Social Exclusion and Consumer Switching Behavior:

A Control Restoration Mechanism

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This study examines the effects of social exclusion on consumers' brand and product switching behavior. Five studies were conducted, which revealed that consumers who perceive themselves as being chronically or temporarily excluded exhibit more switching behavior than their peers who do not feel socially excluded. This effect is mediated by a decreased sense of control after social exclusion. The effect disappears when the incumbent option possesses the function of maintaining social belongingness (e.g., when the incumbent option is socially conformed or symbolizes social connection).

Keywords: social exclusion, switching behavior, control restoration, belongingness

The days of complete customer loyalty are over. Today, increasing numbers of consumers are changing their buying norms by purchasing different products. According to a recent survey of 23,665 consumers in 34 countries, the "switching economy," that is, the revenue that companies lose due to increased switching rates, has swollen to $5.9 trillion for companies globally (i.e., a 29% increase since 2010; Accenture, 2013), with $1.3 trillion in the U.S. alone. The increasingly frequent consumer switching behavior and the large amount of revenue behind it pose challenges for both the product and service industries. Meanwhile, with the increasing penetration rate of social networks and the growing trend to integrate social and shopping elements, asking how interpersonal interactions such as rejection or inclusion affect consumers' consumption behavior becomes a legitimate and important question. In this study, we examine whether social exclusion, a psychological construct that has aroused significant research attention in recent decades, has a significant effect on consumers' switching behavior. We predict that consumers will show an increased tendency to switch brands and product choices after experiencing social exclusion.

What is the theoretical ground for this prediction? Specifically, social exclusion deprives people of their sense of control. Hence, socially excluded individuals may experience a strong desire to restore their sense of control (Baumeister et al. 2005). Switching to a different product or service involves changing from an incumbent option to a new one. This process helps individuals to demonstrate self-efficacy in influencing their environment and highlights their ability to have alternative options, thereby contributing to their sense of control (Averill 1973; Corah and Boffa 1970). Hence, we hypothesize that social exclusion increases consumer switching behavior as a means of restoring a sense of control. We further predict that the effect of social exclusion on consumer switching behavior is attenuated or dismissed when the

incumbent option possesses the function of maintaining social belongingness (e.g., when the incumbent option is socially conformed or symbolizes social connection).

Our hypotheses are supported by the five studies reported in this article. The results from these studies provide important insights into how and why consumers' feelings of social exclusion influence their product and service switching behavior. To the best of our knowledge, our research is the first to reveal the relationship between consumer switching behavior and social exclusion. In addition to revealing a novel factor driving consumers' switching decisions, it provides further evidence that consumers' switching behavior can be influenced by psychological factors, independent of tradeoffs among the options under consideration. Finally, this research contributes to the growing psychological literature on the mechanism of personal control by demonstrating the effectiveness of switching behavior in restoring people's sense of control; and it also contributes to the social exclusion literature by testing the interactive effect between two mechanisms simultaneously activated by exclusion, namely, control restoration and belongingness maintenance.

THEORETICAL BACKGROUND

Social Exclusion and the Sense of Control

Social exclusion (i.e., being rejected, isolated, or ostracized, sometimes with explicit declarations of dislike and other times not; Baumeister et al. 2005; Williams 2007) is a common but threatening experience. Exclusion can occur in almost every aspect of social life, such as being ignored at a party or in office conversations, having a friendship or romantic relationship

end, or receiving rejection letters from companies or universities. A recent report by the European Urban Knowledge Network (2015) revealed that in Europe, 124 million people (about one in four European citizens) have experienced various levels of social exclusion.

Given the importance of this phenomenon, ample research in both social and consumer psychology has investigated the psychological consequences of social exclusion. For example, researchers have found that individuals who are continually exposed to social exclusion over a long period of time are likely to experience depression (DeWall and Richman 2011), helplessness, and/or feelings of unworthiness (Allen and Badcock 2003). Compared with their included peers, excluded consumers take more financial risks, have greater self-focus, desire others' attention, and emphasize uniqueness (Duclos, Wan, and Jiang 2013; Lee and Shrum 2012; Mead et al. 2011; Wan, Xu, and Ding 2014; Wang, Zhu, and Shiv 2012). Williams (2009) found that exclusion threatens four fundamental human needs: belongingness, perceived control, self-esteem, and a meaningful existence. Consistent with this argument, excluded individuals exhibit selective memories of explicitly social events to fulfill their unmet need to belong (Gardner, Pickett, and Brewer 2000); manifest strong intentions about religious affiliation to regain a sense of control (Aydin, Fischer, and Frey 2010); experience negative feelings related to low self-esteem such as anxiety, jealousy, and depression (Leary 1990); and demonstrate less empathy and a lower likelihood of engaging in prosocial behavior due to reduced self-worth or a less meaningful existence (DeWall and Baumeister 2006; Twenge et al. 2007).

