

Aug 10th, 12:00 AM

Revisiting the Constructs of SQB Theory: A Review and Research Agenda

Mahikala Niranga
Southern Cross University, mahi44n@gmail.com

Darshana Sedera
Southern Cross University, darshana.sedera@gmail.com

Follow this and additional works at: <https://aisel.aisnet.org/amcis2022>

Recommended Citation

Niranga, Mahikala and Sedera, Darshana, "Revisiting the Constructs of SQB Theory: A Review and Research Agenda" (2022). *AMCIS 2022 Proceedings*. 2.
<https://aisel.aisnet.org/amcis2022/core/core/2>

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2022 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

Revisiting the Constructs of SQB Theory: A Review and Research Agenda

Emergent Research Forum (ERF)

W. A. M. Niranga
Southern Cross University
mahi44n@gmail.com

Darshana Sedera
Southern Cross University
darshana.sedera@gmail.com

Abstract

This literature review aims to examine the current state of SQB theory by looking at its evolution, most used constructs, contextual coverage and propose new SQB constructs to a revised model. More specifically, this paper examines SQB research published from 2010 to 2021. While some work has been done on examining the application of SQB theory within their context, the associated SQB constructs in which this work was achieved are frequently observed. Investigating the papers from a theoretical and contextual view exposes that IS researchers have continuously used SQB, yet primary attention is on existing theories with little attention to contextual differences even though a fast-moving IT appearance is present in the field. Regardless of the context, researchers can learn lessons on SQB learned from other scholars and move beyond to further enrich the understanding of SQB with an expansion of the existing SQB literature.

Keywords:

SQB theory, constructs, context, literature review.

Introduction

The world has changed due to globalization (Fischer 2003), technology advances (Walther et al. 2018), market competition (Lindskov 2021), connectivity (Allen 2016), and the recent COVID-19 pandemic (Razmerita et al. 2021). With this massive change that has resulted in the last decades, status quo bias (SQB) has become an increasingly important concept as individuals rarely accept change willingly and prefer their beliefs. Receiving extensive interest in both academia and industry, SQB is now used extensively in many contexts, especially in politics (Alesina and Passarelli 2019), economy (Tomiura et al. 2016), education (Stevens et al. 2021), health (Hsieh and Lin 2020), agriculture (Sedera et al. 2021) and consumer behavior (Lee et al. 2008) as it is being challenged more than ever before. However, practitioners and researchers need to understand the SQB more, through which sectors can get the value due to the rapid change that occurred. To date, researchers have examined SQB using a variety of theories, research lenses, and empirical approaches, mainly addressing the models developed by Samuelson and Zeckhauser (1988) and Kim and Kankanhalli (2009). While these various streams of study provide diverse views on SQB on the issue of human decision-making, SQB theory made a significant input in understanding the character of biases in contributing to individuals' propensity to stick to the status quo and resist change. With the overwhelming endorsement received by Samuelson and Zeckhauser (1988) model, Kim and Kankanhalli (2009) made a significant contribution to SQB theory from the IS context, by looking at the theory adaptation in previous scholarly work. While authors in various disciplines address rather specific research questions relating to SQB as per their context, it is noticed that, regardless of the context, most of them, including IS scholars have used the SQB theory constructs in their studies. Context has been playing an enormous role in SQB which is evident from the last decade which required a substantial modification (Polites and Karahanna 2012; Shirish and Batuekueno 2021). Even though a few of them have changed the SQB constructs as per the contextual differences, it is not prominent enough to assess SQB. Against this backdrop, the research question addressed in this paper is: *What is the current state of SQB theory?* This literature review aims to learn the extent to which we can answer this question based on existing literature, look at the theory to see the evolution, its most used constructs, contextual coverage, and propose new constructs to a revised model.

Methodology

This review covers SQB research published from 1/2010 to 12/2021. Since there are no clear criteria governing the choice of outlets (Shamseer et al. 2015), we addressed our search as per the choice of outlets presented by Schryen (2015) and Trieu (2017). Mainly EBSCO database has been referred to locate useful academic publications and we identified 320 peer-reviewed papers adhere to that. Among them, we could not analyze 160 due to the duplication result that appeared in the database. Only 160 papers were retrieved for evaluation and 40 remained in the literature review. 120 papers were excluded due to reasons the searching keywords; *status quo bias and status quo bias theory*, appeared in abstracts but they did not investigate SQB, SQB focus of the paper does not match with the paper definitions, duplicates, and not written in English. All the remaining 160 papers were from different peer-reviewed journals in various disciplines; *American Journal of Political Science, Business Process Management Journal, MIS Quarterly, International Journal of Information Management, Journal of Behavioral Finance, Journal of Consumer Psychology* etc. Table 1 illustrates the mapping of SQB constructs.

