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“Explain, but make no Excuses”: Service Recovery after Public Service Failures

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Abstract

Public service encounters between employees and citizens are daily fare which, makes the occurrence of service failures rather likely. However, public service failures and their recovery have been given only little attention in public administration research so far. Drawing from organizational justice theory and cognitive appraisal theory, the effects of different explanation strategies, excuses and justifications, are tested using representative population data from two survey experiments. Results show that justifications decrease the client's frustration and likelihood to complain after service failures, whereas excuses could even worsen the situation. This article aims to promote public service management research by combining psychological theories with practical relevance.

In recent years, public management scholars have started to integrate service management science into the public sector context (Osborne, Radnor & Nasi, 2012; Osborne, Radnor, Kinder & Vidal, 2015; van de Walle, 2016). This perspective poses potential for advancing our understanding of the public service delivery as the classic product-focused understanding of the New Public Management era has "obscured this service-based and systemic nature of public services" (Radnor, Osborne, Kinder & Mutton, 2014, p. 406). The specific characteristics of service encounters (Parasuraman, Zeithaml, & Berry, 1985) change our perspective on the role of both service provider and service receiver. Simultaneously, the public differs from the private sector regarding structural settings, such as the lack of price mechanisms and competition (Osborne 2018). Therefore, scholars have proposed to adopt these concepts calling for a public service logic (Radnor et al., 2014; Engen, Fransson, Quist & Skålen, 2020) integrated in a public service management (Hodgkinson, Hannibal, Keating, Buxton & Bateman 2017). This study builds on these fundamental considerations by empirically testing differences in the effects of service tools, specifically the effects of non-monetary compensation after service failures.

Public goods are mainly provided through the delivery of services which often requires a direct interaction between public organizations' employees and citizens. The interaction between public employees and clients has been an essential element of street-level bureaucracy research, too (Lipsky, 2010). However, empirical evidence on the dynamics of such public encounters, the element of communication, and their psychological effects is still a blank spot in public administration studies (Bartels, 2013, 2014; Raaphorst & Loyens, 2018; Raaphorst & van de Walle, 2017). In service management research, the service encounter is a major object of interest (Rafaeli et al., 2016). As service encounters are inherently complex (Grönroos, 1984), service failures are likely to occur at some point (Hess Jr., Ganesan, & Klein, 2003, p. 127). Therefore, service failures constitute a special episode in service encounters. The effects of service failure offer rich insights into the dynamics that form a client's (dis-)satisfaction (Berry & Parasuraman, 1991; McCollough, Berry, & Yadav, 2016; Smith & Bolton, 1998). In such a situation, the role of frontline staff is of major importance in lessening outcome deterioration. Thus, service failures and their recovery pose research topics worthwhile for public encounters as well.

Different tools are at the frontline staff's disposal when trying to recover from a service failure. While most of the studies on service recovery focus on tangible and/or monetary compensation (Hess Jr. et al., 2003; McCollough et al., 2016; Sparks & McColl-Kennedy, 2001; for rare public sector examples, see also Thomassen, Leliveld, van de Walle, & Ahaus, 2017, and Thomassen, Leliveld, Ahaus, & van de Walle, 2020), the transfer to the public sector may be rather difficult as, for example, compensation payments may not be ethically accepted in public organizations (Thomassen et al., 2017, p. 897). Therefore, research on intangible recovery strategies may yield additional fruitful insights into the dynamics of public service encounters. This article will focus on non-monetary forms of recovery, as they are much more likely to happen in the real-world context of public services. One example of non-monetary recovery actions are explanations for the service failure. Therefore, this study tries to answer the following research question: What

are the effects of explanations given by frontline staff on citizens' satisfaction after facing a public service failure? Two studies using survey experiments have been conducted to answer that question. Current studies on service recovery demand an investigation of more complex service interactions in different settings in order to increase the external validity of this field of research. Interactions with public administrations offer a great opportunity to fill this gap due to the different setting (van de Walle, 2016). Public services are often provided in a monopolistic market. Additionally, rules and procedures often derive from multi-level governance structures, especially in federal states, raising the level of complexity of services. These characteristics offer an important contribution to both public administration and service management. Thus, this article heeds the call for public service management (Osborne, Radnor, & Nasi, 2012) by introducing evidence from the fields of service management and psychology into public administration.

The paper is structured as follows. First, the theoretical framework is presented in order to understand the importance of (non-monetary) service recovery. Therefore, organizational justice theory as well as cognitive appraisal theory are applied to the research setting to derive hypotheses. Third, the design and results of the two studies are presented. Finally, implications are highlighted and suggestions for future research are given.

Service Failures and Recovery

Service failures may be defined as “situations in which customers experience an economic (e.g. money, time) and/or a social loss (e.g. status, esteem) due to a mishap or a problem when experiencing a public service” (Thomassen et al., 2017, p. 896). This loss leads to situational assessments, such as perceived injustice or unfairness (Balaji, Roy, & Quazi, 2017) followed by emotional reactions, such as anger and regret (Bonifield & Cole, 2007). Thus, service failures constitute a so-called moment of truth (Grönroos, 2010) due to their strong impact on the service experience and evaluation. Service providers will, therefore, try to anticipate failures and try to engage in so-called service recoveries. Note that failures may stem from various causes, not necessarily from mistakes by the service provider itself. Despite various reasons for particular failures, they will normally result in losses for both, customer and service provider due to repetition of the service, additional adjustments to the service or even complaint handling. Tsai, Yang, & Cheng (2014) differentiates between process and outcome failures. While the first refers to failures during the processing and delivery of services, the latter refers to failures that result from not fulfilling the basic needs of the customer, such as faulty decisions by employees. The type of failure, its magnitude, and the attribution of responsibility will affect the customer's emotional reaction and should be addressed specifically during service recovery.