Among the four needs threatened by social exclusion, we focus on the need for personal control (Baumeister et al. 2005). Having a sense of control, defined as the need to demonstrate competence, superiority, personal causation, and mastery over the environment (Alloy, Clements, and Koenig 1993; Kay et al. 2009; White 1959), is widely accepted as a driving force of human

behavior. Individuals with a sense of control feel less vulnerable to attack (Hiroto 1974) and have greater confidence in solving problems (Mirowsky and Ross 1990). From an evolutionary standpoint, if we control our environment, we have a far better chance of survival (Mittal and Griskevicius 2014). Thus, people suffer psychologically and/or physically when their sense of control has been damaged (DeWall et al. 2012; Newcomb and Harlow 1986; Staub, Tursky, and Schwartz 1971).

An individual's sense of control is normally operationalized in two dimensions: personal mastery (i.e., the extent to which people perceive themselves as having the ability to influence or control the environment) and perceived constraints (i.e., the extent to which people believe there are obstacles or factors beyond their control that interfere with their goals; Gurin, Gurin, and Morrison 1978; Lachman and Weaver 1998). Being rejected or ostracized by others indicates the loss or unavailability of social connections (Molden et al. 2009). Consequently, social exclusion is associated with an inability to influence others in social activities, impairing an individual's perceived personal mastery over the surroundings (Williams 1997). Similarly, social exclusion limits individuals' understanding of their social environment and interactions with others in the society (Bruneau 1973; Skinner 1996), and concurrently results in more perceived constraints. Taken together, exclusion results in lower perceived control. Given that the sense of control is a fundamental human need that is crucial to personal well-being, consistent with psychological reactance theory (Brehm 1966; Wortman and Brehm 1975), when individuals feel excluded, they experience an uncomfortable tension caused by lack of control and they subsequently react in an attempt to regain control (DeWall et al. 2012; Pittman and D'Agostino 1989; Wortman and Brehm 1975).

Utility- and Process-Driven Consumer Switching Behavior

Consumer switching refers to a consumer's voluntary decision to move from an existing incumbent option to a new option. It is a prevalent phenomenon that can occur either across brands or within the same brand (Jiang, Zhan, and Rucker 2014). In general, consumer switching behavior can be explained by two types of motives. Consistent with the classical economic theory of expected utility (Mongin 1997), a utility-driven explanation posits that consumers switch products/services because they expect the new product/service option to bring them greater utility than the incumbent option (Lam et al. 2010; Ng, Kim, and Rao 2015). Supporting this assumption, the research on consumer switching behavior has largely focused on how various marketing factors drive switching by increasing the expected utility of the new option (Dodson, Tybout, and Sternthal 1978; Van Trijp, Hoyer, and Inman 1996), decreasing the expected utility of the old option (Bougie, Pieters, and Zeelenberg 2003; Inman and Zeelenberg 2002), or both (Deighton, Henderson, and Neslin 1994; Grover and Srinivasan 1992). Inman and Zeelenberg (2002) showed that when the prior experience with an incumbent service provider was unpleasant, switching was more justifiable than staying. Other research has shown that the likelihood of switching to a new brand is significantly higher when the new brand is offered as a deal than when it is not, especially when the deal involves a media-distributed coupon (Dodson et al. 1978).

Although the tradeoff between the new and incumbent option has a substantial influence on consumers' switching decisions, it may not be the only motive. More recently, researchers have discovered that consumers sometimes make switching decisions merely for the sake of switching, independent of the utility of the option (Drolet 2002; Jiang et al. 2014). This process-

driven explanation suggests that the process of making a switching decision provides certain psychological benefits to the decision maker, and in certain situations the decision maker makes the switching decision independent of its outcome. For example, consumers sometimes change their product choices simply for the sake of demonstrating flexibility in their decision rules (Drolet 2002). Jiang et al. (2014) found that perceptions of high power activated a goal for action, which in turn led to more consumer switching behavior.

Switching and Control Restoration

From this process-driven perspective, we argue that a potential psychological consequence of consumer switching behavior is the restoration of the sense of control. Compared with sticking to the status quo, switching involves a *change* from the current product or service (i.e., the status quo) to another. According to prior research, changing is more salient and informative than not changing (Fazio et al. 1982; Nisbett and Ross 1980), because a predisposition to notice and respond to change may enhance evolutionary success (Newman, Wolff, and Hearst1980). As a result, compared to remaining with the status quo, the change involved in switching provides more apparent and salient evidence of the causal connection between individual behavior and its effect on the environment (i.e., "behavior-outcome contingency"; Alloy et al. 1993). Subsequently, switching behavior helps to manifest an individual's mastery of a situation and demonstrate his or her self-efficacy in influencing the environment, symbolizing a strong personal mastery of the self. To conclude, switching helps to increase personal mastery – the perception that an experience or outcome is caused by an individual's own action, which is an important source of feeling in control (Averill 1973;

Wortman 1975). Consistent with this perspective, Wortman (1975) showed that participants who caused a change in the outcome of a task perceived themselves to have more control over it.

