.51
Diversity	0.23
Networking	0.28
School-life Balance	0.22

Cultural to Developmental Outcomes, from Careers to Overall Satisfaction, from Developmental Outcomes to Value, and from Value to Satisfaction were not significant ($p > 0.05$); we therefore deleted those paths and re-estimated the model. The remaining discussion of results pertains to this final model. Figure 3 depicts the structural model results, omitting the first-order facets constructs for simplicity and clarity.

Turning to the structural path coefficients and the second-order construct Curricular, as seen in Table 2, Faculty and Classroom methodologies played the greatest role in shaping satisfaction with curricular design and delivery, coefficients of 0.36 and 0.33,

respectively, while Challenges (being exposed to and challenged by new technologies, skills, and people) and Electives played the smallest roles, coefficients of 0.14 and 0.16, respectively. With respect to the second-order construct Co-Curricular, the impacts for all first-order constructs were relatively similar, with the larger coefficients being 0.20 for Career Services, 0.19 for both Communication and Infrastructure, and 0.18 for Clubs. Organization had the smallest coefficient of 0.10. Regarding Social-Cultural, the coefficient from Community, 0.51, was almost twice as large as any of the remaining coefficients, with Cohort's 0.17 the smallest.

TABLE 3: PATH COEFFICIENTS FROM REFLECTIVE SECOND ORDER CONSTRUCTS

	Growth (.80)	Mastery (.94)		
Developmental Outcomes	0.90	0.97		
	Inclusion (.81)	Pride (.58)	Respect (.81)	Supportiveness (.85)
Experiential Outcomes	0.90	0.76	0.92	0.92

The structural path coefficients from the reflective second-order constructs are shown in Table 3, with the only notable outcome being that the coefficient from Experiential Outcomes to Pride at 0.76 is the smallest and the only one to not be greater than or equal to 0.90; similarly, the R^2 for Pride is .58 compared to .80 to .94 for the other endogenous first-order constructs associated with Developmental Outcomes and Experiential Outcomes. Table 4 shows

the path coefficients linking the satisfaction with program design and delivery constructs to the satisfaction with program outcomes constructs. Developmental Outcomes, $R^2 = .72$, were driven more from Curricular than from Co-curricular, while Experiential Outcomes, $R^2 = .75$, and Careers, $R^2 = .57$, were impacted by Curricular, Co-curricular, and Social-Cultural to relatively similar extents.

TABLE 4: PATHS FROM PROGRAM DESIGN AND DELIVERY CONSTRUCTS TO PROGRAM OUTCOME CONSTRUCTS (ADJUSTED R^2)

	Developmental Outcomes (.72)	Experiential Outcomes (.75)	Careers (.57)
Co-curricular	0.39	0.32	0.30
Curricular	0.52	0.36	0.26
Social-Cultural	NS	0.28	0.27

Table 5 shows the structural path estimates for the three overall outcomes, Satisfaction, $R^2 = .58$, Value, $R^2 = .60$, and Commitment, $R^2 = .48$. As indicated earlier, the path from Careers to Satisfaction was not significant while Developmental Outcomes and Experiential Outcomes were relatively similarly important in predicting Satisfaction.

The path from Developmental outcomes to perceptions of the overall Value of the program was not significant; the paths from Career outcomes was greater than from Experiential outcomes or Satisfaction. Commitment was predicted by Satisfaction to a greater extent than by Value.

TABLE 5: PATH COEFFICIENTS TO OVERALL OUTCOMES CONSTRUCTS (ADJUSTED R²)

	Satisfaction (.58)
Developmental Outcomes	0.38
Experiential Outcomes	0.42
Careers	NS
Value	NS
	Value (.60)
Careers	0.54
Developmental Outcomes	NS
Experiential Outcomes	0.29
	Commitment (.48)
Satisfaction	0.53
Value	0.24

DISCUSSION

The results of Study 2 both support the measures and model developed from Study 1 and offer some interesting insight into full-time MBA student satisfaction. The analysis for Study 2 refined the measures that emerged from Study 1 by identifying 45 measures that were either not sufficiently unidimensional or that shared little variance with their construct. It reduced the number of facets from 33 identified in Study 1 to a final count of 26; Study 2 verified that these facets are not only conceptually distinct but empirically distinct as well. It found support

for the hierarchical relationship of the facets of satisfaction with Curricular, Co-Curricular, and Social-Cultural design and delivery elements, and for the hierarchical relationship of the facets of satisfaction with both Experiential and Developmental program outcomes. It found support for all but four of the hypothesized structural path coefficients identified and hypothesized following Study 1.