This article approaches the research objective from two theoretical perspectives: First, organizational justice theory helps us to understand why different types service recoveries have an

impact on the client's service evaluation. Second, cognitive appraisal theory explains the psychological mechanism underlying service failures and recovery.

Organizational Justice Theory and Recovery Modes

Organizational justice theory (or fairness theory) (Greenberg, 1987) provides an initial approach to understanding the relevance of service recoveries. It has been applied to a number of different research topics, such as work motivation and satisfaction (Battaglio & Condrey, 2009; Cho & Sai, 2013; Choi, 2011; Cohen-Charash & Spector, 2001; Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Husted & Folger, 2004; Kurland & Egan, 1999). Additionally, it has also been widely used in the service management context (Mattila, 2001; Sparks & McColl-Kennedy, 2001; Tax & Brown, 2000). The concept explains the importance of different spheres of interaction to determine the perceived fairness of a decision made by individuals, groups of people, or organizations.

Three types of justice can be distinguished: distributional, procedural, and interactional justice (Greenberg, 1987). Distributional justice is understood as the fairness of distribution of resources. In the context of service recovery, this is especially associated with tangible and/or monetary compensation. Procedural justice is conceptualized as the fairness of the process itself, focusing on involvement, ethicality, and bias-free behavior. Finally, interactional justice refers to the fairness of how individuals are treated after the decisions and is therefore applicable to the service encounter context. It may be further differentiated into interpersonal and informational justice, where, the former represents the respect, kindness, and courtesy with which the service employee interacts with the client. The latter reflects the distribution of information, explanations for decisions, and reasons for action.

Explanations for service failure represent a major mechanism to increase interactional justice. From the perspective of organizational justice theory, Folger & Cropanzano (1998) differentiate between four types of explanations:

1. Excuses: The individual tries to avoid responsibility by invoking circumstances or other organizations and individuals who caused the failure.
2. Justifications: The individual accepts the responsibility. However, reasons for the decisions or circumstances (mostly due to higher goals) are explained in order to legitimize the situation.
3. Referential accounts: Individuals try to ease the dissatisfaction with the failure by comparing the client's situation with others who may be even worse off.
4. Apologies: Individuals take responsibility. Additionally, they express their sympathy and/or remorse.

Van Vaerenbergh, Varga, Keyser, & Orsingher (2018) provide a different typology by differentiating between compensation options (e.g. monetary compensation or apologies), organizational procedures (e.g. customer participation), and favorable employee behavior (e.g. excuses, justifications, or empathy). The latter option plays an especially “important role in managing customers’ emotional reactions” (van Vaerenbergh et al., 2018, p. 4). Therefore, in this study, the use of excuses and justifications is of major interest. While both attempt to increase the informational justice of the encounter or decision, they follow opposing strategies in dealing with the responsibility for the failure. On the one hand, excuses aim at diverting responsibility to unavoidable events or other parties, blaming them for the service failure. Thereby, frustration is supposed to be channeled away from the service deliverer by emphasizing that the problem is not in that person’s control, or even providing a scapegoat. The effectiveness of the excuse may differ depending on the specificity (Folger & Cropanzano, 1998, p. 46). Blaming a specific individual or organization may be more convincing in trying to prove that the service provider is not to blame, compared to an unspecific excuse in which the provider is just shown as powerless. In public administration research, blaming theories (Hood, 2011) have been mostly applied at the macro- or meso-level of policy analysis and public administration studies (Anderson, 2009; Carpenter & Krause, 2012; Hood, 2007; James, Jilke, Petersen, & van de Walle, 2016). Micro-level phenomena like public encounters have played no major role in this literature so far.

By using justifications, on the other hand, the employee accepts responsibility for the situation. An explanation is offered to the client, drawing on his or her understanding or sympathy. The causes for the failure may have intra- or extra-organizational origins. Their occurrence may, for example, be due to unknown standard procedures, extraordinary circumstances, or a superordinate goal. These circumstances allow the employee to justify his or her actions and the result leading to the service failure. Additionally, clients may perceive a given justification as an attempt to lower information asymmetries (Lipsky, 2010, p. 65) and therefore as a kind of investment in their procedural and structural knowledge about administrations by the employee.

The question as to which of these types is more effective is highly contested (Bradley & Sparks, 2012, p. 41f). Whereas some studies point to the superiority of excuses (Shaw, Wild, & Colquitt, 2003, p. 447), other studies found contradictory results in favor of justifications (Conlon & Murray, 1996). However, the effectiveness of these two strategies may be determined by the client’s assessment of the adequacy, legitimacy, and credibility of such explanations (Shaw et al., 2003). The causal attribution can therefore be influenced by the stability, credibility, and locus of the failure (Hess Jr. et al., 2003).