Results and Discussion

The analysis was conducted in three phases. First, a broad sense of how many articles study SQB was obtained. Next, papers were reviewed and synthesized based on the context. Then, the relevant adopted SQB theory constructs, new context-related constructs, and the relationship between them were explored. Finally, repetitively used new context related SQB constructs were identified to use as new SQB constructs in future studies. As per figure 1, the highest percentage (20%) in IS context is expected to be the leading context for research on examining SQB as the fast-moving appearance of the technology adaptation in business work. Further, this has more strengthened with the COVID-19 and how individuals react to new adaptations (Brafford and Ryan 2020). Equally, the consumer behaviour context, which is the second largest (17.5%) in the SQB investigation, shows an examination based on customer satisfaction and psychological constraints (Dean et al. 2017). Additionally, the health and medical context (15%) has been used SQB broadly to measure the resistance of clients specifically to the areas on IT-oriented health applications (Hsieh and Lin 2020; Trieu 2017) which have been mainly implemented during the COVID-19 (Prakash and Das 2021). Also, the significant contribution in accounting and finance (10%) and general (10%) contexts could be resulted due to the practitioner interest around 2010-2021. Conversely, SQB's least prioritized contexts; telecommunication (7.5%), public administration (5%), economic development (5%), financial services (5%), and energy (5%), perhaps due to the small number of articles during the article review category. It does not answer that SQB has not been used in research studies, but, removed due to this study framework. Figure 2 record the degree to which the reviewed SQB papers refer to the constructs of SQB theory proposed by Samuelson and Zeckhauser (1988) and Kim and Kankanhalli (2009). As noted earlier, a few purposes of this review analysis are to look at the SQB theory to see the evolution and its most used constructs. Regardless of the context, the most used SQB construct is sunk cost (SQB5) proposed by Samuelson and Zeckhauser (1988) as one of the main switching costs which are later expanded by Kim and Kankanhalli (2009). Further, it has been identified as a psychological commitment by most of the scholars that may influence individuals' intention to stick to their current course of action and empirically identify the unique role of sunk costs in studying adoption. It is apparent that, most of the scholars have considered the rational decision making by looking at the transition cost (SQB1) and uncertainty cost (SQB2) constructs from the original theory. Several studies highlighted the role of uncertainty, primarily looking at information search and analysis efforts. Besides, loss aversion (SQB3) has been used as a main SQB construct and it has been looked at in different perspectives such as the endowment effect based on prospect theory in 1979 (Kahneman and Tversky 1979) and views of Kahneman and Tversky (1984). Unexpectedly, most of them have not investigated anchoring cost (SQB4), regret avoidance (SQB6), and control (SQB7) in their studies, instead of adopting the comparable SQB constructs introduced by Kim and Kankanhalli (2009). It is readily evident that most of the scholars have considered the Kim and Kankanhalli (2009) model constructs than Samuelson and Zeckhauser (1988) original constructs as a correct fit to their context even though it has been developed based on IS discipline. Nevertheless, individual authors are making a substantial contribution to the SQB theory by introducing context-related constructs in besides from adapting constructs from the original SQB theory.

¹ The full journal list is not stated under the methodology and can be received by the corresponding authors upon request