As further support for our structural model, we compare our ability to predict our overall satisfaction construct to what has been reported by previous research. The

amount of variance in overall satisfaction explained by our model, 58%, compares favorably to what has been seen in other studies of student satisfaction. Mai (2005) was able to explain 43% of the variance in overall satisfaction while the model tested by Sakthivel, Rajendran, & Raju, (2005) explained 49% of their overall satisfaction measure. Taylor & Judson (2011) were able to explain 49.5% of the variance in their overall satisfaction measure. Thus, our model represents an improvement in predicting overall student satisfaction.

While it is gratifying and not surprising (DeShields Jr, Kara, & Kaynak, 2005; Gibson, 2010) to find that Faculty and Classroom methodologies play the greatest role in defining satisfaction with Curricular Design and Delivery, other findings were more unexpected. For example, the weak relationship from Experiential Outcomes to Pride. This might be due to the singular program from which our data were collected which was just recently accredited and thus unranked; even so, the place of Pride in the model was supported both at the measurement level by examining the loadings and cross-loadings of its indicators, and at the structural level as evidenced by the significant path from Experiential Outcomes and by it having lower correlations with the other constructs than it does with Experiential Outcomes.

Another notable finding is how strongly Curricular dominates Co-curricular in predicting Developmental Outcomes, though both are significant. While this finding has a great deal of face validity, it bears highlighting that Co-curricular includes Professional Development Activities and Career Services, which one would also expect to have substantial impact on satisfaction with Developmental Outcomes. Another notable outcome is the larger path coefficient from Curricular to Experiential Outcomes in comparison to, especially,

Social-Cultural and Co-curricular. While satisfaction with facets such as Career Services or Community may seem to be central to the full-time MBA student experience, the academic experience plays the central role.

Perhaps the most surprising finding is that satisfaction with Careers, whose items included internships, did not significantly predict overall program satisfaction. At the same time, Careers was the biggest predictor of perceived program Value. Value, in turn, had a smaller path coefficient to Commitment than did Satisfaction. This highlights the importance of carefully considering the import of each of the overall program dependent constructs and considering how the program's strategy links to each.

Overall satisfaction with the program directly relates to recruitment and retention of students. One of the indicators of overall satisfaction used in this research is "I recommend this program to people looking for MBA programs"; the loading for this item on Satisfaction was 0.86, indicating that it is strongly related to the construct overall. Because recruitment of future students is especially important in a competitive full-time MBA program environment, programs must focus on the satisfaction with their students if they wish to remain successful. Furthermore, since these students are in school full-time, as opposed to those enrolled in part-time or online programs, they become part of the day-to-day community in a business school. If they are unsatisfied, it not only influences the likelihood of them remaining in the program but also likely impacts the attitudes of staff and faculty as well as students in other programs (Brown & Lam, 2008; Felps et al., 2009; Harter, Schmidt, & Hayes, 2004; Morgeson & Hoffman, 1999; Nishi, Lepack & Schneider, 2008; Schneider, Erhardt, Mayer, Saltz, & Niles-Jolly, 2005; Schneider, Hanges, Smith,

& Salvaggio, 2003), and thus has cascading negative effects.

The satisfaction of full-time MBA students should thus be an important consideration in the formulation and execution of a business school's strategy. Strategists argue that firms—in this case business schools—that regularly engage in exchanges with primary stakeholder groups—in this case students—must take these stakeholder claims into account when formulating strategies or else risk withdrawal of support, which in turn can weaken performance and threaten prospects of survival, competitiveness, and profitability (Bosse, Phillips, & Harrison, 2009; Walsh & Nord, 2005). Business schools that actively attend to the satisfaction of full-time MBA students may be able to develop a competitive advantage relative to business schools that do not.

