

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Godefroid, Marie-E.; Plattfaut, Ralf; Niehaves, Björn

Article — Published Version How to measure the status quo bias? A review of current literature

Management Review Quarterly

Provided in Cooperation with: Springer Nature

Suggested Citation: Godefroid, Marie-E.; Plattfaut, Ralf; Niehaves, Björn (2022) : How to measure the status quo bias? A review of current literature, Management Review Quarterly, ISSN 2198-1639, Springer International Publishing, Cham, Vol. 73, Iss. 4, pp. 1667-1711, https://doi.org/10.1007/s11301-022-00283-8

This Version is available at: https://hdl.handle.net/10419/307394

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.



WWW.ECONSTOR.EU

https://creativecommons.org/licenses/by/4.0/

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.





How to measure the status quo bias? A review of current literature

Marie-E. Godefroid¹ · Ralf Plattfaut² · Björn Niehaves¹

Received: 1 December 2021 / Accepted: 20 June 2022 / Published online: 1 August 2022 @ The Author(s) 2022

Abstract

The Status Quo Bias (SQB) describes an individual's preference to avoid changes and maintain the current situation. In today's world, technological advances require nearly constant change within organizations. Thus, SQB can become an issue when it hinders progress. Therefore, it is crucial to understand how this effect can be reliably measured and, even more importantly, what countermeasures to employ. Prior research has focused more on individual measuring approaches and less on countermeasures. As researchers across different research fields have studied this bias, we conduct a literature review spanning different scholarly fields. This broader research focus allows us to identify four measurement approaches and 13 countermeasures along the three aspects of cognitive misperception, rational decision making, and psychological commitment of SQB. Our overview consolidates existing knowledge and will hopefully be the starting point for researchers to start combating this bias where needed. Successful and proven countermeasures can, for example, increase the acceptance and adoption of digital innovations and technology in general and thereby allow organizations to capitalize on their investments.

Keywords Status quo bias \cdot Literature review \cdot Cognitive bias \cdot Bias measurement \cdot Countermeasures

JEL Classification D91

Marie-E. Godefroid Marie.Godefroid@uni-siegen.de

> Ralf Plattfaut plattfaut.ralf@fh-swf.de

Björn Niehaves Bjoern.Niehaves@uni-siegen.de

- ¹ University of Siegen, Siegen, Germany
- ² Process Innovation & Automation Lab, South Westphalia University of Applied Sciences, Soest, Germany

1 Introduction

"The most damaging phrase in the language is 'We've always done it this way'."

(Grace M. Hopper).

Status quo bias (SQB) is a non-rational or biased preference for the current way of doing things (Samuelson and Zeckhauser 1988). Like other simplified decision procedures, it can help to save time and be more efficient. Samuelson and Zeckhauser used the example of a colleague who always ordered the same sandwich for lunch when they introduced the bias in 1988. In this case, the colleague saves time and brain capacity in the decision-making process. However, SQB can be harmful when a change would improve the way of doing things, e.g., there might be a sandwich that is a healthier or tastier option, but, due to the biased preference for the status quo, the colleague is never going to try that sandwich. Since its initial publication, SQB has become a commonly studied issue. It has been found across industries and in different research contexts. For example, SQB has been studied in the context of novel ethical concepts (Bostrom and Ord 2006), energyrelated choices (Blasch and Daminato 2018), or investment decisions (Freiburg and Grichnik 2013). SQB can also be studied regarding different levels of analysis, e.g., individual (Kim and Kankanhalli 2009) or groups of individuals, be it in an organizational context (Bao 2009) or society at large (Telesetsky 2017).

This interest in SQB naturally does not stem from a vendetta against non-creative sandwich eaters. The reason for the interest is rather that SQB can hinder innovation and improvement. SQB can be harmful if a non-optimal current situation continues or if helpful improvements are ignored. To demonstrate this risk, we give three examples from different research contexts, namely politics, economics, and information systems. First, SQB can affect politics and, in times of climate change, the most critical environmental policies. Exemplarily, Mohn (2021) finds that the International Energy Agency's World Energy Outlook contained SQB towards fossil fuels which is not in line with the current worldwide aim for renewable energies. Second, SQB can also affect economic decisions, which can prove to be harmful to those individuals whom the decisions affect. In this regard, Lorenc et al. (2013) showed that SQB is one of the reasons for 'fuel poverty', e.g., income weak individuals spending too much of their already low income on unfavorable energy tariffs and not switching to a different tariff. Finally, SQB can impede the introduction of new technologies and is, therefore, quite frequently studied in information systems. One example of such a technology are enterprise resource planning (ERP) systems. The organizational value of ERP systems is well established; nonetheless, Kim and Kankanhalli (2009) were able to demonstrate that SQB impeded an ERP introduction in a major IT service company. In fact, adoption rates remained low because employees were biased towards continuing the use of their old system. As these examples indicate, SQB can be a problem and therefore requires suitable countermeasures.

But to counter SQB requires the ability to reliably measure it and then select the right countermeasures. However, so far, every publication seems to be

using a different path to measure SQB. Methods to measure SQB vary widely. Some of these variations can be explained with tailored approaches to the specific research context. For example, employing an econometric approach based on behavioral outcomes using secondary data to calculate SQB in the context of investment decisions, where it can be expressed as a monetary function, is logical (Freiburg and Grichnik 2013). However, in other contexts, different measurement approaches are used simultaneously. As an example, in the context of technology acceptance, Kim and Kankanhalli (2009) conceptualize a model for SQB based on the concepts of loss aversion, net benefits, transition costs, uncertainty costs, sunk costs, social norms, and control. However, in the same context, Li et al. (2016) only require the constructs of loss aversion, transition costs, and social norms to measure the same phenomenon. To date, an overview of these different approaches is still missing. There are laudable efforts, e.g., by Lee and Joshi (2017), who examined the use of different explanation approaches to SQB and related constructs, but these rather looked for the number of studies explaining a certain construct instead of a reliable way to measure SQB. However, approaches that reliably and validly measure SQB and can also be generalized across research contexts are essential to measure and counter SQB. Only then is it possible to compare and generalize results - be it between research streams or from research to practice. Especially for the question of deciding on the right countermeasures, the level of insight into the underlying aspects of SQB is also key.

Similar to the variance of measurement methods for SQB, there is a wide variety of countermeasures recommended in the literature. For example, the advice varies from recruiting new personnel from outside of the organization (Long et al. 2019) over telling success stories (Linnerud et al. 2019) to providing additional information material on the change (Hsieh et al. 2014). Here, it is also relevant to notice that status quo bias can occur on different levels, e.g., the individual (sandwich eating colleague) or on a group (be it a team, an organization, or a state) level. This is relevant as the bias might have different effects on the level of the primary adoption process on a group level and on the secondary adoption process on an individual level (Heidenreich and Talke 2020) and might also call for different countermeasures. To date, no overview exists that details countermeasures to SQB mentioned in the literature and guidance on when to apply which. Such an overview would facilitate knowledge exchange between research streams. As SQB is studied in very different fields, it would be a waste of resources to invent or test countermeasures again. An overview could also help practitioners to select the right countermeasures to their specific situation. To fill this gap, we aim to create an overview of the measurements used and countermeasures recommended. Thereby, we answer the following research questions:

RQ1 How is SQB measured across research fields, and what are the advantages and disadvantages of the different measurement approaches?

RQ2 Which countermeasures against SQB influence have researchers found in which contexts?

To this end, we conducted a systematic analysis of published research articles on SQB. We analyze these articles with regard to the two research questions and discuss ways to select the right measurement approach and the right countermeasure. Based on these insights, we also analyze the (potential) value of the SQB perspective for different application areas.

The remaining paper is structured as follows: Sect. 2 introduces the theoretical background. Section 3 details the method used to identify and analyze the relevant literature. Section 4 presents the findings, which are discussed in Sect. 5.

2 Theoretical background

2.1 Cognitive biases

Simon (1955) introduced bounded rationality, which led to the introduction of cognitive biases. He postulated that humans' access to information and their computational capacities limit their ability to make entirely rational decisions. These findings challenged the long-established model of the homo oeconomicus, e.g., the assumption that humans always maximize their absolute value based on the transparency of information (Doucouliagos 1994). The effects of the limitations identified by Simon (1955) can lead to certain distortions that researchers later conceptualized as cognitive biases. Biases describe behavior where "*individuals draw inferences or adopt beliefs where the evidence for doing so in a logically sound manner is either insufficient or absent*" (Haselton et al. 2015, p. 2).

The concept of bounded rationality enabled Tversky and Kahneman (1974) to introduce cognitive biases with their first three heuristics of representativeness, availability, and anchoring and adjustment. They were able to show that individuals have a biased perception of statistics. When asked in an experiment if it was more likely that a student described to them beforehand was now a bank teller or a feminist bank teller, most participants selected the latter. They had made a biased decision based on the prior information that detailed that the student was a feminist (representativeness heuristic). Similarly, participants made a biased decision when asked regarding the likelihood of a certain event occurring. Tversky and Kahneman (1974) were able to show that their assessment depended on how available information about such an event was for the participants (availability heuristic). Finally, they let people guess the size of large cities in the US and found that a random number given to the participants beforehand (and the participants were told that it was a random number) influenced their size estimate. Since these first findings, many more biases have been explored. Benson (2019), for example, identified 188 biases. One of these biases that were identified subsequent to Tversky and Kahneman's discovery was the status quo bias, which we detail in the next Sect. 2.2. However, studies have also identified additional related concepts, which we detail in the subsequent Sect. 2.3.

2.2 Status Quo Bias (SQB)

Samuelsen and Zeckhauser introduced SQB in 1988 with the lifelike example of a colleague that always took the same sandwich for lunch for decades. This colleague only once deviated from the status quo. To prove the general applicability of the effect, Samuelson and Zeckhauser (1988) reported on an experiment where they offered participants two different treatments. Treatment 1 informed participants that they inherited money from an uncle and offered them four options to invest the money. In the second version, the participants' received a similar treatment but received the information that their uncle had already invested the money in one of the options. In the case of treatment 2, the participants were more likely to choose the pre-selected option. They then conceptualize that there are three different categories of explanation approaches to this bias: cognitive misperception, rational decision making, and psychological commitment (Samuelson and Zeckhauser 1988).

2.2.1 Cognitive misperception

Here, Samuelson and Zeckhauser (1988) primarily refer to the concept of loss aversion established by Kahneman and Tversky (1979). In their experiments, Kahneman and Tversky were able to show that losses loom larger than gains in the value perception of individuals as a part of prospect theory. They found that individuals tend to forego substantial gains out of fear of minor losses (Kahneman and Tversky 1979). Individuals prefer to remain with the status quo because potential losses in the context of change are perceived as unrealistically large (Samuelson and Zeckhauser 1988).

2.2.2 Rational decision-making

Part of SQB can be explained with the aim of individuals to avoid uncertainty and transition costs. Uncertainty costs occur when the value of a good or service is not known beforehand. Therefore, individuals tend to, for example, stick to brands they have made positive experiences with. Similarly, it might be rational to stay with the same supplier, as transitioning to another would require an investment in a due diligence procedure. These costs have, however, already been invested for the current option. Thus, it might be a prudent option to stay with the status quo. In this context, one might also argue that individuals simply make the same decisions when similar options are presented. But rational decision-making cannot explain why people tend to remain with the status quo—even if potential gains would exceed any transaction or uncertainty costs.

2.2.3 Psychological commitment

This SQB aspect is most often conceptualized as the sunk cost effect. This effect describes the greater tendency to continue a course of action once an investment in money, effort, or time has occurred. Individuals tend to justify this behavior as not

wanting to appear wasteful (Arkes and Blumer 1985). In a wider sense, sunk costs can refer to skills related to the previous way of working that individuals will lose due to a change. This can, for example, be the time that individuals have invested in training for the current way of working. If, for example, a new technology is introduced, their training might not be applicable anymore and could therefore be considered as sunk cost (Kim and Kankanhalli 2009). In addition, researchers have found that the opinion of friends and colleagues also plays a large role (social influence) and that the level of control individuals experience also impacts SQB. The latter can be understood as how confident the user is about understanding and dealing with the change (Samuelson and Zeckhauser 1988).

The first measurement model that captured all three aspects of SQB was developed by Kim and Kankanhalli (2009), who studied SQB in the technology acceptance context. They then tested parts of this model successfully in the context of an introduction of an Enterprise Resource Planning system (Kim and Kankanhalli 2009). A subsequent review of works that cited Kim and Kankanhalli found that the focus of researchers has unduly lain on rational decision-making explanation approaches (Lee and Joshi 2017). In addition, Wu (2016) offers the first meta-analytic review of status quo bias in technology adoption. He was able to confirm the findings on construct-relationships of previous researchers.

2.3 Related concepts to the SQB

Several concepts or biases in themselves are closely related and studied in the context of SQB. The most prominent ones are the default bias, inertia, loss aversion, sunk cost, and innovation resistance, including the concept of status quo satisfaction. These are established concepts on their own and will facilitate the reader's understanding of our findings, as they appear in several publications alongside SQB. Other biases mentioned by a few publications in conjunction with the SQB, like the omission bias (Ritov and Baron 1992), are not detailed here for brevity's sake.