Cognitive Appraisal Theory

Cognitive appraisal theory (CAT) (Folkman, Lazarus, Gruen, & DeLongis, 1986) offers a valuable approach to understanding why service recoveries play an important role after failure situations. Following CAT, emotions and affective responses in individuals may be caused by certain events that are assessed and evaluated in an appraisal process as the individual tries to interpret and explain the situation taking place. This process may be divided into two stages (Lazarus, 1991). In the primary phase, the individual assesses the relevance of the event in terms of his or her needs and goals. During the secondary appraisal, the emotions are formed. The individual tries to hold others accountable for the event, giving blame (or credit) to other individuals, groups, or institutions. Thereby, different emotions such as anger, frustration, anxiety, or happiness may be triggered and investigated. In a service context, clients appraise their situation when exposed to a service failure. They will draw an evaluation based on the given problem, its magnitude, and the given resources. The level of perceived stress depends on this assessment. Frontline staff may positively influence this judgment by offering emotional support in the form of service recovery. In organizational frontline research, CAT has been adapted to investigate the effect of different behaviors and traits of frontline staff on the reaction of customers and clients, for example emotional competence (Bonifield & Cole, 2007; Delcourt, Gremler, Zanet, & van Riel, 2017; Watson & Spence, 2007).

As both excuses and justifications try to shape citizen' interpretation of the failure, both modes may affect their emotional responses. Excuses may help the public employee to shift the blame, and thus the frustration, towards other people or organizations, resulting in a lower level of frustration with the experience. Justifications may achieve a comparable effect but through an understanding of the accompanying circumstances, which may have reasonable explanations. Therefore, the following hypotheses are proposed:

H1: The use of excuses decreases the citizen's level of anger after a public service failure.

H2: The use of justifications decreases the citizen's level of anger after a public service failure.

As discussed, the effectiveness of excuses may depend on the specificity of the excuse. An excuse that blames a specific organization or individual may be more convincing than an unspecific excuse.

H3: A more specific excuse is more effective in service recovery than an unspecific excuse.

As both explanation types may appear in the same service encounter, the interaction of these is also of interest. Both modes, excuses and justifications, have rather different (if not adverse) approaches in dealing with service failures. The appearance of both modes may mutually negate the effects of the respective explanation. Therefore:

H4: The use of excuses negates the effects of justifications after a public service failure (and vice versa).

While anger is only a cognitive response to service failures, complaining behavior materializes as a substantial phenomenon. Complaints can cause negative effects on both frontline workers and the organization itself, causing emotional labor (Babakus, Yavas, Karatepe, & Avci, 2003; Jerger & Wirtz, 2017; Korczynski, 2003; Mann, 1999), reputational costs (Richins, 1983), and the use of organizational resources for complaint handling (Williams & Buttle, 2014). Organizational complaint handling is an essential consequence of service failures. A meta-analysis by Gelbrich & Roschk (2011) distinguishes between three types of post-complaint responses: compensations (monetary as well as psychological), favorable employee behavior (explaining reasons for failure, active listening, careful communication), and promptness (smooth complaint-handling processes). They find that the employee's behavior has a substantial effect on the perceived interactional justice which, in return, has the strongest effect on the overall satisfaction of clients.

Complaints may target different goals. Clients showing problem-solving complaining behavior want to find solutions to encountered failures and thereby contribute to the organizational performance by improving processes (Hibbard, Kumar, & Stern, 2001). Vindictive complaining behavior (Grégoire & Fisher, 2008), however, is an emotional coping strategy to reduce negative emotions. Citizens preferring vindictive complaining try to reflect their stress and anger onto the (seemingly) responsible person or organization in order to reduce emotional stress. Receiving a justification, however, succeeds in reducing emotional stress by offering an explanation. This, again, lowers the need for other coping strategies like vindictive complaining behavior. Simultaneously, justifications may also lower the likelihood of problem-solving complaining behavior, as explanations may signal that the reason for the failure has already been identified.

H5: The use of justifications decreases the likelihood of vindictive complaining behavior after a public service failure.

H6: The use of justifications decreases the likelihood of problem-solving complaining behavior after a public service failure.

Study 1

Design and Data

To test the first four hypotheses, this study follows an experimental approach using a survey experiment containing vignettes of fictitious service encounters. This approach is widely applied in research on service failure (Tax & Brown, 2000) and increasingly common in behavioral administrative research (Grimmelikhuijsen, Jilke, Olsen, & Tummers, 2016; Jilke & van Ryzin, 2017). The experimental approach allows us to examine isolated treatments that are difficult to

observe separately in real-life context. Service interactions not only encompass different verbal strategies of explicit communication but also various sources of implicit communication, such as tone, facial expression etc. Additionally, an experimental approach also allows for isolating situational confounding variables, such as the client's mood. Accordingly, a 2 (no / justification) x 3 (no / general / specific excuse) factorial between-subject design is used, in which one out of six vignettes was presented to the respondents in a survey experiment. In order to account for a more complex service situation with more diffuse failure responsibilities, the following scenario was developed: The scenario describes a citizen who must get a new ID card from the local citizen office. However, the public service employee rejects the citizen's photo as it does not meet the required biometrical standards. The response of the employee is used as the treatment. Respondents rated the situation as moderately realistic (M=3.85 on a five-point Likert scale, SD=0.99).