Commitment, on the other hand, relates to different but also important strategic considerations for full-time MBA programs. The items that measured Commitment in our instrument included items related to future donation of financial resources and future interactions with students after becoming alumni of the program. Donations are important as sources of income other than tuition, both from current donations, and from endowments (Baruch & Sang, 2012; Monks, 2003). Future interaction with students after becoming alumni is important because it has been found to mediate intention to donate (Baruch & Sang, 2012). Hawawini (2005) has argued that after graduation there is too little contact between business schools and their graduates but, because increasing such contact is critical to future donations, business schools may need to carefully consider ways to increase and enhance their relationships with students after they have graduated. Our work shows that increasing student satisfaction with Faculty, Classroom, Core, and

Community are the most significant means to increase commitment to one's program. These are all facets of the Curricular second order construct, except for Community which is a facet of the Social Culture second order construct. We find it interesting that such foundational program elements have the most impact on MBA student Commitment.

LIMITATIONS

The model presented here was developed and tested using student responses from a single full-time MBA program. As mentioned above in discussing the weak relationship between Pride and Experiential Outcomes, the particular characteristics of that program certainly impacted the parameter estimates obtained. We are less concerned that it impacted the elicitation of facets or the structural relationships modeled, but to be confident in that, it needs to be tested with students from other programs; in such testing, the respondent validation process discussed in Study 1 will be particularly important. Additionally, it will be important to include open ended questions, including at least the following two, until more is known about the generalizability of the model to other schools: "What was not asked that is important to your satisfaction with your full-time MBA program?" and "What items were asked that do not relate to your satisfaction with your full-time MBA program?" We encourage future researchers to test the model in multiple programs and further refine it based on results.

Another, obvious, limitation is the fact that this model was intended and developed to cover only a single type of program of business study; there are other graduate and undergraduate programs that play important roles in the life of a business school. Perhaps the model presented here could be applied successfully in those other settings or perhaps the process used here should rather be employed to develop

different models for those programs. As types of business programs proliferate, understanding student satisfaction in each will be crucial.

And yet, a third limitation of this study questions that statement. As previously noted, many cite the marketization of education with an undue emphasis on student satisfaction as leading to student consumerism and disengagement (Judson, & Taylor, 2014; Taylor, Hartman, & Lim, 2018; Taylor & Judson, 2011) and call for a returned emphasis on longer-term traditional learning outcomes. We share these researchers' concerns but note that we are not arguing for more emphasis on full-time MBA student satisfaction, but, rather, we are trying to improve our measurement and understanding of that construct so that it may be more accurately used in whatever manner is appropriate.

CONCLUSION

Currently, the two most common measures of business school performance are research output and popular rankings, which can be said to measure, if incompletely, the rigor and relevance of business schools (Bennis & O'Toole, 2005; Trank & Rynes, 2003) and the two types of measures result in different lists of top schools (Gioia & Corley, 2002). Student satisfaction may both expand on and bridge the gap between these two types of measures. In our experience, students are not happy simply with "war-stories" (Bennis & O'Toole, 2005) nor with pure theory for theory's sake, but rather want to both understand the why and know the how of business and organization management.

Full-time MBA students are an important element of our communities in many business schools. Arguably, students are a key client- or customer- like stakeholder for full-time MBA programs, along with organizations that hire MBAs (Armstrong, 2003; Offerman, 2007) and society at large.

Understanding what, along with job and career prospects, underlies students' satisfaction with their program should be a key input, along with that of other stakeholders, to rethinking the full-time MBA. In addition, full-time MBA students are a significant resource to the business community and to society. They give two years of their lives over to their own development and to their programs in an important investment for both parties and for future employing organizations and society. Their satisfaction with their programs is therefore important, at a minimum, to both them and to business schools.

Recently, online and hybrid MBA programs have gained popularity and market share. Our model, though built specifically in reference to traditional full-time MBA programs, shares many elements with models tested specifically in the context of such newer delivery modes. For example, Sebastianelli, Swift, and Tamimi (2015) found that Course Content, Course Structure, Rigor, Professor-Student Interaction, Student-Student Interaction, and Mentoring-Support were significant predictors of online MBA student satisfaction; these factors are readily subsumed within the present model. One might wonder if some of our model's constructs, for example, Facilities, may not be relevant to online programs; plausible as that might be, we note that Parahoo, Santally, Rajabalee, and Harvey (2016) found that physical facilities were the second most predictive factor of online student satisfaction. This finding suggests to us that researchers should proceed conservatively when applying our model to online and hybrid programs and not delete elements without empirical support for doing so.