The default bias or effect describes a choice between different options where individuals are more likely to choose the pre-selected option. The outcome subsequently deviates from the choice scenario where nothing is pre-selected. Samuelson and Zeckhauser (1988) already referenced this effect in their initial publication on the SQB (Samuelson and Zeckhauser 1988). There are different options regarding the study of this bias: One option is that a previous choice by participants becomes their default in a second round of the experiment (Krieger and Felder 2013). The other option is that individuals get multiple options that are all new to them, but the framing of the question presents one option as the default (Geng 2016; Suri et al. 2013) or what becomes the default in a future scenario (Korobkin 1998). The default bias appears in situations where one choice (the default) is pre-selected. This situation can be a case of continuing the status quo, however, it can also be a new situation. For example, when individuals install a new technology (thus changing their status quo) but keep the default password setting and thereby creates a security risk (Kankane et al. 2018).

Organizational inertia describes that the size, complexity, structure, systems, procedures, and processes of an organization can affect its resistance to change (Tushman and O'Reilly 1996). For example, inertia can negatively influence the intention to use a new system (Polites and Karahanna 2012). This resistance can enforce the status quo (Schwarz 2012). Inertia has appeared in various contexts, from the adoption of mobile payment systems (Zhang et al. 2016) over health clouds (Hsieh et al. 2014) to smartphones (Lin et al. 2015).

Loss aversion was established by Kahneman and Tversky (1979) when they discovered that losses loom larger than gains in the value perception of individuals as a part of prospect theory. They found that individuals tend to forego substantial gains out of fear of minor losses. Samuelson and Zeckhauser (1988) identified the cognitive misperception of loss aversion as an explanation for SQB. Individuals prefer to remain with the status quo because potential losses in the context of change are unrealistically large (Kim and Kankanhalli 2009). Prior research identified the overlap of loss aversion with SQB (Kahneman et al. 1991). However, following Samuelson and Zeckhauser (1988), loss aversion is only one of three explanation approaches for SQB. Thus, for certain situations, the other two aspects of SQB might have more explanation potential. In other situations, e.g., the choice between two investment options (none of them being the status quo) where loss aversion explains individual behavior, SQB is not relevant at all.

The sunk cost effect describes the greater tendency to continue a course of action once an investment in money, effort, or time has occurred. Individuals tend to justify this behavior as not wanting to appear wasteful (Arkes and Blumer 1985). In the technology acceptance context, sunk costs can refer to skills related to the previous way of working that individuals will lose due to the switch to the new system (Kim and Kankanhalli 2009). Similar to loss aversion, there might be situations where SQB applies, but sunk cost is not the salient explanation approach. However, in difference to loss aversion, sunk costs always lead to SQB, like the fact that there are sunk costs implies that there must be a status quo on which these costs have been spent.

Finally, innovation resistance research offers additional insights: Innovation resistance itself is a phenomenon well known in the literature. Innovation resistance is hereby understood as a normal consumer response when faced with the adoption and use of an innovation. It describes any behavior that aims at maintaining the status quo as well as current beliefs. Innovations typically lead to change, and individuals might have good reasons to exhibit behavior aimed at maintaining the status quo (Ram 1987). A factor that can even increase resistance is status quo satisfaction. For example, a consumer that is very satisfied with a product is more likely to resist change than a consumer not satisfied with the given product—provided all other factors are the same (Heidenreich and Handrich 2015). Interestingly and this concept does not appear under the keyword of "status quo bias". The focus lies only on status quo satisfaction. To account for these differences in nomenclature, we decided to use a more open search string, as detailed in the next section.

3 Methodology

3.1 Data collection

Following the recommendations by Watson and Webster (2002) and Tranfield et al. (2003), we did not limit the literature search to specific journals to holistically understand current research on SQB. Thus, we also included publications from all research fields in our analysis to ensure comprehensive coverage (vom Brocke et al. 2015). To allow for a broad overview of the topic of SQB and also include adjacent research streams, we conducted a literature review based on a keyword-based search for (("status quo") AND (("bias") OR ("satisfaction")) OR ("innovation resistance")) on the Web of Science and the AIS library. We searched the Web of Science to gain a broad spectrum of publications. We also searched the AIS Library to include the latest research, e.g., conference publications from the area of information systems, as the first review of journal publications suggested a recent increase of publications in this research area. For the search, we employed four selection criteria: accessibility, universality, publication-quality, and relevance (Anggraini and Sholihin 2021). The publications had to be accessible to the public. Thus, we only reviewed published research. The publications need to be in a universally understandable language, e.g., English, French, or German. The publications had to fulfill certain quality criteria, like being peer-reviewed. Thus, we included peer-reviewed journals and conference publications. Finally, the publications had to be relevant and thus contain the keyword in the title, abstract, or keywords. This search resulted in 768 publications.

3.2 Data selection and quality assessment

In a second step, we then selected relevant data and performed a quality assessment. Based on a first review of the publication abstracts, we excluded one duplicate (1) and publications that did not mention SQB or a related concept (136). We also excluded publications that only mentioned SQB or related concepts in passing (140). We then reviewed the remaining 492 publications and excluded 229 publications that discussed SQB or related concepts but did not elaborate on the phenomenon in depth. For example, for this research, the focus is on SQB. Therefore, we assumed that publications only mentioning SQB in passing would not add substantial insights to the topic. Nonetheless, we included results that discuss SQB but mainly measure related concepts like inertia or default bias (see Sect. 3.2 related concepts to SQB). This procedure left us with 262 publications for detailed analysis regarding measure meant models and countermeasures (see Fig. 1).

3.3 Data analysis

Our analysis revealed that researchers across fields have studied SQB. To show the variety of research fields that have explored SQB, we analyzed the outlets and the



Fig. 1 Selection approach for the literature review. The full list of publications reviewed in depth can be obtained from the authors upon request



Fig. 2 Distribution of studies across time

topics they pertain to for those publications discussing SQB in depth. Of the 262 publications analyzed in-depth, 112 came from the field of Business and Economics, 80 from Information Systems, 24 from Psychology and Medicine, 21 from Politics and Law, 17 from Energy and Sustainability, five from Education and Teaching, and three from Ethics. Overarching, we can identify an increase in studies on SQB and related concepts across research areas in the last fifteen years (see Fig. 2). As this article is written during the year 2022, to avoid distortion we do not include the 3 publications already published this year.

Regarding the unit of analysis of the bias, we found that only a minority of publications focused on groups of individuals, e.g., organization or state level (31). Instead, the majority focused on individual decisions either in general (34), the organizational context, e.g., employees and students (39), or consumers and citizens (158). The most frequent methods were surveys (141), followed by purely theoretical works (51) and experiments (36). Less common were interviews (14), secondary data analysis (8), mixed methods (5), case studies (4), and literature reviews (3). In addition, we assessed the 262 publications reviewed in detail for the way they measured SQB. For those studies that used multiple constructs, we categorized the used constructs based on the three initial aspects of cognitive misperception, rational decision-making, and psychological commitment, as introduced by Samuelson and Zeckhauser (1988). We also reviewed the practical implications of the publications for countermeasures to SQB. We present these countermeasures as clusters along the three conceptual aspects of SQB in the following findings sections.

4 Findings

asure SQB

Our assessment of the measurement approaches leads us to identify four different approaches to measure SQB: Firstly, the measurement by an econometric approach based on behavioral outcomes, secondly, the measurement through medical means like the subthalamic nucleus activity, thirdly with multiple constructs, and fourthly, the direct measurement with several items.

Firstly, several studies assess SQB through an econometric approach based on behavioral outcomes, for example, by comparing share values (Enns et al. 2014), investments with different levels of risk in lottery decisions (Bekir and Doss 2020), different policy preferences (Alesina and Passarelli 2019), different farming options (Hermann et al. 2016), or investment decisions (Freiburg and Grichnik 2013). The latter, for example, measured SQB as such: "*Reinvestment: An investment decision was defined as reinvestment if a LP [limited partner, i.e., institutional investor] had already invested in earlier funds of a GP [general partners, i.e., private equity firms] [...]. The binary variable was coded one if an earlier investment in the same GP had been made and zero otherwise. If the reinvestment variable predicts the investment decision after controlling for potential information and access benefits of these reinvestments, evidence for the status quo bias would exist" (Freiburg and Grichnik 2013, p. 141). However, these measurement approaches require sufficient longitudinal data to repeatedly observe the behavior of humans or organizations.*

Secondly, there are a few studies that observe SQB with medical means during a decision task, e.g., based on the subthalamic nucleus activity (Fleming et al. 2010), the functional magnetic resonance imaging data (Nicolle et al. 2011), functional near-infrared spectroscopy (Hu and Shealy 2020), and transcranial magnetic stimulation (Pisoni et al. 2014).

Thirdly, several studies used multiple constructs to measure SQB. Four of the studies in our literature review assigned these constructs to the three explanation categories, cognitive misperception, rational decision making, and psychological commitment that Samuelson and Zeckhauser (1988) identified. Interestingly the studies assign different constructs to these aspects, and in two cases, they assigned the same construct to different categories. This overlap implies that these should not be seen too strictly (see Table 1). For example, Mueller et al. (2019) assign perceived value to the rational decision-making aspect, while Kim and Kankanhalli (2009) identify this construct as not pertaining to SQB literature. Similarly, switching costs are assigned to different categories by different authors.

Based on the constructs assigned to the three explanation aspects, we subsequently reviewed the other studies regarding their use of these constructs (see Table 2). We reviewed all studies that contained a measurement model with multiple constructs carefully regarding their use of the constructs identified in Table 1. We included all studies that contained at least two of the concepts, to exclude studies that focused primarily on something else. We marked those rows with an x, where the construct was used under the same name and aspect. The same construct might,

Table 1 Measurement constru	icts related to three core as	pects		
Publication	Cognitive misperception	Rational decision making	Psychological commitment	Other constructs
Kim and Kankanhalli (2009)	Loss aversion	Net benefits, Transition costs, Uncertainty costs	Sunk costs, Social norms, Control	Switching benefits, Perceived value, Switching costs, Colleague opinion, Self-efficacy for change, organizational support for change
Hsieh et al. (2014)	Inertia, Perceived value	Transition costs, uncertainty	Sunk costs, Regret avoidance	Perceived usefulness, Perceived ease of use
Hsieh (2015)	Inertia, Perceived value	Switching costs, Perceived threat	Sunk costs, Regret avoidance	Attitude, social norm, perceived behavior control, Intention to use, resistance to use
Li et al. (2016)	Loss aversion	Transition costs	Social Norms	Inertia, Affective inertia, Behavior Inertia, Cognitive Inertia, KMS Resistance Intention
Khedhaouria et al. (2016) Mueller et al. (2019)	Switching costs Loss aversion, Anchor- ing effects, inertia	Switching costs Uncertainty, Transition costs, Perceived value	Switching costs, Satisfaction, Sunk cost, Regret avoidance, Deci- sion control	Habit, Inertia, Continuance intention Organizational support, Colleague, Intention to use, Organizational norms, Social norms

Table 2 Di	fferent mea	surement	approaches to	o SQB										
Publica- tion	Cog. misł	oerception			Rational d	ecision maki	gu			Psychole	gical commi	tment		
	Loss aversion	Inertia	Anchoring effects	Per- ceived value	Net benefits	Transition costs	Uncertainty costs	Switching costs	Per- ceived threat	Sunk costs	Regret avoidance	Social norms	Control	Satisfac- tion
Abbas et al.					(X)				×			×		
Abualrob and Kang	(X)						×						8	
Ahn and Ahn (2020)					×			X					×	
Attanasi et al. (2017)	X												×	
Bal- akrishnar et al. (2021)	E	×		×				×		×	×			
Chang (2020)							Х						x	X
Chang et al. (2020)					×		×	×						×
Chen and Dickson (2008)												x	x	x

Table 2 (cc	ontinued)													
Publica- tion	Cog. misp	erception			Rational d	ecision maki	gu			Psychol	ogical commi	itment		
	Loss aversion	Inertia	Anchoring effects	Per- ceived value	Net benefits	Transition costs	Uncertainty costs	Switching costs	Per- ceived threat	Sunk costs	Regret avoidance	Social norms	Control	Satisfac- tion
Chen and Chen (2015)					x		X						x	
Cheng et al. (2016)													×	×
Chi et al. (2020)				X				X						
Chung and Liang (2020					X								×	×
Eidelman et al. (2009	x						×					×		
Gardiner and Andoh- Baidoo (2019)	×			×				×					×	
Hamilton (2021)												×	x	x
Heidt et al. (2017)				×					×					

Table 2 (co	ontinued)													
Publica-	Cog. misp	erception			Rational de	ecision maki	ng			Psychol	ogical commi	itment		
TOD	Loss aversion	Inertia	Anchoring effects	Per- ceived value	Net benefits	Transition costs	Uncertainty costs	Switching costs	Per- ceived threat	Sunk costs	Regret avoidance	Social norms	Control	Satisfac- tion
Hong et al. (2011)							X						x	×
Hong and Chang (2013)											×		×	
Hsieh (2015)		x		х				X	х	×	Х			
Hsieh et al. (2014)		X		×		x	×			×	x			
Hu et al. (2011)				(X)								x		
Huber et al. (2012)							x							×
Ju and Lee (2021)					x		Х						Х	X
Jung and Lim (2021)	x	x					X	x						