Imagine that you need to refresh your citizen ID card at the local citizen office. In preparation, you acquire a biometrical photo from a professional photographer.

At the office, your photo is scanned. The computer gives an error message that the photo does not meet the required standards. It is too bright and too low on contrast.

*The employee tells you that she can't use the picture and that you need to get a new appointment with a better picture. *

*[T0: **no / no**] – No additional message –*

*[T1: **no / general excuse**] "I'm sorry, but those are the regulations. We have no influence on that."*

*[T2: **no / specific excuse**] "I'm sorry, but those are the regulations from the Federal Ministry of the Interior. We have no influence on that."*

*[T3: **justification / no excuse**] "I'm sorry, but this way it can be ensured that the picture on the ID card is easily recognizable. In the end, this is for your own safety and enables the police to do a good job, for example."*

*[T4: **justification / general excuse**] "I'm sorry, but those are the regulations. We have no influence on that. This way, it can be ensured that the picture on the ID card is easily recognizable. In the end, this is for your own safety and enables the police to do a good job, for example."*

*[T5: **justification / specific excuse**] "I'm sorry, but those are the regulations from the Federal Ministry of the Interior. We have no influence on that. This way, it can be ensured that the picture on the ID card is easily recognizable. In the end, this is for your own safety and enables the police to do a good job, for example."*

An a priori power analysis using G*Power (Faul, Erdfelder, Buchner, & Lang, 2009) was conducted, aiming for 80 % power, with an expected effect size of $d = 0.15$ indicating a necessary sample size of 1102 to conduct a t-tests. The effect size was inferred from previous research on service recoveries (Bradley & Sparks, 2012; Mattila, 2001). The data was gathered via online survey using a representative (gender, age, and education) sample from a German online panel ($n=1,090$). Participants were randomly assigned to one of the six conditions. Randomization over all six treatments was achieved by order of accessing the online survey and using the residual value after dividing the respondent's ID by six. This way, an even distribution over all treatments was realized.

Variables. The dependent variable “anger” represents the negative emotional response after the service failure. It is measured as a composite mean index of three items measuring frustration, irritation, and anger with the situation ($\alpha = .82$) (see Table 4).

Results

Justifications have a redeeming effect on the level of anger ($M_{\text{no justification}} = 3.649$, $M_{\text{justification}} = 3.513$, two-sided $t(1070.2) = 2.0279$, $p\text{-value} = 0.043$), which is in line with the expected hypothesis H2¹. The effect size is Hedges' $g = .124$.

Excuses, however, do not have the expected effect on the appraisal of the situation. When investigating the effect of excuses (both unspecific and specific in contrast to no excuses at all), they unexpectedly even worsen the frustration of the citizen ($M_{\text{no excuse}} = 3.493$, $M_{\text{excuse}} = 3.624$, two-sided $t(662.62) = -1.792$, $p\text{-value} = 0.074$). The effect size is $g = 0.116$. When further investigating the differing effects of the specificity of excuses, the data indicate that the anger-boosting effect of specific excuses is slightly higher ($F(2, 1071) = 1.771$, $\beta = 0.148$, $p = 0.074$) than for unspecific excuses ($\beta = 0.115$, $p = 0.162$). Therefore, the data show evidence against hypotheses H1 and H3.

Aside from traditional null hypothesis testing (NHST), scholars have recommended evaluating the effect sizes using so-called equivalence testing (Lakens, 2017; Schuirmann, 1987). This procedure complements NHST by evaluating whether an effect size is equivalent to zero assuming specific equivalence bounds. Hereby, the tested null hypothesis is any effect size deemed worthwhile. One widely used procedure is the “two one-sided t-tests” (TOST). Although the effect sizes of the t-tests above are comparably small, the TOST procedure gives additional guidance for evaluating the effects. Assuming equivalence bounds of $d = 0.2$, Figure 1 shows that the effect of justifications is statistically different from 0 and statistically not equivalent to zero. The same results can be found for the effect of excuses (Figure 2). While effect sizes of 0.2 are

¹ This effect remains stable even when controlling for responsibility attributed to various actors, such as the photographer.

admittedly small, the intervention of using justifications and/or excuses requires minimal resources in service encounters. Considering this cost-benefit ratio, explanations may represent a valid recovery option.

[Figure 1 about here]

[Figure 2 about here]

In order to test for hypothesis H4, an ANCOVA is used including an interaction term between the use of excuses and of justifications. Table 1 gives the results. Including the interaction term in Model 2, the anger-boosting effect of excuses is mitigated and loses its significance. However, the interaction term is also not significant.

[Table 1 about here]

Taking a closer look at the different treatments, Table 2 gives the results of an ANOVA comparing every treatment group compared to the control group. Only the group that received just a justification for the service recovery shows a significant drop in the anger level. Figure 3 shows the distributions of anger across the different treatment groups. This indicates that the use of different explanation strategies may be dysfunctional due to conflicting signals that are sent to the client. This in return may lower the credibility of the statement.

[Table 2 about here]

[Figure 3 about here]

The results of this study offer initial evidence in favor of justifications and against excuses when compensating for service failure in public service encounters. Due to the small effect size, additional evidence is needed in order to raise the reliability of the results.