While this model marks a point of departure for exploring the components of full-time MBA student satisfaction, it also offers significant insight for measuring satisfaction for other professional graduate

programs of similar structure and value to their respective higher education institutions. We believe that universities would be well advised to extend our model to law, medical, engineering, and other professional schools. As competition for well-qualified students increases, universities with better reputations for delivering a valuable experience, defined with respect to student development and growth but also with respect to student satisfaction, will have an edge in attracting prospective students. These same universities will also find it easier to solicit monetary and time commitments from their graduates due to their high satisfaction levels.

Contact Author:

John J. Sailors, PhD
(Corresponding Author)
TMH 443
Opus College of Business
University of St Thomas
1000 LaSalle Ave, Minneapolis MN 55403
jsailors@stthomas.edu

Teresa J. Rothausen, PhD
TMH 443
Opus College of Business
University of St Thomas
1000 LaSalle Ave, Minneapolis MN 55403
tjrothausen@stthomas.edu

Michael L. DeV Vaughn, PhD
TMH 443
Opus College of Business
University of St Thomas
1000 LaSalle Ave, Minneapolis MN 55403
deva2917@stthomas.edu

Christopher P. Puto, PhD
Spring Hill College
4000 Dauphin St.
Mobile, Alabama 36608
cputo@shc.edu

REFERENCES

Alves, H., & Raposo, M. (2007). Conceptual model of student satisfaction in higher education. *Total Quality Management*, 18(5), 571-588.
<https://www.tandfonline.com/doi/abs/10.1080/14783360601074315>

Arbaugh, J. B., Bento, R., & Hwang, A. (2010). Does the MBA experience support diversity? Demographic effects on program satisfaction. *Decision sciences journal of innovative education*, 8(2), 391-415.

<https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1540-4609.2010.00267.x>

Athiyaman, Ade (1997), "Linking Student Satisfaction and Service Quality Perception: The case of university education", *European Journal of Marketing*, Vol. 31, (7), pp.528-540.
<https://www.emeraldinsight.com/doi/abs/10.1108/03090569710176655>

Balmer, J. M., & Chen, W. (2017). Corporate heritage brands, augmented role identity and customer satisfaction. *European Journal of Marketing*, 51(9/10), 1510-1521.

- <https://www.emeraldinsight.com/doi/full/10.1108/EJM-07-2017-0449>
- Baruch, Y., Bell, M. P., & Gray, D. (2005). Generalist and specialist graduate business degrees: Tangible and intangible value. *Journal of Vocational Behavior*, 67(1), 51-68. <https://www.sciencedirect.com/science/article/abs/pii/S0001879105000564>
- Bosse, D. A., Phillips, R. A., & Harrison, J. S. (2009). Stakeholders, reciprocity, and firm performance. *Strategic Management Journal*, 30: 447-456. <https://onlinelibrary.wiley.com/doi/abs/10.1002/smj.743>
- Broughton, P.D. (2008). *Ahead of the Curve: Two Years at Harvard Business School*. New York: Penquin.
- Brown, S.P. & Lam, S.K. (2008). A meta-analysis of relationships linking employee satisfaction to customer responses. *Journal of Retailing*, 84: 243-255. <https://www.sciencedirect.com/science/article/pii/S0022435908000456>
- Clinebell, S.K. & Clinebell, J.M. (2008). The tension in business education between academic rigor and real-world relevance: The role of executive professors. *Academy of Management Learning and Education*, 7: 99-107. <https://journals.aom.org/doi/abs/10.5465/AMLE.2008.31413867>
- Connolly, M. (2003). The end of the MBA as we know it? *Academy of Management Learning and Education*, 2: 365-367. <https://journals.aom.org/doi/abs/10.5465/amle.2003.11901960>
- Corbin, J., & Strauss, A. (2008). *Basics of qualitative research* (3rd ed.). Los Angeles, CA: Sage.
- Creswell, J. W. (2007). *Qualitative inquiry & research design* (2nd ed.). Thousand Oaks, CA: Sage.
- Datar, S.M., Garvin, D.A., & Cullen, P.A. (2010). *Rethinking the MBA: Business Education at a Crossroads*. Boston: Harvard Business Press.
- DeShields Jr, O. W., Kara, A., & Kaynak, E. (2005). Determinants of business student satisfaction and retention in higher education: applying Herzberg's two-factor theory. *International journal of educational management*, 19(2), 128-139. <https://www.emeraldinsight.com/doi/abs/10.1108/09513540510582426>
- Deshpande, R. (1983). Paradigms lost: on theory and method in research in marketing. *Journal of Marketing*, 47: 101-110. <https://www.jstor.org/stable/1251403>
- Díaz-Méndez, M., & Gummesson, E. (2012). Value co-creation and university teaching quality: Consequences for the European Higher Education Area (EHEA). *Journal of Service Management*, 23(4), 571-592. <https://www.emeraldinsight.com/doi/abs/10.1108/09564231211260422>
- Dziewanowska, K. (2017). Value types in higher education—students' perspective. *Journal of Higher Education Policy and Management*, 39(3), 235-246. <https://www.tandfonline.com/doi/abs/10.1080/1360080X.2017.1299981>
- Endres, M. L., Chowdhury, S., Frye, C., & Hurtubis, C. A. (2009). The multifaceted nature of online MBA student satisfaction and impacts on behavioral intentions. *Journal of Education for Business*, 84(5), 304-312. <https://www.tandfonline.com/doi/abs/10.3200/JOEB.84.5.304-312>
- Felps, W., Mitchell, T.R., Hekman, D.R., Lee, T.W., Holtom, B.C., & Harman, W.S. (2009). Turnover contagion: how coworkers' job embeddedness and job search behaviors influence quitting. *Academy of Management Journal*, 52:

- 545-561.
<https://journals.aom.org/doi/abs/10.5465/AMJ.2009.41331075>
- Frombrun, C. & Shanley, M. (1990). What's in a name: Reputation building and corporate strategy. *Academy of Management Journal*, 33: 233-258.
<https://journals.aom.org/doi/abs/10.5465/256324>
- Gibson, A. (2010). Measuring business student satisfaction: A review and summary of the major predictors. *Journal of Higher Education Policy and Management*, 32(3), 251-259.
<https://www.tandfonline.com/doi/abs/10.1080/13600801003743349>
- Gioia, D.A. & Corley, K.G. (2002). Being good versus looking good: Business school rankings and the Circean transformation from substance to image. *Academy of Management Learning and Education*, 1: 107-120.
<https://journals.aom.org/doi/abs/10.5465/AMLE.2002.7373729>
- Glaser, B. G., & Strauss, A. L. (1967). *The Discovery of Grounded Theory*. Chicago, IL: Aldine.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., and Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, 2nd Ed., Thousand Oakes, CA: Sage.
- Harrison-Walker, L. J. (2010). Customer prioritization in higher education: targeting 'right' students for long-term profitability. *Journal of Marketing for Higher Education*, 20(2), 191-208.
<https://www.tandfonline.com/doi/abs/10.1080/08841241.2010.526355>
- Harter J.K., Schmidt F.L., Hayes T.L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87: 268–279.
<http://psycnet.apa.org/record/2002-12397-006>
- Harvey, W. S., Tourky, M., Knight, E., & Kitchen, P. (2017). Lens or prism? How organisations sustain multiple and competing reputations. *European Journal of Marketing*, 51(4), 821-844.
<https://www.emeraldinsight.com/doi/abs/10.1108/EJM-03-2016-0122>
- Hawawini, G. (2005). The future of business schools. *Journal of Management Development*, 24(9), 770-782.
<https://www.emeraldinsight.com/doi/abs/10.1108/02621710510621286>
- Henseler, J., Ringle, C. M., and Sarstedt, M. (2015). A New Criterion for Assessing Discriminant Validity in Variance-based Structural Equation Modeling. *Journal of the Academy of Marketing Science*, 43(1): 115-135.
<https://link.springer.com/article/10.1007%2Fs11747-014-0403-8>
- Hillman, A. J. & Keim, G. D. (2001). Shareholder value, stakeholder management, and social issues: What's the bottom line? *Strategic Management Journal*, 22: 125-139.
[https://onlinelibrary.wiley.com/doi/abs/10.1002/1097-0266\(200101\)22:2%3C125::AID-SMJ150%3E3.0.CO;2-H](https://onlinelibrary.wiley.com/doi/abs/10.1002/1097-0266(200101)22:2%3C125::AID-SMJ150%3E3.0.CO;2-H)
- Judson, K. M., & Taylor, S. A. (2014). Moving from marketization to marketing of higher education: The co-creation of value in higher education. *Higher Education Studies*, 4(1), 51-67.
<https://eric.ed.gov/?id=EJ1076369>
- Keaveney, S., & Young, C. (1997). *The student satisfaction and retention model (SSRM)*. Denver, CO: Working Paper, University of Colorado.
- Lincoln, Y. S., & Guba, E. E. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: Sage
- McCracken, G. (1988). *The Long Interview*. Newbury Park, CA: Sage