Table 2 (co	intinued)													
Publica- tion	Cog. misp	perception			Rational d	ecision maki	ßu			Psychole	gical commi	tment		
	Loss aversion	Inertia	Anchoring effects	Per- ceived value	Net benefits	Transition costs	Uncertainty costs	Switching costs	Per- ceived threat	Sunk costs	Regret avoidance	Social norms	Control	Satisfac- tion
Juric and Linden- meier	×				×								×	×
(2019) Katan (2009)													×	X
Kaur et al. (2021)		×						X					X	x
Kautish et al. (2021)		×												×
Khed- haouria et al. (2016)								×						×
Kim (2011)				X	(X)	Х	Х					x		
Kim and Kan- kanhalli (2009)	×			(X)	×	×	×	(X)		×		×	×	
Kim and Perera (2008)							х	x						

Table 2 (cc	ontinued)													
Publica- tion	Cog. misp	erception			Rational du	ecision maki	gu			Psychol	ogical comm	itment		
	Loss aversion	Inertia	Anchoring effects	Per- ceived value	Net benefits	Transition costs	Uncertainty costs	Switching costs	Per- ceived threat	Sunk costs	Regret avoidance	Social norms	Control	Satisfac- tion
Kim and Lee							x							x
Kim et al. (2017)					X		X						x	
Klöcker et al. (2014)				×				×						
Korn et al. (2015)					x									
Kuo (2020)		x			x			X			x			X
Labrecque et al. (2017)							×	x						
Ledger- wood et al. (2011)							×						X	
Lemay et al. (2021)		×					x					×		

Table 2 (co	ontinued)													
Publica- tion	Cog. misp	perception			Rational de	ecision maki	ß			Psychol	ogical commi	itment		
	Loss aversion	Inertia	Anchoring effects	Per- ceived value	Net benefits	Transition costs	Uncertainty costs	Switching costs	Per- ceived threat	Sunk costs	Regret avoidance	Social norms	Control	Satisfac- tion
Leong et al. (2020)								X						x
Li and Cheng (2014)	×	×										×		
Li et al. (2016)	×	(X)				×						×		
Lin et al. (2015)	×	×			x			x						x
Liñeira and Hen- derson (2021)	8						×							
Lucia- Palacios et al. (2016)		×						×						×
Moorthy et al. (2017)							×						×	
Morisi et al. (2021)			×				×							

1683

 $\stackrel{{}_{\scriptstyle{\frown}}}{\underline{\frown}}$ Springer

Table 2 (co	ontinued)													
Publica- tion	Cog. misp	erception.			Rational de	ecision maki	ng			Psychol	ogical comm	itment		
	Loss aversion	Inertia	Anchoring effects	Per- ceived value	Net benefits	Transition costs	Uncertainty costs	Switching costs	Per- ceived threat	Sunk costs	Regret avoidance	Social norms	Control	Satisfac- tion
Mueller et al. (2019)	X	×	X	x		×	X			×	X		×	
Ng and Kwahk (2010)				×				×						x
Oster- mann et al. (2020)		×											X	×
Park et al. (2017)		x						×					X	×
Park and Ryoo (2013)								X						X
Polites and Kara- hanna (2012)		×				×						×		
Puiu et al. (2021)					×									X
Qin (2021)					х								X	(X)

Table 2 (co	ontinued)													
Publica- tion	Cog. misp	perception			Rational d	ecision maki	gu			Psycholc	gical commi	tment		
	Loss aversion	Inertia	Anchoring effects	Per- ceived value	Net benefits	Transition costs	Uncertainty costs	Switching costs	Per- ceived threat	Sunk costs	Regret avoidance	Social norms	Control	Satisfac- tion
Shin et al. (2019)	×						X							
Shirish and Bat- uekueno (2021)	×	×			(X)		×	x					×	
Simona- Moussa and Ravazzini							Х					×		×
Sivathanu (2019)					X							x		X
Siyal et al. (2019)				(X)					(X)					
Stryja and Satzger (2019)	×						×	x		×	×			
Talwar et al. (2020)					×							×	x	×
Wang et al. (2019a)		×						×						

Table 2 (co	ontinued)													
Publica- tion	Cog. misp	erception			Rational d	ecision maki	ng			Psychol	logical commi	itment		
	Loss aversion	Inertia	Anchoring effects	Per- ceived value	Net benefits	Transition costs	Uncertainty costs	Switching costs	Per- ceived threat	Sunk costs	Regret avoidance	Social norms	Control	Satisfac- tion
Wang et al.		x					×							×
(2019b)														
Wu (2016)				Х	(X)		Х		х					
Wu et al. (2021)								X						x
Zhang et al. (2016)		×		×									x	
Zhang et al. (2017)				(X)		×				×				
Σ	15	20	2	16	19	7	28	24	5	Г	7	14	27	30

🖄 Springer

however, be measured with different questions. To signify deviations, we marked constructs with an (x) that appear under a different name or aspect. For example, Kim and Kankanhalli (2009) do not classify a perceived value as pertaining to SQB, but we have located it there following Hsieh (2015).

Regarding the second row (the concepts used to measure the different explanation categories), we tried to find a compromise between the assignments in the studies in Table 1. We consider perceived value to belong both to cognitive misperception and rational decision-making due to the inconclusive assignment (see Table 1). We also consider switching costs to fall under the rational decision-making aspect following Hsieh (2015). We do so as Kim and Kankanhalli (2009) did not assign it to any aspect, and Khedhaouria et al. (2016) assigned it to all three aspects.

Table 2 also aggregates further details in the studies to provide an overview of the different concepts used. Shaded in gray are those studies with a clear allocation of constructs to SQB aspects, as detailed in Table 1. For example, Kim and Perera (2008) describe that they have conceptualized switching costs further into uncertainty costs, emotional costs, setup costs, learning costs, sunk costs, and lost performance costs. But this only appears in Table 2 as uncertainty costs and switching costs as these have been assigned to the overarching aspects by one of the four studies cited in Table 1. This entails that we also do not report other non-SQB concepts used in the different measuring models, as we aim to focus on SQB theory.

The overview of constructs used to measure SQB shows a focus on certain constructs and a nearly even distribution across explanation approaches. The concept we found most often was satisfaction (30), followed by uncertainty cost (28) and control (27), thus representing rational decision-making and psychological commitment. However, with relatively frequent measures of inertia (20), we also find constructs from the cognitive misperception aspect. This paints a slightly different picture than the results by Lee and Joshi (2017), who found a heavy bias towards more rational explanation approaches for SQB. This could either indicate that this is an IS-specific issue or that studies focusing primarily on SQB are more likely to make a more holistic explanation approach. Nonetheless, our finding underlines the importance for future researchers to consider all possible categories of explanation approaches. Also, we still need more clarity on the interrelation of the different constructs and their specific explanation value to ensure their optimal use. As an additional step to understanding how these concepts appear in SQB research, we assessed all 262 texts regarding their analysis of SQB in relation to the concepts established above (see Table 2). We found that 80 publications did not highlight a specific aspect. However, the majority did highlight specific concepts pertaining to SQB. The most prominent ones were loss aversion (96), transaction cost (49), and sunk cost (40).

Fourthly, we found two studies that directly measured SQB as one construct through a set of questions (Sun et al. 2019; Blasch and Daminato 2018). Exemplarily, Blasch and Daminato (2018) examined behavioral anomalies and energy-related individual choices and assessed SQB with six questions:

- 1. "I get easily attached to material things (my car, my furniture, etc.).
- 2. I would have problems with having to move to a smaller place.
- 3. I tend to keep old stuff around.

- 4. I feel very bad if I lose something, even when it's not that important.
- 5. I think I could cope losing all my belonging in a fire.
- 6. I would have no problem accepting a job that has less pay than my previous/current one."

(Blasch and Daminato 2018, p. 13).

4.2 Measures to counter SQB

Once it is established that SQB is, in fact, influencing a decision, the next step should be a discussion on how to counter it. In the following (see Tables 3, 4, 5), we grouped countermeasures mentioned in the different publications by the three explanation approaches loss aversion, rational decision making, and cognitive misperception (Samuelson and Zeckhauser 1988). From the literature, we derived fifteen aggregated countermeasures. These countermeasures focus either on the individual or organizational level. We assigned the countermeasures to the three explanation approaches based on the respective authors' argumentation. For example, Zhang et al. (2016) mention that additional resources can help users feel in control. Control is one of the constructs used to measure psychological commitment (Kim and Kan-kanhalli 2009). As such, we assigned "provide additional information and resources" to the psychological commitment group. All of these countermeasures are proposed as beneficial for the desired change. However, if their effects are actually beneficial, neutral, or detrimental cannot be established yet, as most of them have not been tested in practice so far.

To counter the cognitive misperception aspect of SQB, we found four aggregated countermeasures: Two on the individual level (manipulate the default and rephrase the problem) and two on the group level (get an outside opinion and change the structure of decisions). An SQB countermeasure that might not be applicable in every situation is the measure to manipulate the default. This effect can be achieved by framing the desired option as the default to nudge towards change. Henkel et al. (2019) demonstrated that the manipulation of setting the default on a more environmentally friendly search engine nudged participants towards more pro-environmental behavior. Similarly, the choice of health insurance plans can be influenced towards a specific beneficial option (Krieger and Felder 2013). Another quite context-specific measure is the approach to rephrase the problem. It can help to postulate the situation as a reverse scenario to test for SQB. For example, to ask if a shorter lifespan would be desirable in a discussion of lifespan enhancing measures (Bostrom and Ord 2006). In this line, Li et al. (2016) recommend encouraging creative thinking in general. On the group level, SQB can be addressed through external influences in the form of introducing new people. Long et al. (2019) suggest periodically introducing new people into the organization to ensure that abandonment decisions in multistage projects are taken. A less substantial change is to rotate personnel internally. Freiburg and Grichnik (2013) see this as a measure to avoid SQB in institutional reinvestments in private equity funds. Another measure is to change the structure of the decisions. This can imply getting a higher leadership level to make the decisions. Sherren et al. (2016), for example, call for regional or even federal

	Countermeasures	Example	Sources
Cognitive m	usperception		
Individual	Manipulate the default	Frame a desired option as the default	Henkel et al. (2019), Krieger and Felder (2013), Labrecque et al. (2017), Casidy et al. (2021), Chouk and Mani (2019), Hew et al. (2019)
	Rephrase the problem	Postulate the reverse scenario to test for SQB	Bostrom and Ord (2006), Li et al. (2016), Boeuf (2019)
Group	Get an outside opinion	Recruit new personnel from outside	Long et al. (2019), Freiburg and Grichnik (2013), Chatfield and Reddick (2019), Eterovic (2010), Ostermann et al. (2020), Pal et al. (2019), Tavera-Mesias et al. (2021)
	Change the structure of the decisions	Involve senior management in the decisions	Sherren et al. (2016), Enns et al. (2014), Song and Ahn (2019), Freiburg and Grich- nik (2013), Shirish and Batuekueno (2021), Bellé et al. (2018), Mani and Chouk (2017), Choi et al. (2020), Kim et al. (2016), Wang et al. (2020), Kroh (2021)

Table 3 Countermeasures for SQB - cognitive misperception aspect

Table 4 Cou	intermeasures for SQB - rations	al decision making	
	Countermeasures	Example	Sources
Rational dec	ision making		
Individual	Tell success stories	Provide engineers with exemplary projects to prove feasibility	Linnerud et al. (2019), Kim (2011), Shealy et al. (2019), Bekir and Doss (2020), Wu (2016), Matsuo et al. (2018)
	Reduce the perceived change	Frame the adoption of a new product as requir- ing only small changes	Heidenreich and Kraemer (2015), Talke and Heidenreich (2014)
	Use mental simulation	Use marketing campaigns that drive self- visualization	Heidenreich and Kraemer (2016), Talke and Heidenreich (2014)
	Use financial incentives	Pay individuals money to deviate from the status quo	Boonen et al. (2009), Blasch and Daminato (2018), Talwar et al. (2020), Kautish et al. (2021), Keegan et al. (2019), Mani and Chouk (2018, Chang (2020), Heidenreich et al. (2016), Stackhouse et al. (2020), Kaur et al. (2021), Lian and Yen (2013), Ahn and Ahn (2020), Laukkanen (2016), Mani and Chouk (2017), Kushwah et al. (2019), Wong et al. (2021), Hew et al. (2019), Pal et al. (2019), Tandon et al. (2021), Nel and Boshoff (2021), Castro et al. (2019), Siyal et al. (2019), Wang et al. (2019a)
	Increase the perceived value of the change	Emphasize the advantages of a new service from the viewpoint of service users	Hsich (2015), Kim and Kankanhalli (2009), Ng and Kwahk (2010), Hsich et al. (2014), Gardiner and Andoh-Baidoo (2019), Bekir and Doss (2020), Klöcker et al. (2017), Telesetsky (2017), Balakrishnan et al. (2015), Zhang et al. (2017), Telesetsky (2017), Balakrishnan et al. (2015), Talwar et al. (2020), Juric and Lindenmeier (2019), Mani and Chouk (2018), Kuo (2020), Juric and Lindenmeier (2019), Mani and Chouk (2013), Kuo (2020), Bao (2009), Greene and van Riel (2021), El-Jardali et al. (2013), Lian and Yen (2013), Ahn and Ahn (2020), Kim et al. (2013), Lian and Yen (2013), Ahn and Ahn (2020), Kim et al. (2017), Lauk-kanen (2016), Mani and Chouk (2011), Casidy et al. (2021), Blasch and Daminato (2018), Chouk and Mani (2019), Kushwah et al. (2021), Blasch and Daminato (2018), Chouk and Mani (2019), Kushwah et al. (2019), Wong et al. (2020), Abbas et al. (2017), Wang et al. (2020), Hackarella et al. (2019), Heidenreich and Kraemer (2016), Hietschold et al. (2021), Heidenreich and Kraemer (2016), Hietschold et al. (2020), Hong and Chang (2013), Inman and Zeelenberg (2002), Wang et al. (2019), Cheng et al. (2019), Cheng et al. (2015), Heidenreich and Kraemer (2016), Hietschold et al. (2020), Hong and Chang (2013), Inman and Zeelenberg (2002), Wang et al. (2019), Cheng et al. (2015), Heidenreich and Kraemer (2016), Hietschold et al. (2019), Cheng et al. (2015), Heidenreich and Kraemer (2016), Hietschold et al. (2020), Hong and Chang (2013), Inman and Zeelenberg (2002), Wang et al. (2019), Cheng et al. (2016)