Study 2

The second study tries to replicate the previous results while extending the theoretical implications. Based on the results of Study 1, Study 2 will try to test the following adjusted hypotheses²:

*H1a**: The use of excuses increases the citizen's level of anger after a public service failure.

*H2**: The use of justifications decreases the citizen's level of anger after a public service failure.

Furthermore, this second study examines the relationships proposed in hypotheses H5 and H6.

Design and Data

Study 2 follows a similar approach to Study 1 using a survey experiment. For the vignette, the study refers to the scenario from Thomassen et al. (2017), who chose a failed appointment for collecting a visa for which the citizen applied over the internet. This scenario was tested in a PA context and has a less complex structure of blame attribution. The treatment was modified towards a non-monetary attempt at service recovery. Respondents rated the described scenario as rather realistic (1–7 scale, mean = 5.19, sd = 1.3). The scenario reads as follows:

In one month, you need to be in another country for which a travel visa is required, which costs you approximately 40 dollars. You have ordered it online. After a couple of days, you receive a message that it is ready to collect at the office (about a 20-minute drive from your home) and you go to the office.

Now you are at the desk, and the employee informs you that the visa is not there. The employee checks the system and informs you that it is still on its way. It will be available tomorrow.

[T0: Control] You leave the building.

[T1: justification given] The employee says: "I am sorry. We are currently making changes to our internal system to improve in the future. However, unfortunately this sometimes causes delays in the processing of applications." You leave the building.

[T2: excuse given] The employee says: "That's unfortunate. But the printer's delivery service failed to make the delivery." You leave the building.

The design was pre-registered on Open Science Framework (OSF): <https://osf.io/et6aj>.³ Based on a power analysis ($d = 0.15$, $\alpha = 0.05$, power = 80 %), 699 participants were aimed for. The

² Hypotheses highlighted with an asterisk have been pre-registered.

³ Hypotheses 3 and 4 in the pre-registration have been omitted from this paper in order to increase the coherence of the study.

effect size was inferred from previous research on service recoveries (Bradley & Sparks, 2012; Mattila, 2001) and the results of Study 1. The data were gathered by conducting an online survey of a representative (in terms of gender, age, and education) population sample in Germany from a survey panel. After omitting cases that did not match a bad quality item, the sample size was $n=785$. The randomization procedure was the same as in Study 1, however the sample consisted of different participants.

Variables. Anger as a negative emotional response was measured using a two-item scale ($\alpha = 0.93$) ranging from 1–7. Vindictive ($\alpha = 0.86$) and problem-solving ($\alpha = 0.82$) complaining behaviors are conceptualized as proposed by Grégoire & Fisher (2008) and Gelbrich (2010). Table 4 in the appendix offers a thorough description of the items.

Results

The use of an excuse slightly increases the mean level of anger in the treatment group ($M_{\text{no excuse}}=4.883$, $M_{\text{excuse}}= 4.992$, two-sided $t(648.44) = -0.9953$, $p\text{-value} = 0.32$). However, this increase is statistically insignificant. The data show no support for H1a. The justification, again, has a significantly redeeming effect on the level of anger ($M_{\text{no justification}}=5.007$, $M_{\text{justification}}= 4.741$, two-sided $t(583.8) = 2.3634$, $p\text{-value} = 0.018$), which indicates support for H2. The effect size is slightly larger than in the previous study ($g = .168$). Figure 4 gives the distribution of anger across the treatment groups.

[Figure 4 about here]

A structural equation model (SEM) was calculated in order to test hypotheses 5 and 6. Results are given in Table 3. The model fit is very good ($\text{Chi}^2[\text{df} = 27] = 118.971$; $\text{CFI} = 0.975$, $\text{RMSEA} = 0.062[0.051 - 0.073]$). The results indicate that justifications significantly lower the tendency towards vindictive complaining, which is in line with the arguments of hypothesis H5. Simultaneously, justifications also lower the likelihood of support-seeking complaining, supporting H6, thereby indicating that the likelihood of complaining is generally reduced when offered an explanation for the service failure. The data show no effect for the use of excuses.

[Table 3 about here]

General Discussion

The results offer five theoretical and practical contributions. First, contrary to the majority of studies on service recovery (Bradley & Sparks, 2012; Shaw et al., 2003), the data from both experiments indicate no effect of excuses on the citizen's emotional response to the service failure. As this study is the first to apply this topic to the public sector context, there may be different reasons for this finding. The characteristics of public services may inhibit the effect of excuses. For example, the monopolistic nature of most core public services exacerbates the effectiveness of shifting the blame onto other actors. Citizens are often not able to choose from different service providers. Being told that other actors are to blame for the failure signals that such failures may occur in the future as well, and may provoke a feeling of helplessness, reinforcing angry reactions. Another characteristic may be the complex structure of regulation, especially in federal systems, often underlying public services. This diffusion of responsibility – as simulated in Study 1 – may reinforce further frustration, making excuses less suitable for public service failures.

Second, on the other hand, justifications seem to be an effective recovery measure for public service failures. By explaining the reason and meaning behind the service failure to the client, frustration may be mitigated. As the frustration level decreases, the second appraisal of the service failure is then less negative. However, as service failures may happen for an understandable reason, the kind of reason could influence the effectiveness of this recovery mode. If the failure can be attributed to a greater good (e.g. societal concerns), it may be easier to accept, whereas personal mistakes, red tape, or administrative burden may be harder to swallow for the client. Future studies should take a closer look into this possible moderator.