Another important aspect of switching is its final state: ending up with an alternative option. Although consumers do not know the outcome of their choices when they make decisions, the ability to choose other options indicates that their behavior is being controlled through internal forces and is less constrained by situational bounds (Averill 1973; Corah and Boffa 1970; Skinner 1996; Zimbardo 1969). Compared to remaining with the status quo, voluntarily choosing another brand or product in switching *proves* and makes the consumer *realize* that he or she has an alternative choice. Subsequently, switching behavior demonstrates the ability to deviate from the status quo and makes the consumer feel less constrained by the existing situation. Although it could be argued that merely having the belief or observing that there is an alternative option could in itself reduce the sense of constraint, the actual switching decision or behavior clearly highlights the ability to break the constraint of the status quo as opposed to choosing to remain with the incumbent option. Switching behavior thus helps to restore control by reducing "perceived constraint," which is the extent to which people believe there are obstacles or factors beyond their control that interfere with their goals (Gurin et al. 1978; Lachman and Weaver 1998).

Taken together, both the "changing" component and the voluntary choice of an alternative option involved in switching contribute to increased perceived control following switching behavior. Given that there is no direct evidence that consumer switching behavior is more effective at boosting perceived control than choosing to stay, we first conduct a pilot study to validate our basic notion.

Pilot Study

Two hundred and thirty adult U.S. consumers (96 men, M_{age} = 37.47) participated through Amazon's Mechanical Turk in exchange for a small monetary incentive. Participants were randomly assigned to one of four conditions (switching vs. chosen-stay vs. compulsory-change vs. compulsory-stay). The participants were instructed to imagine that there was a food court near their office that contained only two restaurants: a burger place and a Chinese restaurant. They were told that they went to the burger place or the Chinese restaurant (counterbalanced) for lunch yesterday. The participants in the switching condition were further informed that they decided to make a change and eat at the other restaurant today. In contrast, the participants in the chosen-stay condition were told to imagine that they decided to eat at the same restaurant they had eaten at yesterday. We also included two other no-choice baseline conditions (compulsory-change and compulsory-stay). The participants in the compulsory-change and compulsory-stay conditions were instructed to imagine that because the burger place or the Chinese restaurant (counterbalanced) was temporarily closed today, they had no choice but to change to the other restaurant (compulsory-change condition) or to stay with the same one they ate at yesterday (compulsory-stay condition). After imagining the scenario, the participants responded to the 6-item sense of control scale (Lachman and Weaver 1998; 1 = *strongly disagree*, 7 = *strongly agree*; α = .92; see web appendix A for a full list of items), based on their feeling at the moment.

After collapsing the counterbalanced cells, a series of planned contrasts was conducted to compare the participants' perceived control across conditions. Consistent with prior research findings that making a choice in general (either deciding to switch or staying with the incumbent

option) increases perceived control (Averill 1973; Botti and McGill 2011; Inesi et al. 2011), the sense of control in the chosen-stay condition was higher than the two compulsory (i.e. no-choice) conditions in which the participants were deprived of free choice due to factors beyond their control ($M_{\text{chosen-stay}}$ = 5.12, SD = 1.13 vs. $M_{\text{compulsory-change}}$ = 4.55, SD = 1.35; $t_{(226)}$ = 2.56, p = .011; $M_{\text{chosen-stay}}$ = 5.12, SD = 1.13 vs. $M_{\text{compulsory-stay}}$ = 4.61, SD = 1.36; $t_{(226)}$ = 2.26, p = .024). This was the same for the sense of control in the switching condition ($M_{\text{switching}}$ = 5.82, SD = 1.12 vs. $M_{\text{compulsory-change}}$ = 4.55, SD = 1.35; $t_{(226)}$ = 5.62; p < .001; $M_{\text{switching}}$ = 5.82, SD = 1.12 vs. $M_{\text{compulsory-stay}}$ = 4.61, SD = 1.36; $t_{(226)}$ = 5.33; p < .001). More importantly, as we predicted, the sense of control was higher among the participants in the switching condition than it was for those in the other conditions ($M_{\text{switching}}$ = 5.82, SD = 1.12 vs. $M_{\text{chosen-stay}}$ = 5.12, SD = 1.13; $t_{(226)}$ = 3.12; p = .002; $M_{\text{switching}}$ = 5.82, SD = 1.12 vs. $M_{\text{compulsory-change}}$ = 4.55, SD = 1.35; $t_{(226)}$ = 5.62; p < .001; $M_{\text{switching}}$ = 5.82, SD = 1.12 vs. $M_{\text{compulsory-stay}}$ = 4.61, SD = 1.36; $t_{(226)}$ = 5.33; p < .001). No difference was found between the two compulsory conditions (t < 1; NS).