	Countermeas-	Example	Sources
	ures		
Psychologic: Individual	l commitment Provide additional information and resources	Give users more information about the change itself	 Hsieh et al. (2014), Zhang et al. (2016), Merriman et al. (2016), Weiler et al. (2019), Lorenc et al. (2013), Henkel et al. (2019), Kim (2011), Li et al. (2016), Chi et al. (2020), Jung and Lim (2021), Matsuo et al. (2018), Ma and Lee (2019), Cheng et al. (2018), Leong et al. (2020), Ghung and Liang (2020), Sivathanu (2019), Bellé et al. (2018), Hong et al. (2011), Juric and Lindenmeier (2019), Kuo (2020), Huber et al. (2012), Bellé et al. (2003), Hong et al. (2021), Heidenreich et al. (2016), Kuo (2020), Huber et al. (2012), Bao (2009), Lemay et al. (2021), Heidenreich et al. (2016), Carmonae et al. (2021), Kuo (2021), Wiedmann et al. (2011), Soh et al. (2020), Baccarella et al. (2021), Nel and Boshoff (2021), Castro et al. (2019), Choudrie et al. (2018), Tavera-Mesias et al. (2021), Heidenreich and Kraemer (2015), Stryja and Satzger (2019), Wang et al. (2019), Adjüüzel et al. (2019), Heidenreich and Kraemer (2015), Stryja and Satzger (2019), Wang et al. (2019), Adjüüzel et al. (2019)
	Train users suf- ficiently	Use well-designed training sessions that guide users step- by-step	Gardiner and Andoh-Baidoo (2019), Chi et al. (2020), Kim and Kankanhalli (2009), Kim (2011), Shirish and Batuekueno (2021), Leong et al. (2020), Park and Ryoo (2013), Chung and Liang (2020), Cho and Chang (2008), Hong et al. (2011), Juric and Lindenmeier (2019), Lucia-Palacios et al. (2016), Mani and Chouk (2018), Kuo (2020), Chang (2020), Wang et al. (2019b), Lemay et al. (2021), Greene and van Riel (2021), El-Jardali et al. (2013), Kim and Lee (2021), Moorthy et al. (2021), Greene and van Riel (2020), Chouk and Mani (2019), Lian and Yen (2014), Wong et al. (2021), Carmona-Lavado et al. (2020), Abbas et al. (2017), Pal et al. (2019), Baccarella et al. (2021), Siyal et al. (2019), Chang et al. (2020), Wang et al. (2019), Hossain et al. (2021), Siyal
	Address sunk costs	Highlight the value of existing knowledge	Kim (2011), Zhang et al. (2017), Heidenreich and Kraemer (2015), Chang et al. (2020)
Group	Use social feedback	Offer feedback that allows a comparison with colleagues	Shealy et al. (2019), Blasch and Daminato (2018), Matsuo et al. (2018), Kaur et al. (2021), Chen and Kuo (2017), Talwar et al. (2020), Greene and van Riel (2021), Stackhouse et al. (2020), Chen et al. (2019), Hew et al. (2019), Abbas et al. (2017), Ray et al. (2020), Castro et al. (2019), Tavera-Mesias et al. (2021), Siyal et al. (2019), Hossain et al. (2019), Adigüzel et al. (2019)
	Activate change agents	Motivate early adaptors to influ- ence their colleagues	Chi et al. (2020), Kim and Kankanhalli (2009), Wu (2016), Park and Ryoo (2013), Leong et al. (2020), Chung and Liang (2020), Talwar et al. (2020), Lian and Yen (2013), Kim et al. (2017), Hietschold et al. (2020)
	Change social norms	Change social norms to influ- ence status quo perception	Merriman et al. (2016), Hermann et al. (2016), Hong (2020), Leong et al. (2020), Chung and Liang (2020), Inman and Zeelenberg (2002), Wang et al. (2019a)

leadership to ensure that the right decisions regarding land-use policies are made. Similarly, Enns et al. (2014) argue that current political decision structures in the US need to be changed to avoid SQB towards the benefits of top income shares. Depending on the situation, this change can happen in the form of making the decision procedure easier, as Song and Ahn (2019) suggest for emissions trading. Or in the form of a written argumentation for investment decisions (Freiburg and Grichnik 2013).

We identified five countermeasures that focus on the rational decision-making aspect of SQB-all on the individual level: To tell potential users success stories, to reduce the perceived change, to use mental simulation, to use financial incentives, and to increase the perceived value of the change. If the issue lies in rational doubts about the benefit of the change, successful examples can help. Shealy et al. (2019) demonstrated this by showing engineers an exemplary project to serve as a feasibility example. In this regard also, the successful experiences of well-known companies can be used (Bekir and Doss 2020). A second measure can be to reduce the perceived change, e.g., by communicating that the adoption of a new product or service will only lead to small changes (Heidenreich and Kraemer 2015; Talke and Heidenreich 2014). A third measure is the use of mental simulation. Here the idea is to create a situation with which the user can identify and imagine themselves using the product or service (Heidenreich and Kraemer 2016; Talke and Heidenreich 2014). All three measures should address uncertainty and transition costs by assuring the user that the new solution is indeed feasible and is not that different from their current solution. If the lack of information on the change is the issue, these can be delivered in various formats, e.g., demonstrations, pilot projects, workshops, lighthouse projects, product trials, or extended trial versions to gain more experience (Linnerud et al. 2019; Kim 2011; Heidenreich and Kraemer 2015). Practitioners should, in general, aim to establish a positive adoption image by constructing breakthroughs and success stories (Wu 2016). An entirely different measure is the use of financial incentives. Boonen et al. (2009) show that especially negative financial incentives influence pharmacy choice. These findings offer health insurers an upper hand in price negotiations as it enables them to channel business towards certain providers. Another example of positive financial incentives is to offer a premium for scrapping old appliances to drive people towards more energy-efficient behavior (Blasch and Daminato 2018). However, it does not necessarily require money to increase the perceived value of the change. In the context of education, it can also help to make the status quo more unattractive and thereby drive unskilled workers toward higher education (Korn et al. 2015). The measure of increasing the perceived value of change also works in the other direction by making the non-status quo option more attractive. Telesetsky (2017) suggests two options for policy changes to nudge private landowners away from the status quo and towards the eco-restoration of their own lands. More common, however, is simply framing the non-status quo option as more attractive. Zhang et al. (2017) counsel to emphasize the advantages of the new service from the viewpoint of service users. This guidance appears in several other publications (Hsieh 2015; Kim and Kankanhalli 2009; Ng and Kwahk 2010; Hsieh et al. 2014;

Gardiner and Andoh-Baidoo 2019; Zhao et al. 2016) emphasize the opportunities provided by the new options in the context of innovations (Bekir and Doss 2020), or create a positive association with the technology (Klöcker et al. 2014). Highlighting benefits can be done by comparing the benefits of the status quo and the new solution (Heidenreich and Kraemer 2016). At the same time, organizations should also monitor (online) communication, e.g., to react to negative word of mouth (Hietschold et al. 2020).

Finally, there are six measures mentioned in the literature to counter psychological commitment: Three on the individual level (provide users with additional resources, train users sufficiently, and address sunk costs) and three on the group level (use social feedback, activate change agents, and change social norms). Providing users with additional resources has the aim to enable users to "feel in control," e.g., via additional resources for users in the context of health cloud or mobile payment (Hsieh et al. 2014; Zhang et al. 2016). This can, for example, be more information about organizational sustainability projects or a new decision support system (Merriman et al. 2016; Weiler et al. 2019). Such an effort can also focus on more information about alternative options like, for example, alternative energy providers (Lorenc et al. 2013). But it can also be helpful to give specific information on the change in the context of nudging toward pro-environmental behavior or in the context of the introduction of an enterprise resource planning system (Henkel et al. 2019; Kim 2011). Li et al. (2016) propose the idea to provide user-friendly manuals or tools that will automatically translate existing paper-based or electronic knowledge into the knowledge base in the context of a knowledge management system introduction. Along similar lines, Chi et al. (2020) suggest an online help desk or hotline to guide users step by step whenever users are stuck in the middle of operating the system. Chang et al. (2020) also recommend highlighting vendor support. This suggestion leads us to the next measure. Several authors recommend providing users with training, guidance, time, and resources to learn a new system (Gardiner and Andoh-Baidoo 2019; Chi et al. 2020; Kim and Kankanhalli 2009; Kim 2011), e.g., well-designed training sessions with sufficient content can guide user step by step. At the same time, it can be helpful to actively address sunk costs. Such an effort needs to highlight how previous investments, e.g., training or knowledge, can be reused in the context of the new system (Kim 2011) or, more generally, how current usage patterns can be continued (Heidenreich and Kraemer 2015). On the group level, a number of measures focus explicitly on the social norms aspect of SQB. The idea of using social feedback is to provide users with bonus or malus points regarding the degree of desired change they incorporated. Shealy et al. (2019) managed to successfully demonstrate the effects of this countermeasure in the context of sustainable building. Another option is to offer social comparison feedback, e.g., telling households that their energy consumption exceeds that of the average household (Blasch and Daminato 2018). Also, addressing the social norms is the countermeasure to activate change agents. The suggestion is to motivate those who adopted the change well to influence their colleagues (Chi et al. 2020) or persuade key users (especially opinion leaders) to accept the change first (Kim and Kankanhalli 2009). This effort can even include the managers who should show their active support and play a change agent's role to overcome internal and external resistance to change (Wu 2016). This approach can also be extended to consciously include resistors of innovations in the change efforts (Hietschold et al. 2020). Possibly not applicable in all contexts, this measure can be taken further by actively changing social norms. The idea is to thereby influence the status quo perception (Merriman et al. 2016). For example, policymakers should change farmers' opinions as a group through campaigns to promote organic farming (Hermann et al. 2016).

While most of the countermeasures are suggestions based on the respective authors' results and have not been tested in practice, there are also a few studies that have done so: Lorenc et al. (2013) tested the effects of additional information on energy tariff switching. Heidenreich and Kraemer (2016) tested the effects of mental simulation and benefit comparison on passive innovation resistance. Shealy et al. (2019) tested both the effects of best practice examples and a bonus point system on nudging engineers towards more sustainable building. And Hu and Shealy (2020) tested the effects of a formal expression of opinion by city officials for green infrastructure. These works are inspiring examples, and further countermeasures need to be tested in this way to ensure that SQB can be diagnosed and actively challenged. All four examples will be detailed briefly in the following; however, we recommend an interesting read of the originals.

The approach by Lorenc et al. (2013) tested the effectiveness of an intervention to motivate energy tariff switching. They conducted two interviews with 150 individuals focusing on Black and Minority Ethnic (BME) communities, older people (>75 years), and families with young children. In the first interview, researchers provided information on energy tariffs, for example, directing participants to price comparison websites. In a second interview, they then evaluated the effectiveness of the intervention. This led to 19 individuals (13%) who tried to switch and an additional 16 individuals (11%) booking appointments with an advisor to assist with a switch. This implies that 76% of participants and thereby the majority, did not react to the intervention. Maybe even more interesting were the reasons for those not switching: Prior to intervention, lack of knowledge was the reason given most often. After the intervention, the main reasons were lack of time, apathy, and skepticism. These findings offered researchers a better understanding of how to design measures to get people to choose their optimal tariff and provider (Lorenc et al. 2013).

Heidenreich and Kraemer (2016) demonstrated that mental simulation and benefit comparison reduce passive innovation resistance to new product adoption. They conducted their study with 679 individuals using the example of an innovative mobile phone. For the mental simulation task, participants were encouraged to imagine themselves using this new phone. The benefits comparison was based on a list of activities that highlighted the similarities of this new phone with established products. They found that both instruments were effective in the reduction of passive innovation resistance (Heidenreich and Kraemer 2016).

Shealy et al. (2019) tested both the effects of best practice examples and a bonus point system on getting engineers to conceptualize more sustainable buildings. In

their research, they used case studies to confront engineers with real-world decision problems. In these case studies, they used the Envision rating system, a common system in the industry, to support decision-making. They modified the system to show the engineers either a different default number of points for the sustainable option or to provide them with a feasibility example for sustainable building. They tested this with groups of engineering students and found that groups who were endowed with the modified points and shown the feasibility example achieved 79% instead of 56% of the total possible points (control group). In a second test, participants were told beforehand about the effects of the treatment they were getting, but it still resulted in approximately the same results with 76% of the total possible points. These findings offered the construction industry valid ideas on how to introduce the theories of a more sustainable building into practice.