Third, to the best of my knowledge, this is the first study to investigate the interaction effect of different recovery modes. In real-life service encounters, it may be very likely that different explanations for service failures are given at the same time. Yet, different types of explanations may cancel each other out, resulting in non-effective service recovery. The data presented here indicate that excuses make justifications ineffective when used at the same time.

Fourth, despite the comparably small effect size of non-monetary recovery modes (Bradley & Sparks, 2012; Mattila, 2001), they provide an easy-to-implement and cheap measure to mitigate frustration. Additionally, justifications seem to diminish the likelihood of customers complaining. This in return lowers transaction costs for organizational complaint handling and cushions the public employee from emotional labor (Babakus et al., 2003; Jerger & Wirtz, 2017; Korczynski, 2003). Future research should elaborate on that effect by conceptualizing service recoveries in a more thorough way, such as combining interpersonal modes with organizational responses, and accounting for the temporal component of such recoveries (van Vaerenbergh et al., 2018). Furthermore, the emotional and psychological capacities and competencies of public employees may be crucial for such recoveries (Azab, Clark, & Jarvis, 2018; Delcourt et al., 2017; Fernandes, Morgado, & Rodrigues, 2018). Especially in emotionally charged service encounters, such as

policing or welfare administration, these components may prevent extreme emotional or even physical responses.

Fifth, this study empirically endorses the need for a distinct public service management and its research (Hodgkinson et al., 2017; Osborne 2018). While there is vast knowledge about the role of street-level bureaucrats (Brodkin, 2012; Lipsky, 2010; Maynard-Moody & Musheno, 2012) and organizational settings (Keiser, 2010; Marvel, 2017; Steijn & van der Voet, 2019), there are still very few quantitative and experimental studies investigating what happens in those public encounters (Bartels, 2013; Raaphorst, 2017). Theoretical and methodological approaches from service management research may serve as a blueprint (Westrup, 2018). The behavioral public administration movement may further endorse a demand for such studies.

Conclusion

This study examines the effects of different explanation modes in service recovery after public service failures. The results indicate that excuses may be rather ineffective, whereas justifications may decrease the negative appraisal, with the failure measured as anger and frustration. The experiments also show the diminishing effect of justifications on complaining behavior. Reasons for the partially different results compared to previous studies may be traced to the specific public sector context in which the service encounters are framed.

Nevertheless, there are some limitations to this study that need to be considered. First, the results are drawn from a survey experiment. This may also explain the comparably small effect size of the treatments. External validity should be increased by replicating the findings in field studies. This is especially important when concentrating on the communicative aspects of service encounters. However, the quality of the sample ensures a good degree of ecological validity by not only relying on convenience student samples. Second, the magnitude of the failure as well as the persuasiveness of the given explanations are not investigated in this study. However, they play a major role in service recovery, especially when using non-monetary modes. Finally, this is the first study on non-monetary service recovery in the public sector context. Further studies are needed to achieve a more nuanced picture of the differences and similarities in public and private service encounters.

Nonetheless, the results of this study promote further investigation into public service management and the specifics of public encounters, a field with various possibilities and unanswered research questions that may offer significant insights to research on citizen-state interactions.

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Table 1: ANCOVA of interactions between explanation types on anger from service failure after recovery (Study 1)

	Anger	
	(1)	(2)
Excuse	0.132* (0.071)	0.036 (0.101)
Justification	-0.136** (0.067)	-0.264** (0.116)
Excuse * Justification		0.191 (0.142)
Constant	3.561*** (0.067)	3.625*** (0.082)
Observations	1,074	1,074
R ²	0.007	0.009
Adjusted R ²	0.005	0.006
F Statistic	3.767** (df = 2; 1071)	3.115** (df = 3; 1070)

Note:

*p<0.1; **p<0.05; ***p<0.01

Standard errors in parentheses

Table 2: ANOVA of treatments on anger from service failure after recovery (Study 1)

	Anger
Unspec. Excuse	0.007 (0.117)
Spec. Excuse	0.064 (0.116)
Spec. Excuse + Justification	-0.033 (0.116)
Unspec. Excuse + Justification	-0.041 (0.116)
Justification	-0.264** (0.116)
Constant	3.625*** (0.082)
Observations	1,074
R ²	0.009
Adjusted R ²	0.004
F Statistic	1.913* (df = 5; 1068)

Note: *p<0.1; **p<0.05; ***p<0.01 Standard errors in parentheses

Table 3: Structural Equation Model of the effects of explanations on anger and complaining behavior

lhs	op	rhs	est	se	z	pvalue
1 Vindictive Complaining	~	Justification	-0.22	0.11	-1.94	0.05
2 Vindictive Complaining	~	Excuse	0.00	0.11	0.03	0.98
3 Support-Seeking Complaining	~	Justification	-0.24	0.11	-2.17	0.03
4 Support-Seeking Complaining	~	Excuse	-0.00	0.11	-0.03	0.98
5 Anger	~	Justification	-0.29	0.13	-2.21	0.03
6 Anger	~	Excuse	-0.03	0.13	-0.25	0.80