The Current Research

The results from the pilot study provide direct evidence that switching more effectively helps to boost the sense of control than choosing to stay and other decision making situations. Building on these preliminary findings and our prior theorization, we hypothesize that social exclusion prompts consumer switching behavior. This effect is likely to be driven by the consumers' desire to restore a sense of control through switching behavior. Stating these hypotheses formally:

H1: Compared with socially included consumers, socially excluded consumers exhibit more switching behavior.

H2: The effect of social exclusion on consumers' switching behavior is mediated by consumers' sense of control.

Whereas switching indicates consumer behavior intended to deviate from the status quo option, the consumers' incumbent product or service options sometimes have the function of maintaining social belongingness. For example, the incumbent option may serve as a link between the consumer and others (e.g., other consumers using the same product; Mead et al. 2011). Because social exclusion threatens the need to belong and subsequently increases the desire for social belongingness (Lakin, Chartrand, and Arkin 2008; Maner et al. 2007), excluded consumers may feel the need to maintain their social belongingness by *not* switching in addition to restoring control through switching, when the incumbent option helps to maintain social connections. Given that in this situation, control restoration and belongingness maintenance exert forces in different directions, we predict that the effect of exclusion on switching will be attenuated or dismissed when the incumbent option helps to maintain social connections. Stated formally,

H3: The effect of social exclusion on consumer switching behavior is attenuated or dismissed, when the incumbent option possesses the function of maintaining social belongingness.

In this study, we test these hypotheses in five studies. Based on real-world consumption data, in the first study we show that the consumers' feelings of social exclusion are positively correlated with their switching behavior in daily consumption (specifically, their choice of lunch venues over a three-month period). Study 2 replicates this effect in controlled laboratory settings

with manipulated feelings of social exclusion and real product choices. Studies 3 and 4 provide direct support for our proposed control restoration mechanism by showing that the observed effect is mediated by the sense of control, and replicated when perceived control is taken away by other means. Study 4 also confirms the effectiveness of consumer switching behavior in restoring individuals' sense of control. Finally, study 5 demonstrates a situation in which control restoration competes with belongingness maintenance, and shows their interactive effect on consumer switching behavior. Together, these studies provide a novel and comprehensive perspective on the psychology of consumer switching behavior. Across experiments, targeted sample sizes were pre-determined as a function of a set period of time, and we reported all manipulations and all hypothesis-related measures in the studies.

STUDY 1

To examine the link between social exclusion and consumer switching behavior, we first conducted a study to test the relationship between the consumers' level of social exclusion and their real-world consumption behavior. We predicted that feelings of social exclusion would be positively correlated with actual consumer switching behavior.

Method

Social Exclusion/Connection. Given the significant role of the social media in maintaining social connections in contemporary society, social media involvement has been used to indicate and evaluate consumers' social connections (Correa, Hinsley, and Zuniga 2010; Divol,

Edelman, and Sarrazin 2012; Livingstone 2008). Tencent QQ (known popularly as QQ) is a social networking software available for PCs and smartphones. Similar to Facebook, Twitter, and Google+, it offers comprehensive online communication functions such as text messaging, audio and video calls, online social games, microblogging, group chat, and online shopping. QQ is the most popular social media tool among Chinese college students, and it is difficult to find a college student in China without a QQ account (Savitz 2012). Due to the popularity of QQ among Chinese consumers, especially college students, we measured Chinese college students' interpersonal connections on QQ as an indication of their level of social connections.

One hundred and twenty-six undergraduates (50 men, M_{age} = 19.72) from a Chinese university completed a voluntary online survey "about university students' life styles." The first part of the survey concerned social media involvement. The participants were asked to check their QQ software/app onsite and report the number of QQ friends they currently had and the number of QQ chatting groups in which they were currently members. These two numbers were then standardized and averaged to form a social connection index (r = .31; p < .001). Next, as potential control variables for the real-world consumption data to be collected later, the participants answered two questions regarding their eating habits and monthly spending: "Do you have a strong preference for one particular type of food?" (1 = *yes*, 2 = *no*) and, "On average, how much do you spend monthly?" (in Chinese ¥).

Switching Behavior. The Chinese university where we conducted this study has a closed campus far away from commercial areas. Because the university offers on-campus housing to all of its students, the students spend the majority of their time living on campus during the regular school year. In addition, all of the students use a campus smart card to make electronic payments

for their campus expenditures (e.g., consumption in student canteens, grocery stores, and other university facilities such as the library and the campus bus, etc.). All of the smart card transaction data were recorded and stored in the university data center.