- Monks, J. (2003). Patterns of giving to one's alma mater among young graduates from selective institutions. *Economics of Education review*, 22(2), 121-130. <https://www.sciencedirect.com/science/article/abs/pii/S0272775702000365>
- Morgeson F.P. & Hoffman D.A. (1999). The structure and function of collective constructs: Implications for multilevel research and theory development. *Academy of Management Review*, 24: 249–265. <https://journals.aom.org/doi/abs/10.5465/amr.1999.1893935>
- Morgeson, F.P. & Nahrgang, J.P. (2008). Same as it ever was: Recognizing stability in the BusinessWeek Rankings. *Academy of Management Learning and Education*, 7: 26-41. <https://journals.aom.org/doi/abs/10.5465/amle.2008.31413860>
- Nishi, L.H., Lepak, D.P & Schneider, B. (2008). Employee attributions of the “why” of HR practices: their effects on employee attitudes and behaviors, and customer satisfaction. *Personnel Psychology*, 61: 503-545. <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1744-6570.2008.00121.x>
- Parahoo, S. K., Santally, M. I., Rajabalee, Y., & Harvey, H. L. (2016). Designing a predictive model of student satisfaction in online learning. *Journal of Marketing for Higher Education*, 26(1), 1-19. <https://www.tandfonline.com/doi/abs/10.1080/08841241.2015.1083511>
- Ringle, C. M., Wende, S., & Becker, J-M. (2015). SmartPLS 3. Bönningstedt: SmartPLS. Retrieved from <http://www.smartpls.com>
- Robinson, P. (1994). *Snapshots from Hell: The Making of an MBA*. New York: Warner Books, Inc.
- Sebastianelli, R., Swift, C., & Tamimi, N. (2015). Factors affecting perceived learning, satisfaction, and quality in the online MBA: A structural equation modeling approach. *Journal of Education for Business*, 90(6), 296-305. <https://www.tandfonline.com/doi/abs/10.1080/08832323.2015.1038979>
- Sakthivel, P. B., Rajendran, G., & Raju, R. (2005). TQM implementation and students' satisfaction of academic performance. *The TQM magazine*, 17(6), 573-589. <https://www.emeraldinsight.com/doi/abs/10.1108/09544780510627660>
- Saeidi, S. P., Sofian, S., Saeidi, P., Saeidi, S. P., & Saeidi, S. A. (2015). How does corporate social responsibility contribute to firm financial performance? The mediating role of competitive advantage, reputation, and customer satisfaction. *Journal of business research*, 68(2), 341-350. <https://www.sciencedirect.com/science/article/abs/pii/S0148296314002215>
- Schertzer, C. B., & Schertzer, S. M. (2004). Student satisfaction and retention: A conceptual model. *Journal of Marketing for Higher Education*, 14(1), 79-91. https://srhe.tandfonline.com/doi/abs/10.1300/J050v14n01_05
- Schneider, B. (1987). The people make the place. *Personnel Psychology*, 40: 437-454. <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1744-6570.1987.tb00609.x>
- Schneider B., Ehrhart M.G., Mayer D.M., Saltz J.L., Niles-Jolly K. (2005). Understanding organization-customer links in service settings. *Academy of Management Journal*, 48: 1017–1032. <https://journals.aom.org/doi/abs/10.5465/amj.2005.19573107>
- Schneider B., Hanges P.J., Smith S.B., & Salvaggio, A.N. (2003). Which comes first: Employee attitudes or