Building on the research by Shealy et al. (2019), Hu and Shealy (2020) tested the effect of an official resolution on the decision for or against a green infrastructure solution. They measured SQB with functional near-infrared spectroscopy identifying activity differences in relevant brain areas. The experiment was conducted with 20 students who were trained in stormwater management. They were confronted with different case studies on stormwater management based on real-life cases. Each of these case studies presented a decision between a "grey" and a "green" infrastructure solution. Hu and Shealy (2020) found that the treatment lowered perceived risk related to cost and performance significantly. They thus discovered an effective countermeasure to SQB, as participants were significantly more likely to choose the greener option if they had been shown the official resolution.

As these four examples show, testing countermeasures allows both an improved scientific understanding and gives practitioners concrete ideas on how to transfer the insights from research into practice. The work by Lorenc et al. (2013) is important as it allows us to better understand the reasons why tariff switching does occur. This reflects in the changed argumentation from lack of knowledge to lack of time. Knowing this, researchers and practitioners can work on designing effective countermeasures. Politicians who want to improve the situation of socially marginalized communities and tackle so-called 'fuel poverty' now have the means to determine the effectiveness of interventions. Heidenreich and Kraemer (2016) were able to prove the effectiveness of mental simulation and benefit comparison. With their insights, marketing managers are able to shape their campaigns to introduce innovative products much more effectively. Similarly, Shealy et al. (2019) advanced scientific knowledge by showing that the knowledge about the manipulation did not diminish its effectiveness. But they also managed to incorporate a way to push for more sustainable building with a standard-industry tool. Thus, their study should make it easier to transfer their research findings into practice. Finally, the study by Hu and Shealy (2020) tested a countermeasure that should be easy to transfer to other contexts as an official resolution should also be able to sway opinions in other contexts and comes at a low cost. These findings show how important testing countermeasures is, and as Tables 3, 4, and 5 demonstrate, further research is required.

5 Discussion

With this research effort, we present an overview of the different approaches to measuring SQB across research fields and have identified countermeasures for the three aspects of loss aversion, rational decision making, and psychological commitment of SQB (Samuelson and Zeckhauser 1988). We identified four approaches to measuring SQB and fifteen countermeasures. However, open questions remain. For example, only four publications have succeeded in testing the effectiveness of such countermeasures. In the following, we discuss our findings on these two core topics.

5.1 Advantages and disadvantages of different approaches to measuring SQB

Researchers have diagnosed SQB across research fields in various contexts. Thus, its existence can't be challenged anymore. However, the exact measurement of SQB still remains an open issue. We identified four approaches to measure SQB: an econometric approach based on behavioral outcomes, medical data, multiple constructs, and direct questions. To discuss the advantages and disadvantages of these measurement approaches, we identified quality criteria that these should fulfill. The literature discusses three quality criteria with regard to any measurement approach (Panter and Sterba 2011; Kirk and Miller 2005). We discuss the advantages and disadvantages of the identified measurement approaches against these criteria:

- 1. *Reliability* The measurement approach needs to measure SQB reliably, e.g., it must be possible to recreate similar results in other studies.
- 2. *Validity* The measurement approach needs to measure SQB validly, e.g., it needs to measure SQB and not something else or only parts of it. That being said, the SQB studies so far indicate that not every aspect of SQB is relevant in every scenario.
- 3. *Generalizability* As SQB has been studied in such a broad range of research fields, measurement approaches also need to be transferable between disciplines. Only if researchers can exchange results across research fields are they also able to build on each other's results and thereby ensure scientific progress.

Additionally, measurement approaches for status quo bias should also fulfill the criterion of explainability: Samuelson and Zeckhauser (1988) identified three categories of explanation approaches that can have different implications, e.g., different countermeasures. Therefore it is important to learn as much as possible about the different aspects involved in the specific situation. We examine this criterion in addition to the other criteria because SQB research should not only aim to analyze SQB instances but should also aim to explain them to be able to counteract them. The aim of any theory development should therefore be at least towards a theory of explanation (Gregor 2006).

The first approach we identified is that of using an econometric approach based on behavioral outcomes based on behavioral evidence, such as investment decisions. Cognitive bias is usually an unconscious effect, so observing participants' behavior is probably the most reliable option. This was also the approach Samuelson and Zeckhauser (1988) used in their first study of SQB. Thus we can consider it highly valid. However, this measurement is highly context-specific, meaning that it is difficult to compare results across different research contexts and thus transfer successful countermeasures. In addition, this approach does not allow for a more accurate understanding of which explanatory aspect (loss aversion, rational decision making, or psychological commitment) is most relevant in this context—assuming that there are nuances and not all aspects are equally relevant in every scenario. This assumption is supported by Chatfield and Reddick (2019) with their findings of the prevalence of loss aversion as a reason for SQB in their context.

The second approach is the use of medical data. This measurement approach appears to be an exciting avenue for further research—especially as it opens up new opportunities for a better understanding of underlying biological reasons for certain psychological phenomena. As this approach directly measures brain activity in the relevant areas, it is both reliable and valid. Depending on the exact research method, it is even possible to pinpoint specific explanation approaches (Hu and Shealy 2020). However, this measurement approach is difficult to scale and thus difficult to generalize as it requires specialized equipment, thereby limiting the number of possible participants (Pisoni et al. 2014). This might even lead to biased results as certain participants might be willing to fill out a questionnaire but not be willing to let personal health-related data be examined. These challenges might also apply to organizations where the SQB perspective would be helpful, but which do not want to subject their members to elaborate exams. At the same time, it would also limit the number of researchers able to study this phenomenon as this approach also requires specialized training for those conducting the experiment (Fleming et al. 2010).

The third approach was that of multiple constructs. The approach to conceptualizing SQB as multiple constructs based on the findings of Samuelson and Zeckhauser (1988) has the advantage that it allows surveying the full range of aspects related to SQB. If used in the full conceptualization (as done, e.g., by Kim and Kankanhalli; 2009), it is reliable and valid and allows to examine in detail which aspects are relevant in the specific scenario. Such an approach would also allow a transfer between different research contexts. But research is not there yet. As Table 2, 3, 4, 5 demonstrate, every study we examined used different constructs to measure SQB. Similar to the other measurement approaches, this approach has its drawbacks as it is not fully reliable to measure SQB as no actual behavior is observed, but rather intentions are surveyed. However, if implemented with a common set of constructs, it would at least have the advantage that all researchers measure the same phenomenon.

The final approach of asking direct questions is interesting as cognitive biases are typically an unconscious effect. Thus, the questions have to target related behavior, as demonstrated in the example of Blasch and Daminato (2018) above. The example also highlights that a limited number of questions cannot reflect the full range of aspects conceptualized by Samuelson and Zeckhauser (1988). Thus, the explanation potential for a specific situation might be limited as the researchers rather test for a general tendency for SQB. Also, questions have to be very context-specific,

e.g., asking for participants' attachment to material things might be correct in the context of SQB towards home appliances but completely irrelevant in the context of non-material politics or information systems. This context specificity, however, limits generalizability and thus reliable and valid measurement of SQB across research contexts. Evidence in that regard might also be the low number of studies that discussed SQB in-depth (2 of 262) that used this method.

Assessing all four measurement approaches, we find that none of them fulfills all quality criteria. Looking at the different measurement approaches makes it especially clear that the transfer of results between differently measured SQB findings might be flawed. All measurement approaches surely have their raison d'être. However, when to apply, which has to be carefully selected and argued for each research project to make it clear to readers what has actually been measured. Another solution might be a combination of approaches, e.g., measuring actual behavior through an econometric approach based on behavioral outcomes and also surveying intentions with a measurement model based on multiple constructs.

5.2 Selecting the right countermeasure(s) to SQB

Researchers across fields have amassed an incredible wealth of suggestions, recommendations, and proven countermeasures to SQB. SQB as a cognitive bias is something potentially negatively affecting a decision outcome. Therefore, identifying effective countermeasures is important across fields. Research on SQB ranges from economics (Bekir and Doss 2020) over politics (Hong and Lee 2018) to information systems (Kim and Kankanhalli 2009). In our literature review, we identified fifteen aggregated countermeasures with many more detailed suggestions in the individual publications. This overview offers a starting point for future research to test these countermeasures. Examples of such efforts could be the four publications that report the active test of countermeasures: Lorenc et al. (2013) tested the effect of more information on SQB, Heidenreich and Kraemer (2016) that of mental simulation and benefits comparison, Shealy et al. (2019) that of feasibility examples and bonus points, and Hu and Shealy (2020) that of an official resolution. But this leaves the question of which countermeasure to select.

In a first attempt to facilitate the selection, we sorted the countermeasures according to the conceptualization of SQB from Kim and Kankanhalli (2009), which provides researchers and practitioners with the full range of available measures to choose from. Kim and Kankanhalli (2009) conceptualize SQB as loss aversion, rational decision making (uncertainty costs, transition costs, and net benefits), and psychological commitment (sunk cost, social norms, and control). The different measures studies recommend implying that in different contexts, one or multiple aspects are more important. Sorting the countermeasures by these aspects thus allows a targeted selection of measures if issues with a certain aspect, e.g., cognitive misperception, are prevalent.

On the second level, we also sorted countermeasures regarding the unit of analysis addressed, e.g., if countermeasures were applied on the individual or group level. Here we found a clear focus on individual measures. Attention was rather placed on the individual adoption of the change, but as Heidenreich and Talke (2020) point out, the primary group-level decision is also relevant. However, to date, researchers have identified significantly fewer countermeasures on that level. Nonetheless, this distinction should also facilitate the selection further and allow for a targeted selection of measures depending on the current progress of change, e.g., group-level countermeasures might be especially relevant at the beginning of change considerations. Furthermore, our overview offers the opportunity to derive further insights regarding the selection of countermeasures:

Firstly, the recommended countermeasures also depend on the clarity of the desired behavior in the situation. While some situations allow a clear desired behavior or option for the decision, others do not. For example, for hedge fund investors, the "right" decision is unclear because there are so many options, and the value depends on market performance (Freiburg and Grichnik 2013). In contrast, when considering the switch between energy providers, tariffs can be objectively compared, and the most beneficial option can be selected (Lorenc et al. 2013). We found that researchers rather tended to recommend countermeasures addressing the rational decision-making aspect if the decision options were clearly defined. When the decision scenario was more open, researchers tended to recommend countermeasures pertaining to cognitive misperception and psychological commitment.

Secondly, the degree of definition of the desired change might depend on the context or research field. Assessing the different SQB cases, we found that there were significant differences in how narrowly defined or actionable the desired change was—if one was proposed. For example, in the case of Canadian dykelands, the solution space is quite open. From the information presented in the publication, it appears as if several policy solutions are possible. Also, the desired behavior changes of private landowners were not clearly defined. Thus, it requires more structural changes to define and shape the desired option (Sherren et al. 2016). In contrast, the desired change in the context of a new system introduction is quite well defined and thus can, for example, be supported by change agents (Kim and Kankanhalli 2009). We assessed this aspect but found no clear relation to the selected countermeasures. However, we still believe this aspect to be important and rather think that the explanations for our inconclusive results lie in the practices of different research fields and potentially the different contexts studied. However, here further studies are required.

Thirdly and finally, researchers always recommend multiple countermeasures. We aggregated countermeasures across publications and identified those that were at least mentioned in two publications. Nonetheless, each publication always mentioned multiple countermeasures. The same is true for the publications that tested countermeasures, e.g., Shealy et al. (2019) tested both the effects of feasibility examples and social feedback. This observation implies that practitioners aiming to tackle SQB should always employ multiple countermeasures. However, the exact combination of countermeasures still requires further research.

5.3 Value of the SQB perspective

Some of the countermeasures introduced above are probably part of every change effort, however, the use of these countermeasures with a better understanding of their exact causal relations could improve their effectiveness. The value of SQB is that it offers an additional perspective. To take an example: One of probably the most substantial change efforts many organizations underwent in the last 20 years is that of the introduction of an enterprise resource planning system. A twenty-year-old study on success factors for such an endeavor mentions—similar to our findings—top management commitment & support, communicating system benefits, hands-on training, and securing the support of opinion leaders (Aladwani 2001). This overlaps with several countermeasures we identified from the literature that affect psychological commitment, e.g., providing users with additional resources, training users sufficiently, or activating change agents. This prompts us to question the value of the SQB perspective. Are we only reformulating issues and solutions that are already well established? We argue that this is not the case, as employing the SQB perspective can offer added value:

Allow for holistic scientific explanation With the help of SQB, researchers can explore different aspects of a holistic explanation for change-related phenomena. This perspective allows us to connect otherwise unrelated observations. As the example of Lorenc et al. (2013) shows, it is not enough to give individuals more information on their energy tariffs and thereby address the rational decision-making aspect. To successfully overcome SQB, an effort that also addresses the non-rational aspects of SQB is probably needed.

Deepen researchers' understanding of possible causes The diversity of constructs used in different studies to measure SQB offers concrete starting points for further research. This perspective allows for shifting theory development from analysis towards explanation and, ideally, design and action (Gregor 2006). Instead of describing what measures have worked well in prior change efforts, the focus would be on explaining why and how they work and designing new ways to employ them even more effectively. The diversity of constructs already assessed by prior research offers a wealth of opportunities for future research to explore their interrelations more closely and develop new and more effectful (combinations of) countermeasures.