After completing the survey and with the agreement of the survey participants and the university data center, the participants' smart card records from the student canteens (for all seven student canteens) where they ate lunch during the three months preceding the survey (92 days, from October 24, 2014 to January 23, 2015) were retrieved. We chose to focus on lunch records because a large proportion of the students skipped breakfast regularly and many (female) students only ate snacks for dinner without going to a canteen. A total of 14.8% of the canteen choice data was not recorded. In those cases, we assumed that the students had off-campus lunches on those days, and in the later analyses we coded them as having lunch in a place different from the seven canteens.

Switching behavior was coded following the established method (Kahn and Isen 1993; Menon and Kahn 1995). Specifically, we coded the participants' first canteen choice record as "0". Then, for each of the following canteen choices, we coded it as either "1 = *switch*" if the participant had lunch in a canteen different from the one they had gone to the previous day, or "0 = *no switch*" if the participant had lunch in the same canteen. We then summed up the numbers to build a switching behavior index that ranged from 0 to 91.

Results

The participants' switching index was regressed on their social connection index, with four demographic factors (age, gender, monthly spending, and taste preference) as the control

variables (table 1). We found that the social connection index had a significantly negative relationship with switching behavior (β = -3.10, $t_{(119)}$ = -2.15, p = .034, Cohen's f^2 = .04). As predicted, the participants who experienced greater social isolation/exclusion switched more often in their lunch canteen choices than those who were more socially integrated.

Insert table 1 about here

None of the control variables had a significant effect on switching behavior (ps > .195), and removing these control variables did not change the data pattern significantly (β = -4.46, $t_{(119)}$ = -2.00, p = .048, Cohen's f^2 = .05; without control variables). Further, after adding the interactions of the control variables with social exclusion into the regression, none of the interactions between the control variables and social exclusion were significant (ps > .070; see web appendix B).

The participants' social connection index, however, did not significantly affect the total number of restaurants that each participant patronized over the three months (β = -.06, $t_{(119)}$ = -.42, p = NS).

Discussion

Based on the online survey and the corresponding three months of archival data, our first study showed that feelings of social exclusion predicted greater consumer switching behavior. Chinese college students with fewer online social connections switched their lunch canteen choices more often than those who had more online connections. This study provides preliminary

evidence to support our basic hypothesis, that social exclusion is related to greater consumer switching behavior.

As luncheon decisions only represent a small proportion of college students' consumption activities, we see this study as a conservative test of our hypothesis and expect to observe more manifestations of the proposed effect in the broader consumption context. The different data sources for the independent and dependent variables also decreased the likelihood of demand effects. Finally, the field setting and the longitudinal nature of the dependent variable demonstrated the strong external validity of the effect we observed.

Two limitations of this study should also be noted. First, the proxy we used in this study (i.e., social connection index on social media) is a relatively indirect measurement for social exclusion, thus it may not perfectly capture the construct of social exclusion. Second, the correlational nature of this study makes it difficult to confirm the causal relationship between social exclusion and switching behavior. We address these concerns in our later studies.

STUDY 2

Study 2 replicated the findings of our first study in a more controlled laboratory environment to establish a stronger causal link between social exclusion and switching behavior. Study 1 examined the participants' switching behavior in sequential canteen choices. In study 2 we focused on single consumer choices to generalize our effect. In this study, we manipulated the participants' feelings of social exclusion instead of using online social connections as a proxy, and then we measured the participants' real switching behavior between different refrigerator magnets.

Our proposed mechanism was a process driven mainly by exclusion. Specifically, the motivation to restore an exclusion-dampened sense of control should lead to more switching behavior. However, an alternate explanation is that the findings of study 1 were due to social inclusion increasing the sense of control and thereby loyalty. To rule out this alternative, in study 2, we added a baseline condition to test whether the observed effect was indeed driven by social exclusion.

Method

One hundred and thirty-four undergraduate students from a Hong Kong university (43 men, M_{age} = 21.51) participated in this study in exchange for a small monetary incentive. The participants were randomly assigned to one of three (social exclusion vs. social inclusion vs. baseline) between-subjects conditions.

The participants' real switching behavior was measured by observing whether the participants switched their real choice of a free gift (a refrigerator magnet). To select the magnets to be used in the study, we conducted a pretest with a separate set of 60 participants (24 men, M_{age} = 20.75) from the same pool of undergraduates. The participants rated the likability of a series of 12 magnets on 7-point scales. Three magnets with medium and similar likability ratings (Ms = 3.58, 3.87, and 3.73, respectively; $F < 1$, NS; see web appendix C) were selected for the main study.