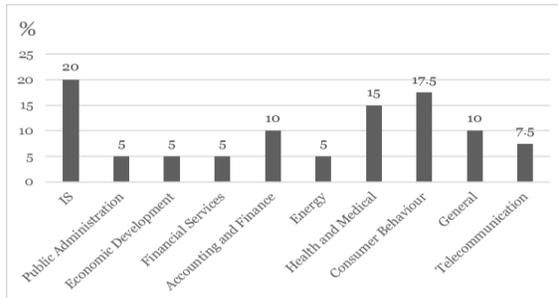


Figure 1. Results by the Context

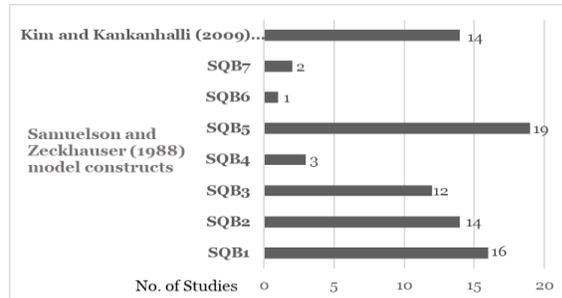


Figure 2. Results by the Use of SQB Constructs

Revisiting SQB Constructs and Recommendations for Future Studies: Table 1 provides an interesting finding of the use of different context specific SQB constructs. Thus, the research on IS context did not make an intensive effort to identify underlying context related SQB constructs except for a few studies. Further, the majority of them have adopted the Kim and Kankanhalli (2009) model constructs to their studies. Yet, we find from the ‘new constructs’ that there are some SQB constructs used by many authors in several contexts which would be useful to investigate SQB. Scholars can consider them for their future research in creating a substantial input to existing SQB theory. This could be further described by mainly looking at common new SQB constructs in research which are bold in Table 1; Inertia: This has been repetitively used by many scholars as a reflection of bias towards the status quo, based on Polites and Karahanna (2012) work and we would add them as a new SQB construct in future research. Accordingly, it has been conceptualized as a formative psychological construct, including cognitive, behavioral, and affective components; Satisfaction: It reveals that satisfaction has been assessed as an SQB construct which is based on regret avoidance of psychological commitment. Accordingly, positive, or negative fulfillment response of customers would prefer to stay in the previous state or resist more for a change; Overconfidence: This expresses the propensity of an individual to overestimate their knowledge and experience without considering other external factors. Therefore, the decision would be biased by the overconfidence of the individual which may result in SQB; Habits: This has used as SQB construct which leads to automatic responses to signs and repeated behaviors. Therefore, individuals will not perceive the need to evaluate the benefits and costs. Habitual behavior grounds individuals’ lack of motivation to change their ongoing behavior which leads to SQB; Loss costs: This refers to the disutility arising from the losses such as benefits, and privileges lost by switching. The retention of such encourages for individuals to continue the status quo.

Conclusion, Contributions, and Future Research

A literature review in SQB was conducted to examine the current state of SQB theory by looking at its evolution, most used constructs, and contextual coverage. Through the discussion, gaps in current SQB research have been identified as opportunities to recognize new SQB constructs for future work. The findings reveal that IS scholars have investigated the SQB more compared to other disciplines. However, their primary attention is to use Kim and Kankanhalli (2009) model constructs with little consideration given to the interaction with the context even though a fast-moving IT appearance is present. Therefore, they should cover more on the context to assess SQB. Regardless of the context, many researchers have introduced new context-related constructs which can use in future studies with an expansion to existing SQB literature. The potential findings of this study can contribute to both the IS and behavioral science applications. The main theoretical contribution is that it provides insights into widely used SQB theories of Samuelson and Zeckhauser (1988) and Kim and Kankanhalli (2009) as an expansion of using context-related constructs in scholarly work. Accordingly, inertia, satisfaction, overconfidence, habits, and loss costs can also be considered as new constructs in future research. From a practical perspective, new SQB constructs may also provide richer insights to address SQB which appears with rapid technology adaptation in work. Next stage is to draw an understanding of SQB constructs by extending the scope to conferences, journals, and time periods. A more thorough analysis will be conducted as part of this study, especially reviewing other disciplines where SQB is studied and theorized as a future work.