- organizational financial and market performance? *Journal of Applied Psychology*, 88: 836–851. <http://psycnet.apa.org/record/2003-08045-006>
- Silverman, D., & Marvasti, A. (2008). *Doing Qualitative Research: A Comprehensive Guide*. Thousand Oaks, CA: Sage.
- Strauss, A., & Corbin, J. (1998). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Thousand Oaks, CA: Sage
- Taylor, S. A., Hartman, N. S., & Lim, H. H. (2018). Customer Journeys Through the Eyes of Undergraduate College Students. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 30, 20. <http://jcsdcb.com/index.php/JCSDCB/article/view/265>
- Senk, J., Mallett, C., Prendergast, C., & Underhill, B. (2014). Understanding the MBA Student Experience: Recommendations and Changes Necessary to Enhance Rankings. *Journal of Global Leadership*, 112. http://www.icglconferences.com/wp-content/uploads/2017/08/ICGL-Journal-Vol-I_-2014.pdf#page=113
- Trank C.Q. & Rynes S.L. (2003). Who moved our cheese? Reclaiming professionalism in business education. *Academy of Management Learning and Education*, 2: 189-205. <https://journals.aom.org/doi/abs/10.5465/AMLE.2003.9901678>
- Walsh, J. P. & Nord, W. R. (2005). Taking stock of stakeholder management. *Academy of Management Review*, 30: 426-438.
- Wells, V. K., & Daunt, K. L. (2016). Eduscape: The effects of servicescapes and emotions in academic learning environments. *Journal of Further and Higher Education*, 40(4), 486-508. <https://www.tandfonline.com/doi/abs/10.1080/0309877X.2014.984599>
- Ziegler, M., & Hagemann, D. (2015). Testing the Unidimensionality of Items. *European Journal of Psychological Assessment*, 31(4), 231-237. <https://econtent.hogrefe.com/doi/full/10.1027/1015-5759/a000309>

Appendix

Welcome and Intro

Thanks for your participation. Glad you are here.

Goals of the research are to learn what elements of the MBA program most affect satisfaction and/or dissatisfaction. The hope is to identify the key determinants for a quantitative survey they can be used by any MBA program. This is one of four groups that we are convening.

I am a professor at XXXX.

Introduce yourselves and the viewers.

Focus Group basics: No right/wrong answers, ask to clarify, no need to answer every question, discussion, but speak up when you have a point. I will be probing for both pros and cons.

There will be times I will need to probe on the meaning of your words, clarifying the context.

We will be taping the sessions so I also may need to “narrate” any quiet expressions or nodding. All your responses will be kept anonymous. The recording is an easy way to take notes and will only be used by the researchers.

Elements of overall experience

What were some of your favorite elements of the MBA Program, the overall experience?

What do you consider unique to this program?

What were some of your least favorite, difficult, frustrating elements?

What do you consider unique to this program?

Probe on the following, if not mentioned:

Specifics to the curriculum/structure of the program

My area of interest

Faculty/teaching

Accessibility to faculty

Placement office

Community/overall atmosphere/culture

Peers

Facilities

Staff/administrators

Challenge

Values

Opportunities to learn outside of classroom

Make a difference

Value for the money

Location

Of these pros and cons, what has played a big role in determining how satisfied you are with the overall program/experience?

Vote from the list those factors that have most impacted your satisfaction and/or dissatisfaction.

Factors in selecting a business school

Go back in time, what were some of the factors you used when you were looking at business schools?

What were some of the main reasons or KEY factors in your decision to come to this program versus another business school?

After 2 years here what are some factors or additional factors you would tell someone to consider when picking a school?

Engagement

What are ways students are “engaged” in the full-time MBA program?

Give me examples of roles, activities, of students you considered to be very engaged in the program.

Thinking of yourself, roommates, friends why were some more engaged than others? What kept people from getting engaged?

What facilitated or encouraged engagement?

Looking back, *why or why not* did you get involved in this MBA Program? Warm-up quiz

1. Name 2-3 things you liked about the overall MBA Program.
2. Name 2-3 things you disliked about the overall MBA Program.
3. Please rate how satisfied you were with the overall MBA Program.

Very Satisfied

Satisfied

Somewhat Satisfied

Not Satisfied

4. What are some of the main reasons for your satisfaction rating?
5. What were some of the ways you were engaged with the MBA program beyond attending classes and completing coursework?

6. Please rate yourself,

Very engaged

Engaged

Somewhat engaged

Not engaged

7. Looking back, *why or why not* did you get involved in this MBA Program?