In the main study, to manipulate social exclusion, the participants first played Cyberball (Williams, Cheung, and Choi 2000; Williams and Jarvis 2006), a computerized ball-tossing game. During the game, the participants were told that they would be linked with two other

players online with whom they could use the icons and arrows on the computer screen to virtually catch and throw a ball. The participants were randomly assigned to one of three experimental conditions: social inclusion, social exclusion, or neutral. The participants in the inclusion condition received the ball one third of the time. In contrast, those in the exclusion condition received the ball only three times at the beginning of the game and never again. The participants in the baseline condition did not play the Cyberball game. A pre-test conducted among a separate group of students from the same subject pool ($N = 78$) confirmed that the participants in the exclusion condition had greater feelings of being excluded (i.e., felt "excluded," "left out," and "ignored," $\alpha = .95$; $M_{exclusion} = 5.84$, SD = 1.34) than those in the baseline ($M_{baseline} = 3.24$, SD = 1.02; $F\ (1, 75) = 92.59$, $p < .001$) and inclusion conditions ($M_{inclusion} = 2.92$, SD = 1.06; $F\ (1, 75) = 119.05$, $p < .001$), whereas the latter two conditions did not differ significantly ($F < 1$, NS).

As an ostensibly unrelated second task, the participants were asked to evaluate two refrigerator magnets (randomly selected from the pool of three pretested magnets) on two scales (i.e., "to what extent do you like the magnet," "how good looking is the magnet;" 1 = *not at all*, 7 = *very much*; $r = .95$; $p < .001$). The participants were also informed that they would receive one free magnet at the end of the experiment as a token of appreciation, and they indicated which one they would choose as their free gift.

Immediately before the participants were dismissed, the experimenter "incidentally" told them that an extra style of magnet had just been located, which they could also choose. The participants were then presented with the new magnet (the third pretested magnet that had not been shown to them) and they were asked whether they wanted to keep their original choice of magnet or switch to the new one. After making this final choice, the participants completed the

same evaluation questions for the new magnet ($r = .95$; $p < .001$). At the end of the study, the participants received the magnet based on their final choice.

Results

Switching Behavior. The participants' switching behavior was measured based on their final choice of magnet. The switching behavior was coded as "1" if the participants chose to switch to the new magnet and "0" if they chose to keep the previous choice. A binary logistic regression showed a significant effect of social exclusion on the participants' switching behavior (Wald $\chi^2(2) = 8.11$, $p = .017$). Consistent with our expectation, the participants were more likely to switch to a new magnet if they were in the social exclusion condition (52.2%) than if they were in the social inclusion condition (25.0%; $\beta = -1.19$, Wald $\chi^2(1) = 7.34$, $p = .007$, $OR = .31$) or in the baseline condition (30.0%; $\beta = -.93$, Wald $\chi^2(1) = 4.32$, $p = .038$, $OR = .39$). The switching rates in the social inclusion and baseline conditions did not differ from each other (Wald $\chi^2(1) = .28$, NS).

To support our assumption that switching in the current context was driven by the psychological benefit of switching rather than the perceived utility of the options, we ran an additional series of data analyses. The regressions showed that social exclusion did not influence the participants' initial ($p = .686$) or final magnet choices ($p = .805$). However, social exclusion remained a significant predictor of the switching behavior even after controlling for the participants' initial (Wald $\chi^2(2) = 8.34$, $p = .015$) and final magnet choices (Wald $\chi^2(2) = 7.85$, $p = .020$), and the evaluations of their initial (Wald $\chi^2(2) = 8.15$, $p = .017$) and final magnet choices (Wald $\chi^2(2) = 8.77$, $p = .012$). These results suggest that the participants' switching behavior was

probably driven by the psychological benefits they received from it, independent of the utility of the initial or final magnets they chose.

Discussion

Replicating the findings in our first study, study 2 demonstrated that socially-excluded participants were more likely to switch their product choices than participants in the inclusion or baseline conditions. By directly manipulating social exclusion in a controlled laboratory environment, this study built a strong causal relationship between social exclusion and consumer switching behavior. The null effect observed between the social inclusion and baseline conditions also suggests that the effect on switching behavior was mainly driven by social exclusion, but not inclusion. Taken together, studies 1 and 2 provided convergent and robust evidence that social exclusion increases consumers' switching behavior. Because both studies measured real consumption behavior as the dependent variable, it is unlikely that the effects we observed were due to lay beliefs or demand characteristics.

In addition, consistent with the process-driven switching perspective, study 2 confirmed that the consumers' switching behavior was not driven by utility concerns over the incumbent or new product/service options, but rather was induced by the psychological benefit the consumers received from switching, which in this case was an increased sense of control. We further explore this proposed underlying mechanism in our third study.

STUDY 3

Social exclusion affects four different human needs: personal control, belongingness, meaningful existence, and self-esteem (Stillman et al. 2009; Williams 2009; Zadro, Williams, and Richardson 2004). We hypothesized that the need to be in control drives socially excluded consumers to engage in more switching behavior. Study 3 tested this proposed underlying mechanism directly through mediation analyses in a more durable product category, namely, washing machines.