Integrate rational and non-rational approaches As the different categories that explanations for SQB show, it can be valuable to combine rational and non-rational elements with improving the explanatory power of a model. This could be an opportunity to expand well-established models that still build on the assumption of rational choice behavior with the insights bounded rationality and cognitive bias research offers.

Improve practitioners' understanding As the study by Aladwani (2001) indicates, much of the good advice for practitioners is already well known. Nonetheless, similar challenges still appear to impede individuals' and organizations' progress. These challenges might persist because countermeasures are easy to define but way harder

to implement. Another explanation approach is that it is difficult to follow such advice if it is not fully clear why it should help. Managers that account for possible effects of non-rational behavior in their employees might find it easier to address this behavior and not simply assume that their employees are unwilling or opposing change out of spite.

Develop more efficient countermeasures In addition to an improved understanding of countermeasures, the SQB perspective help researchers and practitioners alike to design, test, and improve more effectful countermeasures. Researchers could contribute to this by actively testing existing ideas, directly targeting specific SQB aspects or constructs, and offering outside-in ideas for improvement.

5.4 Limitations and further research

We have taken the utmost care to design this study, but there are three main limitations. Firstly, our keyword-based research in two databases might have let us overlook other publications. Nonetheless we believe in having covered a sufficiently broad field based on the substantial differences of examples ranging from politics (Enns et al. 2014) over economics (Bekir and Doss 2020) to environmental issues (Sherren et al. 2016). Secondly, the abstract-based identification of publications discussing SQB in depth might not have done all publications justice. In general, we found that delineation of the concept is often handled differently across contexts and research fields. It lies in the nature of a scientific literature review that a way to combine different views has to be found. However, as we aimed to compile, clarify, and critically discuss findings on the status quo bias, a focus on works that predominantly discuss SQB and not something else was necessary. Thirdly, we have aimed to assign both constructs and countermeasures to the three main aspects of SQB identified by Samuelson and Zeckhauser (1988). This assignment has been done to the best of the authors' knowledge but might not reflect all aspects the publications have contributed. However, we hope that this might spark the interest of further researchers, especially when they delve deeper into the transferability and the assessment of the identified counte_ÄÖPrmeasures to their domain. Based on our review of the current literature regarding SQB, we propose two main avenues for future research around the measurement approach for SQB and effective countermeasures (see Table 6).

Since the initial publication by Samuelson and Zeckhauser (1988), research on SQB has amassed enormous wealth. Our assessment has surfaced an immense variety of measurement approaches and countermeasures. We hope that future researchers will use this wealth to make knowledge about SQB even more transferable between research fields and to develop and select even more targeted countermeasures. Such efforts are crucial as SQB can severely impede innovation and change—efforts to make the world a better place.

suggeste
avenues
research
further
of
Overview
Table 6

Table 6 Overview of 1	further research avenues suggested	
	Further	Details
µSQB measurement	Comparative study of SQB measurement approaches	The studies we assessed for this review all used a single measurement approach. We believe a comparative study of measurement approaches of SQB would allow researchers an even better understanding of the implications of each measurement approach. The overarching imperative for researchers should be to establish a consistent approach to measure SQB to be able to transfer results across domain
	Combination of measurement approaches	All studies used only one method to measure SQB. Studies combining different measurement approaches would be helpful, e.g., using objective data about decision outcomes in combination with multiple constructs to add a second perspective
	Understand optimal selection of constructs	The 70 studies we identified that used multiple constructs to assess SQB all used different constructs. This diversity offers the opportunity to delve deeper into the contexts that make certain constructs more or less relevant and the interrelation of these constructs. If multiple constructs are used, further research on the optimal set of constructs is required
	More detailed study of neglected aspects and constructs	Our findings do not show such a drastic picture as Lee and Joshi (2017), who found that research focuses mostly on rational decision-making aspects. How- ever, we still found that researchers tended to focus more on certain aspects and concepts in their work. For example, we found that most publications explicitly status quo satisfaction and that the least studied anchoring effects. It might be that in certain situations, some aspects or constructs are more relevant, but then we encourage future researchers to make their assumptions explicit. In the set of publications we reviewed, none of the authors explained their reasoning
	Combination of measurement approaches with domain models	Some of the studies combined on SQB combined SQB with established domain models like the technology acceptance model in information systems (Kim and Kankanhalli 2009). Such a combination would allow researchers to derive even more targeted countermeasures through the combination with domain-specific knowledge. Here further studies on the specifics of each domain are required

Table 6 (continued)		
	Further	Details
SQB countermeasures	Further test countermeasures regarding their effectiveness	The studies we assessed propose many different countermeasures for SQB. Still, many of them have not been assessed in a laboratory or even field experiment to improve the scientific understanding of their exact effects and degree of effectiveness. Further research, e.g., testing different countermeasures against each other, is required
	Test combinations of counter-measures	All publications studied for this review recommended multiple countermeasures to SQB. However, depending on the exact situation, probably only a specific set of countermeasures is necessary. Further research testing different sets of coun- termeasures could identify viable sets and avoid waste of resources. Insights on the interaction of different countermeasures in practice could facilitate this further
	Further studies on the group level	Researchers have proposed more measures on an individual level; here, the identification of further measures might be helpful. Also, the relevance of the different types of measures during a change might require further study
	Understanding characteristics of SQB scenarios further	From our assessment, we believe that the recommended countermeasures depend on the clarity of the desired behavior in the situations and the degree to which the desired change can be defined. Here, further examination of the inter- dependencies between countermeasures and the specific situations they are applied to is required. These insights would make results more transferable and improve countermeasure selection

Funding Open Access funding enabled and organized by Projekt DEAL. The authors declare that no funds, grants, or other support were received during the preparation of this manuscript.

Data availability The data analyzed during this study was accessed from public sources as described in the method section. It is available from the corresponding author on reasonable request.

Declarations

Conflict of interest The authors have no relevant financial or non-financial interests to disclose.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/.

References

- Abbas M, Nawaz MS, Ahmad J, Ashraf M (2017) The effect of innovation and consumer related factors on consumer resistance to innovation. Cogent Business Manag 4(1):1312058. https://doi.org/10. 1080/23311975.2017.1312058
- Abualrob AA, Kang J (2016) The barriers that hinder the adoption of e-commerce by small businesses. Inf Dev 32(5):1528–1544. https://doi.org/10.1177/0266666915609774
- Adigüzel F, Kleijnen M, Erkan BBB, Yozgatligil CT (2019) Identifying non-adopter consumer segments: an empirical study on earthquake insurance adoption in turkey. J Consum Aff 53(2):662–685. https://doi.org/10.1111/joca.12217
- Ahn B, Ahn H (2020) Factors affecting intention to adopt cloud-based ERP from a comprehensive approach. Sustainability 12(16):6426. https://doi.org/10.3390/su12166426
- Aladwani AM (2001) Change management strategies for successful ERP implementation. Business Process Mgmt J 7(3):266–275
- Alesina A, Passarelli F (2019) Loss aversion in politics. Am J Polit Sci 63(4):936-947
- Anggraini PG, Sholihin M (2021) What do we know about managerial ability? A systematic literature review. Manag Rev Quart. https://doi.org/10.1007/s11301-021-00229-6
- Arkes HR, Blumer C (1985) The psychology of sunk cost. Organ Behav Hum Decis Process 35(1):124–140
- Attanasi G, Corazzini L, Passarelli F (2017) Voting as a lottery. J Public Econ 146:129–137. https://doi. org/10.1016/j.jpubeco.2016.11.016
- Baccarella CV, Wagner TF, Scheiner CW, Maier L, Voigt K-I (2021) Investigating consumer acceptance of autonomous technologies: the case of self-driving automobiles. Eur J Innov Manag 24(4):1210– 1232. https://doi.org/10.1108/EJIM-09-2019-0245
- Balakrishnan J, Dwivedi YK, Hughes L, Boy F (2021) Enablers and inhibitors of AI-powered voice assistants: a dual-factor approach by integrating the status quo bias and technology acceptance model. Inf Syst Front. https://doi.org/10.1007/s10796-021-10203-y
- Bao Y (2009) Organizational resistance to performance-enhancing technological innovations: a motivation-threat-ability framework. J Busin Ind Market 24(2):119–130. https://doi.org/10.1108/08858 620910931730
- Bekir I, Doss F (2020) Status quo bias and attitude towards risk: an experimental investigation. Manag Decis Econ 41(5):827–838
- Bellé N, Cantarelli P, Belardinelli P (2018) Prospect theory goes public: experimental evidence on cognitive biases in public policy and management decisions. Public Adm Rev 78(6):828–840. https://doi.org/10.1111/puar.12960

- Benson B (2019) Why are we yelling? The art of productive disagreement. Penguin Publishing Group, New York
- Blasch, J.; Daminato, C. (2018): Behavioral Anomalies and Energy-Related Individual Choices: The Role of Status-Quo Bias. CER-ETH Working Paper 18/300.
- Boeuf B (2019) The impact of mortality anxiety on attitude toward product innovation. J Bus Res 104:44-60. https://doi.org/10.1016/j.jbusres.2019.06.031
- Boonen LHHM, Schut FT, Donkers B, Koolman X (2009) Which preferred providers are really preferred? Effectiveness of insurers' channeling incentives on pharmacy choice. Int J Health Care Finance Econ 9(4):347–366
- Bostrom N, Ord T (2006) The reversal test: eliminating status quo bias in applied ethics. Ethics 116(4):656–679
- Carmona-Lavado A, Gopalakrishnan S, Zhang H (2020) Product radicalness and firm performance in B2B marketing: A moderated mediation model. Ind Mark Manage 85:58–68. https://doi.org/10. 1016/j.indmarman.2019.08.013
- Casidy R, Claudy M, Heidenreich S, Camurdan E (2021) The role of brand in overcoming consumer resistance to autonomous vehicles. Psychol Mark 38(7):1101–1121. https://doi.org/10.1002/mar.21496
- Castro CAB, Zambaldi F, Ponchio MC (2019) Cognitive and emotional resistance to innovations: concept and measurement. J Product Brand Manag 29(4):441–455. https://doi.org/10.1108/ JPBM-10-2018-2092
- Chang Y-W, Hsu P-Y, Huang S-H, Chen J (2020) Determinants of switching intention to cloud computing in large enterprises. Data Technol Appl 54(1):16–33. https://doi.org/10.1108/ DTA-12-2018-0104
- Chang Y-W (2020) What drives organizations to switch to cloud ERP systems? The impacts of enablers and inhibitors. JEIM 33(3):600–626. https://doi.org/10.1108/JEIM-06-2019-0148
- Chatfield A, Reddick C (2019) Blockchain investment decision making in central banks: a status quo bias theory perspective. In: Americas conference on information systems (AMCIS) proceedings. Cancún, México
- Chen H-S, Tsai B-K, Hsieh C-M (2018) The effects of perceived barriers on innovation resistance of hydrogen-electric motorcycles. Sustainability 10(6):1933. https://doi.org/10.3390/su10061933
- Chen J, Dickson BJ (2008) Allies of the state: democratic support and regime support among China's private entrepreneurs. China Quart 196:780–804. https://doi.org/10.1017/S0305741008001124
- Chen P-T, Chen J-H (2015) Implementing cloud-based medical systems in hospitals and strategic implications. Technol Anal Strateg Manag 27(2):198–218. https://doi.org/10.1080/09537325. 2014.959483
- Chen P-T, Kuo S-C (2017) Innovation resistance and strategic implications of enterprise social media websites in Taiwan through knowledge sharing perspective. Technol Forecast Soc Chang 118:55–69. https://doi.org/10.1016/j.techfore.2017.02.002
- Chen Q, Lu Y, Gong Y, Tang Q (2019) Why do users resist service organization's brand mobile apps? The force of barriers versus cross-channel synergy. Int J Inf Manage 47:274–282. https://doi. org/10.1016/j.ijinfomgt.2018.07.012
- Cheng X, Fu S, Yin G (2016) Does subsidy work? An investigation of post-adoption switching on carhailing apps. J Electron Commer Res 18:317–329
- Chi W-C, Lin P-J, Chang I-C, Chen S-L (2020) The inhibiting effects of resistance to change of disability determination system: a status quo bias perspective. BMC Med Inf Decis Making 20(1):82
- Cho SD, Chang DR (2008) Salesperson's innovation resistance and job satisfaction in intra-organizational diffusion of sales force automation technologies: the case of South Korea. Ind Mark Manage 37(7):841–847. https://doi.org/10.1016/j.indmarman.2008.04.004
- Choi D, Chung CY, Seyha T, Young J (2020) Factors affecting organizations' resistance to the adoption of blockchain technology in supply networks. Sustainability 12(21):8882. https://doi.org/10.3390/ su12218882
- Choudrie J, Junior C-O, McKenna B, Richter S (2018) Understanding and conceptualising the adoption, use and diffusion of mobile banking in older adults: a research agenda and conceptual framework. J Bus Res 88:449–465. https://doi.org/10.1016/j.jbusres.2017.11.029
- Chouk I, Mani Z (2019) Factors for and against resistance to smart services: role of consumer lifestyle and ecosystem related variables. J Serv Mark 33(4):449–462. https://doi.org/10.1108/ JSM-01-2018-0046