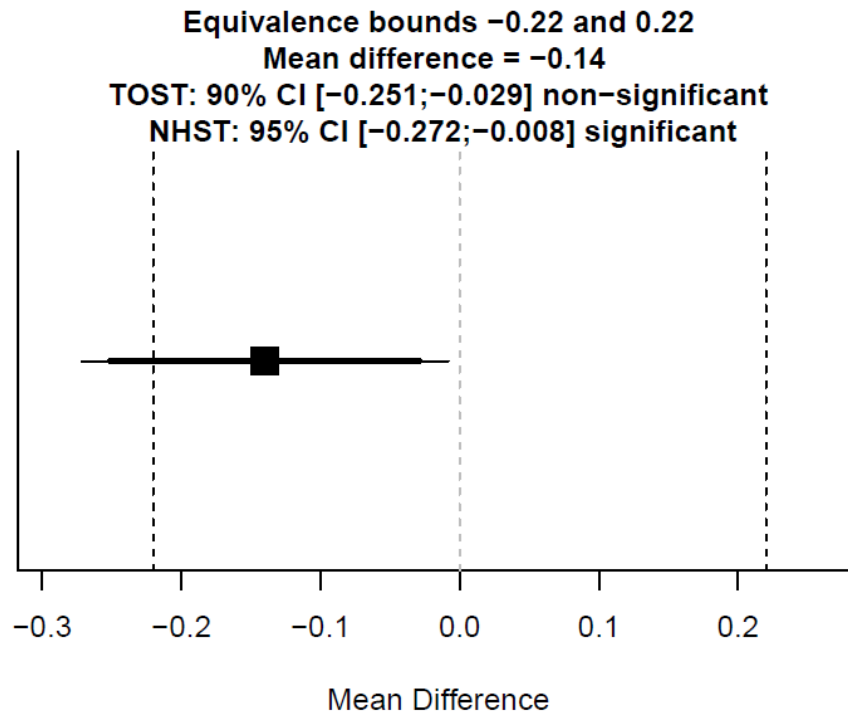


Figure 1: TOST of the effect of justifications

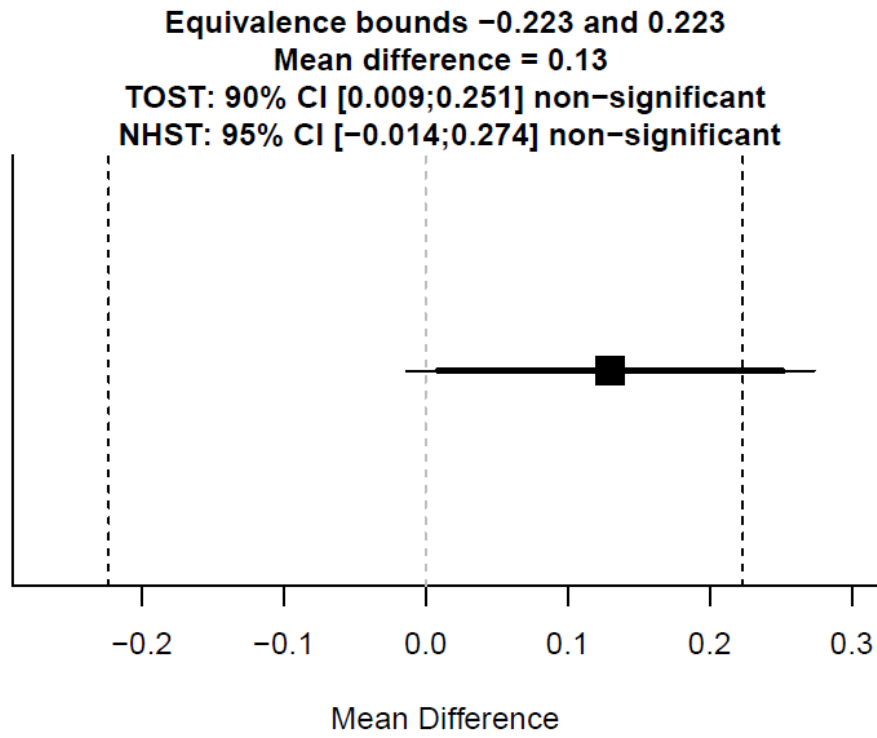


Figure 2: TOST of the effect of excuses