Method

Seventy-eight adult U.S. consumers (38 men, M_{age} = 40.42) participated through Amazon's Mechanical Turk (Paolacci and Chandler 2014; Paolacci, Chandler, and Ipeirotis 2010) in exchange for a small monetary incentive. The participants were randomly assigned to one of the two conditions (social exclusion vs. social inclusion), and their feelings of social exclusion were manipulated through the same Cyberball game used in study 2. Upon completing the game, the participants were asked to report the extent to which they felt "excluded," "rejected," and "left out" during the Cyberball game (1 = *not at all*, 7 = *very much*;Williams et al. 2000; α = .93).

As an ostensible "personality assessment," the participants then completed the same 6-item sense of control scale used in the pilot study (α = .81). In addition to our proposed mediator of sense of control, it could be argued that socially excluded consumers switch their product/brand options because they want to build new connections with other products or brands (i.e., to increase belongingness; Mead et al. 2011); because they believe switching behavior is meaningful (i.e., increases meaningfulness; Williams 2001); because such behavior represents a positive self-value (i.e., boosts self-esteem; Zadro et al. 2004), or to demonstrate the

acknowledges of their failure in previous choices and, thus, switching is more acceptable among individuals with low self-esteem (Brown and Dutton 1995). To rule out these alternative explanations, we also measured the participants' sense of belongingness (Zhu and Argo 2013; $r = .93$, $p < .001$), meaningfulness (Zadro et al. 2004; $\alpha = .77$), and self-esteem (Twenge, Catanese, and Baumeister 2003; $\alpha = .85$) along 7-point scales (1 = *not at all*, 7 = *very much*). Prior research has suggested that social exclusion usually leads to negative emotions such as depression and anxiety (Leary 1990), and that these negative emotions may potentially influence consumer decisions (Jeong and Drolet 2014). To rule out the potential influence of exclusion-induced negative moods on our effect, the participants' moods were also measured (1 = *bad/sad/tense*, 7 = *good/happy/relaxed*; $\alpha = .84$; Williams et al. 2000) (see web appendix A for a full list of items).

We then invited the participants to take part in a seemingly unrelated consumer survey. The participants were asked to imagine the following situation: "Your current washing machine at home is broken and you plan to buy a new washing machine to replace the current one." Next, they reported their brand switching intention by indicating their preference for one of two options (1 = *I would like to stick with the brand I am currently using*, 7 = *I would like to switch to another brand*).

Results

Manipulation Checks. The participants in the social exclusion condition reported more feelings of social exclusion ($M_{exclusion} = 5.54$, $SD = 1.69$) than those in the social inclusion condition ($M_{inclusion} = 2.13$, $SD = 1.24$; $F(1, 76) = 103.44$, $p < .001$).

Switching Intention. Consistent with our expectation, the ANOVA revealed a significant effect of social exclusion manipulation on the participants' brand switching intentions. Specifically, the socially excluded participants reported greater switching intentions ($M_{exclusion}$ = 4.11, SD = 2.08) than their socially included counterparts ($M_{inclusion}$ = 3.18, SD = 2.01; F (1, 76) = 4.04, p = .048, η^2 = .05).

Mediation Analyses. A series of mediation analyses were also conducted. We first tested our hypothesis that the participants' perceived control would mediate the effect of social exclusion on brand switching intention. As expected, social exclusion reduced the participants' perceived control (β = -.80, p = .007) and increased their brand switching intention (β = .93, p = .048). Further, perceived control had a significant effect on brand switching intention (β = -.42, p = .019). Bootstrapping analyses (PROCESS Model 4 with 5000 bootstrapping samples, see Hayes 2012) confirmed that the indirect effect of perceived control on switching intention was significant (95% confidence interval (CI): .0791 to .8142).

To determine whether our effects were unique to feelings of control, we further tested the potential mediating effects of mood and the three other needs triggered by social exclusion in separate mediation analyses. We did not find that the social exclusion manipulation had a significant effect on the participants' mood (p > .10), although social exclusion did influence the participants' sense of belongingness (β = -.24, p = .004), meaningfulness (β = -.12, p = .057), and self-esteem (β = -.15, p = .019). None of these variables, however, showed significant effects on switching behavior (belongingness: β = .21, p = .136; meaningfulness: β = .23, p = .223; self-esteem: β = .48, p = .093). Further mediation tests indicated that none of the variables mediated the effect of social exclusion on brand switching intention (PROCESS Model 4 with 5000

bootstrapping samples, 95% CIs: belongingness [-.0467 to .4229]; meaningfulness [-.0527 to .4302]; self-esteem [-.0477 to .4552]).