Author	Context ²	Samuelson and Zeckhauser (1988) Model Constructs						Kim and Kankanhalli (2009) Model Constructs	New Constructs
		RDM	CM	PC	Status Quo Bias ³ (SQB)				
Shirish and Batuekueno (2021)	IS	X	X			X		Switching benefits, Perceived value, Self-efficacy for change, Organizational support, Colleague opinion	
Wang et al. (2018)	IS		X			X		Social norms	Incumbent system habit, Procedural switching costs, Benefit loss costs , Inertia
Yi-Wen et al. (2015)	IS	X	X					Switching benefits, Institutional pressures, Perceived value	Satisfaction , Perceived risk
Lee and Joshi (2017)	IS							Social norms, Self-Efficacy, Organizational support, Colleague opinion, Organizational change	System failure, User acceptance
Kim (2011)	IS	X	X			X		Switching benefits, Perceived value	Loss costs
Oschinsky et al. (2021)	IS	X	X	X	X	X	X	Switching benefits, Perceived Value, Organizational support, Supportive management, Supportive colleague opinions	Value for others
Alzahrani et al. (2021)	IS	X	X			X		Perceived value, Switching benefits	
Polites and Karahanna (2012)	IS	X				X			Incumbent system habit, Inertia
Wilson et al. (2011)	PA		X	X					
Alesina and Passarelli (2019)	PA			X					
Kosavinta et al. (2017)	ED			X					The fourfold pattern, Bias from rare events, Mental accounting, Preference reversals
Tomiura et al. (2016)	ED			X					Risk aversion, Managerial occupation, Rich, Retirement, Education, Gender
Nel and Boshoff (2021)	FS							Perceived value barrier	Traditional banking inertia , Perceived risk barrier, Perceived usage barrier, Perceived image barrier, Perceived tradition barrier
Chuah and Devlin (2011)	FS			X	X				Hyperbolic discounting and procrastination, Mental accounting, Availability effect and salience, Overconfidence
Schmidt et al. (2020)	AF	X	X			X		Perceived value, Switching benefits, Self-efficacy for a change, Organizational support for a change, Colleagues' opinion	
Schmidt et al. (2020a)	AF	X	X			X		Perceived value, switching costs, Switching benefits, Self-efficacy for a change, Organizational support for a change, Colleagues' opinion	
Johnsi and Sunitha (2019)	AF			X	X		X		Herding, Overconfidence , Asymmetric information, Cognitive dissonance, Mental Accounting, Sensation seeking, Representativeness, Risk aversion
Freiburg and Grichnik (2013)	AF								Reputation, Investment size, Industry maturity, investor experience
Blasch and Daminato (2020)	E			X		X			
Grabicki and Menges (2019)	E								Consumer preferences, methods of preference elicitation
Hsieh and Lin (2020)	HM		X			X		Perceived value	Task characteristics & technology Characteristics (Task-technology fit)
Tsai et al. (2019)	HM	X				X			Inertia , Technology anxiety
Zhang et al. (2017)	HM	X				X			Health service habits , Privacy protection beliefs
Tsutsui et al. (2010)	HM								Beliefs regarding costs and benefits of vaccination, Time discounting, Risk aversion, Overconfidence , Experience, Preventive health and influenza illness, Education level and Socio-demographic attributes
Prakash and Das (2021)	HM								Performance risk, Medico-legal risk, Perceived threat, Inertia
Suri et al. (2013)	HM								Patient inertia
Mrkva et al. (2020)	CB			X					Model, Car attribute, Driving experience, General car knowledge
Shankar and Kumari (2019)	CB	X	X			X	X	Perceived value	Perceived threat, Inertia
Nel and Boshoff (2020)	CB	X	X			X			Direct purchasing habit , Direct purchasing inertia
Dean et al. (2017)	CB								Preference, Attention function, psychological constraint
Van Raaij (2012)	CB			X					
Kim and Gupta (2012)	CB	X	X			X			Satisfaction , Trust, Relative attractiveness,
Lin et al. (2015)	CB	X				X			Inertia , Satisfaction
Maltz (2020)	G		X						
Simonson and Kivetz (2018)	G			X					
Haita-Falah (2017)	G					X			
Brown et al. (2015)	G			X					
Hsin-Yi and Sheng-Pao (2019)	TC							Perceived value	Habit , Interpersonal relationships, Inertia , Satisfaction
Ee Hong and Kee-Young (2010)	TC	X				X		Perceived value	Service user satisfaction , Familiarity
Khedhaouria et al. (2016)	TC	X				X			Habits , Satisfaction , Inertia , Contractual subscription

Table 1. Mapping of SQB Constructs⁴

² IS: Information Systems, PA: Public Administration, ED: Economic Development, FS: Financial Services, AF: Accounting & Finance, E: Energy, HM: Health & Medical, CB: Consumer Behavior, G: General, TC: Telecommunication

³ RDM: Rational Decision Making, CM: Cognitive Misperception, PC: Psychological Commitment; SQB1: Transition cost, SQB2: Uncertainty cost, SQB3: Loss Aversion, SQB4: Anchoring cost, SQB5: Sunk cost, SQB6: Regret avoidance, SQB7: Control

⁴ The mapping can be received upon request.