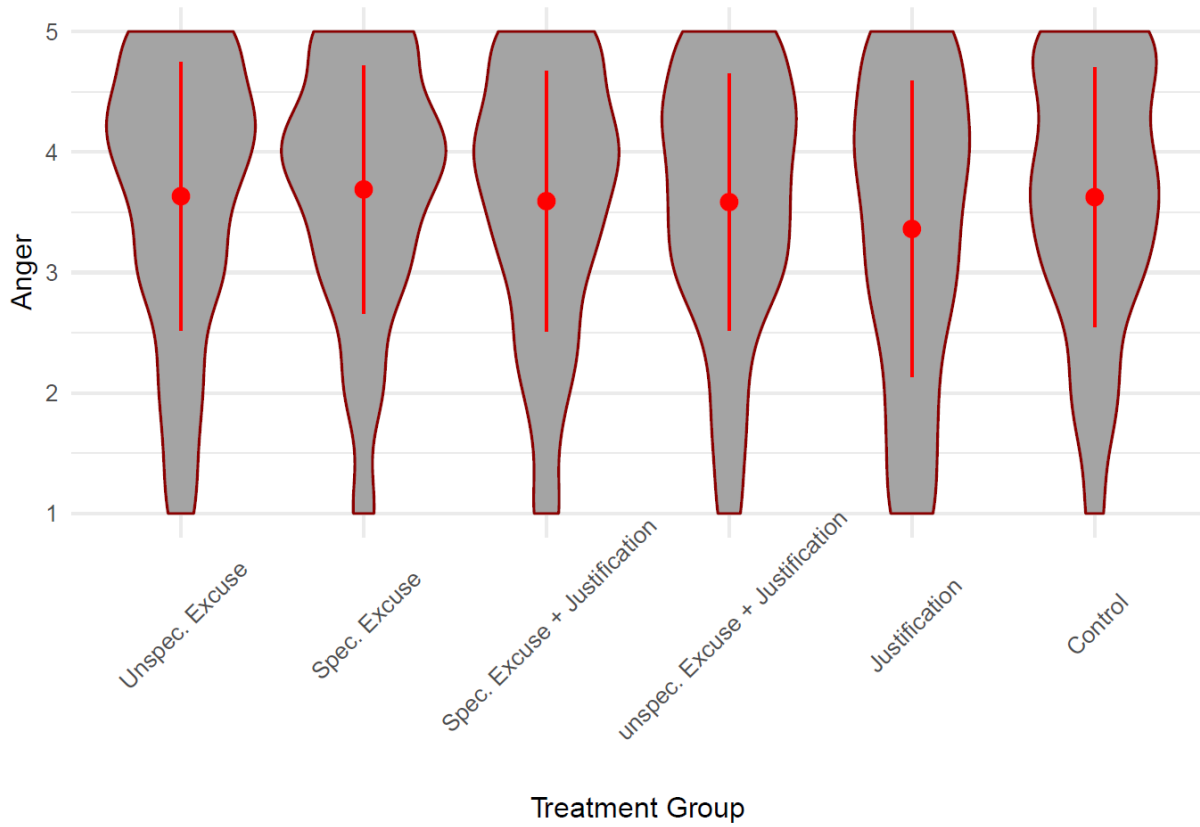


Figure 3: violin plot of treatment groups in Study 1

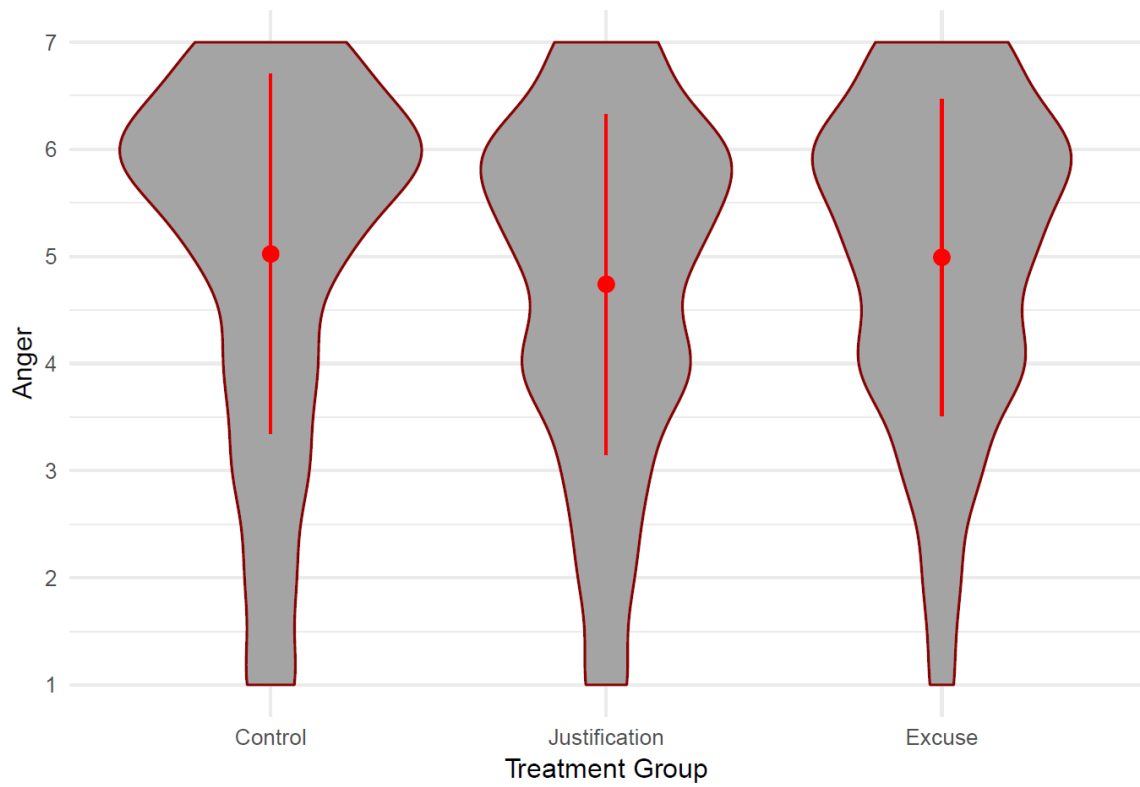


Figure 4: violin plot of treatment groups in Study 2