- Chung KC, Liang SW-J (2020) Understanding factors affecting innovation resistance of mobile payments in taiwan: An integrative perspective. Mathematics 8(10):1841
- Doucouliagos C (1994) A note on the evolution of homo economicus. J Econ Issues 28(3):877-883
- Eidelman S, Crandall CS, Pattershall J (2009) The existence bias. J Pers Soc Psychol 97(5):765–775. https://doi.org/10.1037/a0017058
- El-Jardali F, Alameddine M, Jamal D, Dimassi H, Dumit NY, McEwen MK et al (2013) A national study on nurses' retention in healthcare facilities in underserved areas in Lebanon. Hum Resour Health 11:49. https://doi.org/10.1186/1478-4491-11-49
- Enns PK, Kelly N, Morgan J, Volscho T, Witko C (2014) Conditional Status Quo Bias and top income shares: how U.S. political institutions have benefited the rich. J Polit 76(2):1–15
- Eterovic DS (2010) Institutional bias towards the status quo. J Inst Theor Econ. https://doi.org/10.2139/ ssrn.1554653
- Fleming SM, Thomas CL, Dolan RJ (2010) Overcoming status quo bias in the human brain. Proc Natl Acad Sci 107(13):6005–6009
- Freiburg M, Grichnik D (2013) Institutional reinvestments in private equity funds as a double-edged sword: the role of the status quo bias. J Behav Financ 14(2):134–148
- Gardiner M, Andoh-Baidoo FK (2019) Factors behind the assimilation of enterprise resourse planning (ERP) software in mid-sized and large firms in pre-emerging economies: a case of Ghana. In: Hawaii international conference on system sciences (HICSS) proceedings. Grand Wailea, Maui, Hawaii, pp 6104–6113
- Geng S (2016) Decision time, consideration time, and status quo bias. Econ Enquiry 54(1):433-449
- Greene M, van Riel ACR (2021) Learning from the resourceness blind spot for service innovation at the base of the pyramid. J Serv Mark 35(7):933–946. https://doi.org/10.1108/JSM-06-2020-0254
- Gregor S (2006) The nature of theory in information systems. MIS Quart 30(3):611
- Hamilton MK (2021) Introspective faculty assessment of self leadership. SAGE Open. https://doi.org/10. 1177/21582440211031902
- Haselton MG, Nettle D, Murray DR (2015) The evolution of cognitive bias. In: The handbook of evolutionary psychology. American Cancer Society, New York, pp 1–20.
- Heidenreich S, Handrich M (2015) What about passive innovation resistance? Investigating adoptionrelated behavior from a resistance perspective. J Prod Innov Manag 32(6):878–903
- Heidenreich S, Kraemer T (2015) Passive innovation resistance: The curse of innovation? Investigating consequences for innovative consumer behavior. J Econ Psychol 51:134–151. https://doi.org/10. 1016/j.joep.2015.09.003
- Heidenreich S, Kraemer T (2016) Innovations-doomed to fail? Investigating strategies to overcome passive innovation resistance. J Prod Innov Manag 33(3):277–297. https://doi.org/10.1111/jpim.12273
- Heidenreich S, Kraemer T, Handrich M (2016) Satisfied and unwilling: exploring cognitive and situational resistance to innovations. J Bus Res 69(7):2440–2447. https://doi.org/10.1016/j.jbusres. 2016.01.014
- Heidenreich S, Talke K (2020) Consequences of mandated usage of innovations in organizations: developing an innovation decision model of symbolic and forced adoption. AMS Review 10(3):279–298. https://doi.org/10.1007/s13162-020-00164-x
- Heidt M, Sonnenschein R, Loske A (2017) Never change a running system? How status quo-thinking can inhibit software as a service adoption in organizations. In: European conference on information systems (ECIS) proceedings. Guimarães, Portugal, pp 1902–1918
- Henkel C, Seidler A-R, Kranz J, Fiedler M (2019) How to nudge pro-environmental behaviour: an experimental study. In: European conference on information systems (ECIS) proceedings. Stockholm & Uppsala, Sweden
- Hermann D, Mußhoff O, Agethen K (2016) Investment behavior and status quo bias of conventional and organic hog farmers: an experimental approach. Renew Agric Food Syst 31(4):318–329
- Hew J-J, Leong L-Y, Tan GW-H, Ooi K-B, Lee V-H (2019) The age of mobile social commerce: an artificial neural network analysis on its resistances. Technol Forecast Soc Chang 144:311–324. https:// doi.org/10.1016/j.techfore.2017.10.007
- Hietschold N, Reinhardt R, Gurtner S (2020) Who put the "no" in innovation? Innovation resistance leaders' behaviors and self-identities. Technol Forecast Soc Chang 158:120177. https://doi.org/10. 1016/j.techfore.2020.120177
- Hong S, Lee S (2018) Adaptive governance, status quo bias, and political competition: why the sharing economy is welcome in some cities but not in others. Gov Inf Q 35(2):283–290

- Hong SC (2020) Digital bible and innovation resistance. J Media Religion 19(1):24–34. https://doi.org/ 10.1080/15348423.2020.1728187
- Hong W, Thong JYL, Chasalow LC, Dhillon G (2011) User acceptance of agile information systems: a model and empirical test. J Manag Inf Syst 28(1):235–272. https://doi.org/10.2753/MIS0742-1222280108
- Hong Y-H, Chang R (2013) To click or not to click? A study of the innovation resistance of political emails. Chin J Commun 6(3):305–324. https://doi.org/10.1080/17544750.2013.789424
- Hossain MdA, Quaresma R, Hasan MdR, Imtiaz A (2019) An insight into the bilateral readiness towards telemedicine. Heal Technol 9(4):471–486. https://doi.org/10.1007/s12553-019-00328-1
- Hsieh P-J (2015) Healthcare professionals' use of health clouds: Integrating technology acceptance and status quo bias perspectives. Int J Med Inf 84(7):512–523
- Hsieh P-J, Lai H-M, Ye Y-S (2014) Patients' acceptance and resistance toward the health Cloud: an integration of technology acceptance and status quo bias perspectives. In: Pacific Asia conference on information systems (PACIS) proceedings. Chengdu, China
- Hu M, Shealy T (2020) Overcoming status quo bias for resilient stormwater infrastructure: empirical evidence in neurocognition and decision-making. J Manag Eng. https://doi.org/10.1061/(ASCE)ME. 1943-5479.0000771
- Hu T, Poston RS, Kettinger WJ (2011) Nonadopters of online social network services: network services: is it easy to have fun yet? Commun Assoc Inf Syst. https://doi.org/10.17705/1CAIS.02925
- Huber F, Köcher S, Vogel J, Meyer F (2012) Dazing diversity: investigating the determinants and consequences of decision paralysis. Psychol Mark 29(6):467–478. https://doi.org/10.1002/mar.20535
- Inman JJ, Zeelenberg M (2002) Regret in repeat purchase versus switching decisions: the attenuating role of decision justifiability. Journal of Consumer Research 29(1):116–128. https://doi.org/10.1086/ 339925
- Ju N, Lee K-H (2021) Perceptions and resistance to accept smart clothing: moderating effect of consumer innovativeness. Appl Sci 11(7):3211. https://doi.org/10.3390/app11073211
- Jung H, Lim S (2021) Status quo bias in ocean marine insurance and implications for korean trade. Journal of Korea Trade 25(5):39–57. https://doi.org/10.35611/jkt.2021.25.5.39
- Juric J, Lindenmeier J (2019) An empirical analysis of consumer resistance to smart-lighting products. Light Res Technol 51(4):489–512. https://doi.org/10.1177/1477153518774080
- Kahneman D, Tversky A (1979) Prospect theory: an analysis of decision under risk. Econometrica 47(2):263
- Kahneman D, Knetsch JL, Thaler RH (1991) Anomalies: the endowment effect, loss aversion, and status quo bias. J Econ Perspect 5(1):193–206. https://doi.org/10.1257/jep.5.1.193
- Kankane S, DiRusso C, Buckley C (2018) Can we nudge users toward better password management? An initial study. In: Extended abstracts of the 2018 CHI conference on human factors in computing systems. Association for Computing Machinery, New York, USA, pp 1–6
- Katan D (2009) Profession, identity and status: translators and interpreters as an occupational group. Trans Interpret Stud 4(2):187–209. https://doi.org/10.1075/tis.4.2.04kat
- Kaur P, Dhir A, Ray A, Bala PK, Khalil A (2021) Innovation resistance theory perspective on the use of food delivery applications. J Enterp Inf Manag 34(6):1746–1768. https://doi.org/10.1108/ JEIM-03-2020-0091
- Kautish P, Khare A, Sharma R (2021) Health insurance policy renewal: an exploration of reputation, performance, and affect to understand customer inertia. J Market Anal. https://doi.org/10.1057/ s41270-021-00134-7
- Keegan C, Teljeur C, Turner B, Thomas S (2019) Switching benefits and costs in the Irish health insurance market: an analysis of consumer surveys. Int J Health Econ Manag 19(1):15–32. https://doi. org/10.1007/s10754-018-9244-1
- Khedhaouria A, Thurik R, Gurau C, van Heck E (2016) Customers' continuance intention regarding mobile service providers: a status Quo Bias perspective. J Glob Inf Manag 24(4):289–303
- Kim DG, Lee CW (2021) Exploring the roles of self-efficacy and technical support in the relationship between techno-stress and counter-productivity. Sustainability 13(8):4349. https://doi.org/10.3390/ su13084349
- Kim HW, Kankanhalli A (2009) Investigating user resistance to information systems implementation: a status quo bias perspective. MIS Q 33(3):567–582
- Kim H-W, Perera N (2008) Software continuance from the switching costs perspective: a case of web browser. In: Pacific Asia conference on information systems (PACIS) proceedings, Suzhou, China.

- Kim H-W (2011) The effects of switching costs on user resistance to enterprise systems implementation. IEEE Trans Eng Manage 58(3):471–482
- Kim J, Kim S, Nam C (2016) User resistance to acceptance of In-Vehicle Infotainment (IVI) systems. Telecommun Policy 40(9):919–930. https://doi.org/10.1016/j.telpol.2016.07.006
- Kim Y, Park Y, Choi J (2017) A study on the adoption of IoT smart home service: using value-based adoption model. Total Qual Manag Bus Excell 28(9–10):1149–1165. https://doi.org/10.1080/ 14783363.2017.1310708
- Kirk J, Miller ML (2005) Reliability and validity in qualitative research. SAGE, Newbury Park, CA
- Klöcker P, Bernnat R, Veit D (2014): Implementation through force or measure? How institutional pressures shape national ehealth implementation programs. In: European conference on information systems (ECIS) proceedings, Tel Aviv, Israel
- Korn L, Malul M, Luski I (2015) Employment as a poverty trap. J Employ Couns 52(3):110-120
- Korobkin R (1998) Status quo bias and contract default rules. Cornell Law Rev 83:608
- Krieger M, Felder S (2013) Can decision biases improve insurance outcomes? An experiment on status Quo Bias in health insurance choice. Int J Environ Res Public Health 10(6):2560–2577
- Kroh J (2021) Sustain(able) urban (eco)systems: stakeholder-related success factors in urban innovation projects. Technol Forecast Soc Chang 168:120767. https://doi.org/10.1016/j.techfore.2021.120767
- Kuo R-Z (2020) Why do people switch mobile payment service platforms? An empirical study in Taiwan. Technol Soc 62:101312. https://doi.org/10.1016/j.techsoc.2020.101312
- Kushwah S, Dhir A, Sagar M (2019) Understanding consumer resistance to the consumption of organic food. A study of ethical consumption, purchasing, and choice behaviour. Food Qual Prefer 77:1– 14. https://doi.org/10.1016/j.foodqual.2019.04.003
- Labrecque JS, Wood W, Neal DT, Harrington N (2017) Habit slips: when consumers unintentionally resist new products. J Acad Mark Sci 45(1):119–133. https://doi.org/10.1007/s11747-016-0482-9
- Laukkanen T (2016) Consumer adoption versus rejection decisions in seemingly similar service innovations: the case of the Internet and mobile banking. J Bus Res 69(7):2432–2439. https://doi.org/10. 1016/j.jbusres.2016.01.013
- Ledgerwood A, Mandisodza AN, Jost JT, Pohl MJ (2011) Working for the system: motivated defense of meritocratic beliefs. Soc Cogn 29(3):322–340. https://doi.org/10.1521/soco.2011.29.3.322
- Lee K, Joshi K (2017) Examining the use of status quo bias perspective in IS research: need for re-conceptualizing and incorporating biases. Info Systems J 27(6):733–752
- Lemay DJ, Basnet RB, Doleck T (2021) Switching intentions in the context of open-source software movement: the paradox of choice. Educ Inf Technol. https://doi.org/10.1007/s10639-021-10646-5
- Leong L-Y, Hew T-S, Ooi K-B, Wei J (2020) Predicting mobile wallet resistance: a two-staged structural equation modeling-artificial neural network approach. Int J Inf Manage. https://doi.org/10.1016/j. ijinfomgt.2019.102047
- Li J, Liu M, Liu X (2016) Why do employees resist knowledge management systems? An empirical study from the status quo bias and inertia perspectives. Comput Hum Behav 65:189–200
- Li Z, Cheng Y (2014) From free to fee: exploring the antecedents of consumer intention to switch to paid online content. J Electron Commer Res 15(4):281–299
- Lian J-W, Yen DC (2013) To buy or not to buy experience goods online: perspective of innovation adoption barriers. Comput Hum Behav 29(3):665–672. https://doi.org/10.1016/j.chb.2012.10.009
- Lian J-W, Yen DC (2014) Online shopping drivers and barriers for older adults: age and gender differences. Comput Hum Behav 37:133–143. https://doi.org/10.1016/j.chb.2014.04.028
- Lin T-C, Huang S-L, Hsu C-J (2015) A dual-factor model of loyalty to IT product: the case of smartphones. Int J Inf Manage 35(2):215–228
- Liñeira R, Henderson A (2021) Risk attitudes and independence vote choice. Polit Behav 43(2):541–560. https://doi.org/10.1007/s11109-019-09560-x
- Linnerud K, Toney P, Simonsen M, Holden E (2019) Does change in ownership affect community attitudes toward renewable energy projects? Evidence of a status quo bias. Energy Policy 131:1–8
- Long X, Nasiry J, Wu Y (2019) A behavioral study on abandonment decisions in multistage projects. Manag Sci 66(5):1999–2006
- Lorenc A, Pedro L, Badesha B, Dize C, Fernow I, Dias L (2013) Tackling fuel poverty through facilitating energy tariff switching: a participatory action research study in vulnerable groups. Public Health 127(10):894–901
- Lucia-Palacios L, Pérez-López R, Polo-Redondo Y (2016) Enemies of cloud services usage: inertia and switching costs. Serv Bus 10(2):447–467. https://doi.org/10.1007/s11628-015-0277-y