References

- Alesina, A., and Passarelli, F. 2019. "Loss Aversion in Politics," *American Journal of Political Science (John Wiley & Sons, Inc.)* (63:4), pp. 936-947.
- Allen, J. P. 2016. "The Sharing Economy," in: *Proceedings of the 2016 ACM SIGMIS Conference on Computers and People Research*. pp. 65-67.
- Brafford, A. M., and Ryan, R. M. 2020. "3 Ways to Motivate Your Team Through an Extended Crisis " *Harvard Business Review*:September), pp. 1-4.
- Dean, M., Kıbrıs, Ö., and Masatlıoğlu, Y. 2017. "Limited Attention and Status Quo Bias," *Journal of Economic Theory* (169), pp. 93-127.
- Fischer, S. 2003. "Globalization and Its Challenges," *American Economic Review* (93:2), pp. 1-30.
- Hsieh, P.-J., and Lin, W.-S. 2020. "Understanding the Performance Impact of the Epidemic Prevention Cloud: An Integrative Model of the Task-Technology Fit and Status Quo Bias," *Behaviour & Information Technology* (39:8), pp. 899-916.
- Kahneman, D., and Tversky, A. 1979. "Prospect Theory: An Analysis of Decision under Risk," *Econometrica* (47:2), pp. 263-291.
- Kahneman, D., and Tversky, A. 1984. "Choices, Values, and Frames," *American Psychologist* (39:4), pp. 341-350.
- Kim, H., and Kankanhalli, A. 2009. "Investigating User Resistance to Information Systems Implementation: A Status Quo Bias Perspective," *MIS Quarterly* (33:3), pp. 567-582.
- Lee, J., Baek, E., and Sung, S. 2008. "A Study of Factor Affecting Customer Switching Behavior of Mobile Telecommunication 3.5 G Services," *ICE-B*, pp. 241-246.
- Lindskov, A. 2021. "Hypercompetition: A Review and Agenda for Future Research," *Competitiveness Review: An International Business Journal* (ahead-of-print:ahead-of-print).
- Polites, and Karahanna. 2012. "Shackled to the Status Quo: The Inhibiting Effects of Incumbent System Habit, Switching Costs, and Inertia on New System Acceptance," *MIS Quarterly* (36:1).
- Prakash, A. V., and Das, S. 2021. "Medical Practitioner's Adoption of Intelligent Clinical Diagnostic Decision Support Systems: A Mixed-Methods Study," *Information & Management* (58:7), pp. N.PAG-N.PAG.
- Razmerita, L., Peroznejad, A., Pantelli, N., and Kärreman, D. 2021. "Adapting to the Enforced Remote Work in the Covid 19 Pandemic," in: *34th Bled eConference Digital Support from Crisis to Progressive Change: Conference Proceedings*. pp. 629-642.
- Samuelson, W., and Zeckhauser, R. 1988. "Status Quo Bias in Decision Making," *Journal of Risk and Uncertainty* (1:1), pp. 7-59.
- Schryen, G. 2015. "Writing Qualitative Literature Reviews—Guidelines for Synthesis, Interpretation, and Guidance of Research," *Communications of the Association for Information Systems* (37), pp. 286-325.
- Sedera, D. D., Lokuge, S., and Nugawela, S. 2021. "How Status Quo Bias Affects Digitalization of Agriculture: A Mixed-Method Study of Agri-Business Ceos," in: *International Conference on Information Systems*. Austin, Texas: AIS Library.
- Shamseer, L., Moher, D., Clarke, M., Ghersi, D., Liberati, A., Petticrew, M., Shekelle, P., and Stewart, L. A. 2015. "Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols (Prisma-P) 2015: Elaboration and Explanation," *Bmj* (349).
- Shirish, A., and Batuekueno, L. 2021. "Technology Renewal, User Resistance, User Adoption: Status Quo Bias Theory Revisited," *Journal of Organizational Change Management* (34:5), pp. 874-893.
- Stevens, G. J., Bienz, T., Wali, N., Condie, J., and Schismenos, S. 2021. "Online University Education Is the New Normal: But Is Face-to-Face Better?," *Interactive Technology and Smart Education* (18:3), pp. 278-297.
- Tomiiura, E., Ito, B., Mukunoki, H., and Wakasugi, R. 2016. "Individual Characteristics, Behavioral Biases, and Trade Policy Preferences: Evidence from a Survey in Japan," *Review of International Economics* (24:5), pp. 1081-1095.
- Trieu, V.-H. 2017. "Getting Value from Business Intelligence Systems: A Review and Research Agenda," *Decision Support Systems* (93), pp. 111-124.
- Walther, S., Sedera, D., Urbach, N., Eymann, T., Otto, B., and Sarker, S. 2018. "Should We Stay, or Should We Go? Analyzing Continuance of Cloud Enterprise Systems," *Journal of Information Technology Theory and Application (JITTA)* (19:2), pp. 57-88.