- Ma L, Lee CS (2019) Understanding the barriers to the use of MOOCs in a developing country: an innovation resistance perspective. J Educ Comput Res 57(3):571–590. https://doi.org/10.1177/07356 33118757732
- Mani Z, Chouk I (2017) Drivers of consumers' resistance to smart products. J Mark Manag 33(1–2):76– 97. https://doi.org/10.1080/0267257X.2016.1245212
- Mani Z, Chouk I (2018) Consumer resistance to innovation in services: challenges and barriers in the internet of things era. J Prod Innov Manag 35(5):780–807. https://doi.org/10.1111/jpim.12463
- Matsuo M, Minami C, Matsuyama T (2018) Social influence on innovation resistance in internet banking services. J Retail Consum Serv 45:42–51. https://doi.org/10.1016/j.jretconser.2018.08.005
- Merriman KK, Sen S, Felo AJ, Litzky BE (2016) Employees and sustainability: the role of incentives. J Manag Psychol 31(4):820–836
- Mohn K (2021) The gravity of status quo: a review of IEA's world energy outlook. Econ Energy Environ Policy 9(1):63–81
- Moorthy K, Suet Ling C, Weng Fatt Y, Mun Yee C, Ket Yin EC, Sin Yee K, Kok Wei L (2017) Barriers of mobile commerce adoption intention: perceptions of generation X in malaysia. J Theor Appl Electron Commer Res 12(2):37–53. https://doi.org/10.4067/S0718-18762017000200004
- Morisi D, Jost JT, Panagopoulos C, Valtonen J (2021) Is there an ideological asymmetry in the incumbency effect? Evidence from U.S. congressional elections. Soc Psychol Personal Sci. https://doi. org/10.1177/19485506211046830
- Mueller M, Oschinsky FM, Freude H, Reßing C, Knop M (2019) Exploring the role of cognitive bias in technology acceptance by physicians. In: International conference of information systems (ICIS) proceedings, Munich, Germany
- Nel J, Boshoff C (2021) "I just don't like digital-only banks, and you should not use them either": traditional-bank customers' opposition to using digital-only banks. J Retail Consum Serv 59:102368. https://doi.org/10.1016/j.jretconser.2020.102368
- Ng Ee, Hong; Kwahk, Kee Young, (2010) Examining the determinants of mobile internet service continuance: a customer relationship development perspective. IJMC 8(2):210
- Nicolle A, Fleming SM, Bach DR, Driver J, Dolan RJ (2011) A regret-induced status quo bias. J Neurosci 31(9):3320–3327
- Ostermann U, Holten R, Franzmann D (2020) The influence of private alternatives on employees' acceptance of organizational IS. Commun Assoc Inf Syst 47(1):764–786. https://doi.org/10.17705/ 1CAIS.04735
- Pal D, Papasratorn B, Chutimaskul W, Funilkul S (2019) Embracing the smart-home revolution in asia by the elderly: an end-user negative perception modeling. IEEE Access 7:38535–38549. https://doi. org/10.1109/ACCESS.2019.2906346
- Panter AT, Sterba SK (2011) Handbook of ethics in quantitative methodology. Routledge, London
- Park M, Jun J, Park H (2017) Understanding mobile payment service continuous use intention: an expectation - confirmation model and inertia. Qual Innov Prosper 21(3):78. https://doi.org/10.12776/qip. v21i3.983
- Park SC, Ryoo SY (2013) An empirical investigation of end-users' switching toward cloud computing: a two factor theory perspective. Comput Hum Behav 29(1):160–170
- Pisoni A, Lo Gerfo E, Ottone S, Ponzano F, Zarri L, Vergallito A, Romero L, Leonor J (2014) Fair play doesn't matter: MEP modulation as a neurophysiological signature of status quo bias in economic interactions. Neuroimage 101:150–158
- Polites; Karahanna, (2012) Shackled to the Status Quo: the inhibiting effects of incumbent system habit, switching costs, and inertia on new system acceptance. MIS Q 36(1):21
- Puiu A-I, Ardeleanu AM, Cojocaru C, Bratu A (2021) Exploring the effect of status quo, innovativeness, and involvement tendencies on luxury fashion innovations: the mediation role of status consumption. Mathematics 9(9):1051
- Qin G (2021) Liberal or conservative? The differentiated political values of the middle class in contemporary China. China Quart 245:1–22. https://doi.org/10.1017/S0305741020000296
- Ray A, Bala PK, Dwivedi YK (2020) Exploring barriers affecting eLearning usage intentions: an NLPbased multi-method approach. Behav Inf Technol. https://doi.org/10.1080/0144929X.2020.18494 03
- Ritov I, Baron J (1992) Status-quo and omission biases. J Risk Uncert. https://doi.org/10.1007/BF002 08786
- Ram S (1987) A model of innovation resistance. Adv Consum Res 14(1):208-212
- Samuelson W, Zeckhauser R (1988) Status Quo Bias in decision making. J Risk Uncertain 1(1):7-59

- Shealy T, Klotz L, Weber EU, Johnson EJ, Greenspan Bell R (2019) Bringing choice architecture to architecture and engineering decisions: how the redesign of rating systems can improve sustainability. J Manag Eng. https://doi.org/10.1061/(ASCE)ME.1943-5479.0000692
- Sherren K, Loik L, Debner JA (2016) Climate adaptation in 'new world' cultural landscapes: the case of Bay of Fundy agricultural dykelands (Nova Scotia, Canada). Land Use Policy 51:267-280
- Shin S, Kim H, Heath CJ (2019) Narrow framing and retirement savings decisions. J Consum Aff 53(3):975-997. https://doi.org/10.1111/joca.12211
- Shirish A, Batuekueno L (2021) Technology renewal, user resistance, user adoption: status quo bias theory revisited. J Organ Chang Manag 34(5):874-893. https://doi.org/10.1108/JOCM-10-2020-0332 Simon HA (1955) A behavioral model of rational choice. Q J Econ 69(1):99
- Simona-Moussa J, Ravazzini L (2019) From one recession to another: longitudinal impacts on the quality of life of vulnerable groups. Soc Indic Res 142(3):1129-1152. https://doi.org/10.1007/ s11205-018-1957-5
- Sivathanu B (2019) Adoption of digital payment systems in the era of demonetization in India. J Sci Technol Policy Manag 10(1):143-171. https://doi.org/10.1108/JSTPM-07-2017-0033
- Siyal AW, Ding D, Siyal S (2019) M-banking barriers in Pakistan: a customer perspective of adoption and continuity intention. Data Technol Appl 53(1):58-84. https://doi.org/10.1108/DTA-04-2018-0022
- Soh PY, Heng HB, Selvachandran G, Le Anh Q, Chau HTM, Le Son H et al (2020) Perception, acceptance and willingness of older adults in Malaysia towards online shopping: a study using the UTAUT and IRT models. J Ambient Intell Humaniz Comput. https://doi.org/10.1007/ s12652-020-01718-4
- Song J-D, Ahn Y-H (2019) Cognitive Bias in emissions trading. Sustainability 11(5):1365
- Stackhouse M, Falkenberg L, Drake C, Mahdavimazdeh H (2020) Why massive open online courses (MOOCs) have been resisted: a qualitative study and resistance typology. Innov Educ Teach Int 57(4):450-459. https://doi.org/10.1080/14703297.2020.1727353
- Stryja C, Satzger G (2019) Digital nudging to overcome cognitive resistance in innovation adoption decisions. Serv Ind J 39(15-16):1123-1139. https://doi.org/10.1080/02642069.2018.1534960
- Sun S, Xiong C, Chang V (2019) Acceptance of information and communication technologies in education. Int J Enterp Inf Syst 15(1):24-44
- Suri G, Sheppes G, Schwartz C, Gross JJ (2013) Patient inertia and the status quo bias: when an inferioroption is preferred. Psychol Sci 24(9):1763-1769
- Talke K, Heidenreich S (2014) How to overcome pro-change bias: incorporating passive and active innovation resistance in innovation decision models. J Prod Innov Manag 31(5):894-907. https://doi. org/10.1111/jpim.12130
- Talwar S, Dhir A, Kaur P, Mäntymäki M (2020) Barriers toward purchasing from online travel agencies. Int J Hosp Manag 89:102593. https://doi.org/10.1016/j.ijhm.2020.102593
- Tandon A, Jabeen F, Talwar S, Sakashita M, Dhir A (2021) Facilitators and inhibitors of organic food buying behavior. Food Qual Prefer 88:104077. https://doi.org/10.1016/j.foodqual.2020.104077
- Tavera-Mesias JF, van Klyton A, Zuñiga Collazos A (2021) Social stratification, self-image congruence, and mobile banking in Colombian cities. J Int Consum Market. https://doi.org/10.1080/08961530. 2021.1955426
- Telesetsky A (2017) Eco-restoration, private landowners and overcoming the status quo bias. Griffith Law Rev 26(2):248-274
- Tranfield D, Denyer D, Smart P (2003) Towards a methodology for developing evidence-Informed management knowledge by means of systematic review. Br J Manag 14(3):207-222. https://doi.org/10. 1111/1467-8551.00375
- Tversky A, Kahneman D (1974) Judgment under uncertainty: heuristics and biases. Science (new York, NY) 185(4157):1124-1131
- vom Brocke J, Simons A, Riemer K, Niehaves B, Plattfaut R, Cleven A (2015) Standing on the shoulders of giants: challenges and recommendations of literature search in information systems research. Commun Assoc Inf Syst. https://doi.org/10.17705/1CAIS.03709
- Wang G, Wang P, Cao D, Luo X (2020) Predicting behavioural resistance to BIM implementation in construction projects: an empirical study integrating technology acceptance model and equity theory. J Civil Eng Manag 26(7):651-665. https://doi.org/10.3846/jcem.2020.12325
- Wang L, Luo X, Yang X, Qiao ZL (2019a) Easy come or easy go? Empirical evidence on switching behaviors in mobile payment applications. Inf Manag. https://doi.org/10.1016/j.im.2019.02.005

- Wang W-T, Ou W-M, Chen W-Y (2019b) The impact of inertia and user satisfaction on the continuance intentions to use mobile communication applications: a mobile service quality perspective. Int J Inf Manage 44:178–193. https://doi.org/10.1016/j.ijinfomgt.2018.10.011
- Webster J, Watson RT (2002) Analyzing the past to prepare for the future: writing a literature review. MIS Quart 26(2):13–23
- Weiler S, Marheinecke H, Matt C, Hess T (2019) Trapped in the status Quo? Cognitive misperceptions' effects on users' resistance to mandatory usage. In: Pacific Asia conference on information systems (PACIS) proceedings, Xi'an, China
- Wiedmann KP, Hennigs N, Pankalla L, Kassubek M, Seegebarth B (2011) Adoption barriers and resistance to sustainable solutions in the automotive sector. J Bus Res 64(11):1201–1206. https://doi.org/ 10.1016/j.jbusres.2011.06.023
- Wong L-W, Tan GW-H, Lee V-H, Ooi K-B, Sohal A (2021) Psychological and system-related barriers to adopting blockchain for operations management: an artificial neural network approach. IEEE Trans Eng Manag. https://doi.org/10.1109/TEM.2021.3053359
- Wu C-C (2016) Status quo bias in information system adoption: a meta-analytic review. Online Inf Rev 40(7):998–1017
- Wu JS, Ye S, Zheng CJ, Law R (2021) Revisiting customer loyalty toward mobile e-commerce in the hospitality industry: does brand viscosity matter? Int J Contemp Hosp Manag 33(10):3514–3534. https://doi.org/10.1108/IJCHM-11-2020-1348
- Zhang Kem ZK, Gong X, Zhao SJ, Lee MKO (2016) Are you afraid of transiting from web to mobile payment? The bias and moderating role of inertia. In: Pacific Asia conference on information systems (PACIS) proceedings, Chiayi City, Taiwan
- Zhang X, Guo X, Wu Y, Lai K-H, Vogel D (2017) Exploring the inhibitors of online health service use intention: a status quo bias perspective. Inf Manag 54(8):987–997
- Zhao Q, Chen C, Wang J, Wang K (2016) Study of factors influencing mobile ticketing adoption: status quo bias perspective. J Mar Sci Technol 24:926–937

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.