We also tested the mediation model by simultaneously including sense of control and other potential mediators. Similar to that indicated in the separate mediation analyses above, the results showed only a significant indirect effect of sense of control (PROCESS Model 4 with 5000 bootstrapping samples, 95% CIs: sense of control [.0131 to .2610]; belongingness [-.0186 to .1574]; meaningfulness [-.1729 to .0279]; self-esteem [-.0038 to .2040]; mood [-.1320 to .0092]).

Discussion

Study 3 provides support for hypothesis 2 by demonstrating the mediating role of perceived control. Socially excluded consumers perceived themselves as having a weaker sense of control, which increased their desire to switch their brand/product choices, presumably because they believed it would give them more control.

The literature suggests that, in addition to the need of control, feelings of social exclusion can also threaten several other needs of the victims, such as the need for belongingness, meaningfulness, and self-esteem (Williams 2009). Our mediation analyses confirmed that although excluded consumers did feel the need for belongingness, meaningfulness, and self-esteem, none of these needs mediated the effect of social exclusion on switching behavior.

The scenario used in study 3 portrayed the incumbent brand option in a relatively negative way (i.e., “your current washing machine at home is broken”), so the participants may have inferred that the incumbent brand was a low quality product. Although this possibility could

have led to a strong baseline switching intention, it is unlikely to account for the effect of social exclusion on switching intention observed in this study. We nevertheless used different scenario designs in the following studies to relieve this concern.

STUDY 4

Study 4 sought to provide further evidence that a sense of control helps to explain why social exclusion increases consumer switching. An individual's perceived sense of control can be threatened by many factors (Pittman and D'Agostino 1989). If the previously observed effect of social exclusion on switching was really driven by a dampened feeling of control, we should expect to see a similar effect when the participants' perceived sense of control is weakened by more direct control deprivation. To test this possibility, we manipulated control deprivation directly in study 4 by preventing some of the participants from exercising autonomy or discretion in their behavior (Leotti, Iyengar, and Ochsner 2010).

Study 4 also served two other purposes. First, variety seeking is a construct that has sometimes been used interchangeably with switching in the marketing literature (Kahn and Isen 1993; McAlister and Pessemier 1982). It refers to the tendency to seek diversity in choices of services or goods (Kahn 1995). Whereas switching emphasizes deviation from the status quo, variety seeking focuses on an intention to pursue a more diverse overall product assortment. For example, in five sequential choices of alternatives, the choice pattern of {A, B, C, C, C} is very different from {A, B, A, B, A}. The first choice pattern provides more variety (3 vs. 2) whereas the second demonstrates more switching behavior (2 vs. 4). Following the research on consumer

switching behavior (Jiang et al. 2014), in this study we tested whether social exclusion could exert a similar effect on variety seeking.

Second, study 4 tested whether consumers' switching behavior actually restores an excluded consumer's sense of control. We investigated this issue by measuring the participants' sense of control both before and after their switching behavior and predicted that it would increase the feelings of control among the socially-excluded, but not the socially-included participants.

Method

One hundred and sixty-five adult U.S. consumers (54 men, M_{age} = 35.59) participated through Amazon's Mechanical Turk in exchange for a small monetary incentive. The participants were randomly assigned to the conditions of a 2 (social exclusion: inclusion vs. exclusion) × 2 (control deprivation: deprivation vs. no-deprivation) between-subjects factorial design. The procedure for this study is summarized in figure 1.

The participants first completed an episodic priming task of social exclusion (Mead et al. 2011). By random assignment, the participants recalled an event during which they felt socially excluded or included. Immediately after this task, the participants completed the same manipulation check measures used in study 3 (α = .96).

Insert figure 1 about here

Thereafter, the participants completed the same sense of control scale used in the previous studies (α = .76). Then, they were randomly assigned to one of two conditions: control deprivation or no control deprivation. The participants in the control deprivation condition were told that they would later complete an imagination task in which they would be asked to imagine a tour overseas. However, the itinerary of this tour would be fully controlled by the travel agency and they could not change any items (activities, meals, etc.) The participants in the no control deprivation condition were not told about the imagination task. A pre-test conducted among a separate group of participants (N = 61) confirmed that, when asked to rate their sense of control using the same items as in study 3 based on how they felt "at the present moment" after reading the scenario, they temporarily perceived a lower sense of control ($M_{\text{deprivation}}$ = 4.62, SD = 1.20 vs. $M_{\text{no deprivation}}$ = 5.58, SD = 0.92; F (1, 59) = 12.40, p = .001).

Next, the participants in both conditions finished an ice-cream choice task to measure their product switching behavior (Kahn and Isen 1993; Menon and Kahn 1995). Specifically, they imagined that they could select one free mini-cap of ice cream for four consecutive nights, from four available flavors: vanilla, strawberry, banana, and chocolate. The participants were instructed to choose their ice cream flavors sequentially for each night, and they could select any combination of ice-cream cups across the four nights.

To check whether the participants' switching behavior restored their feelings of control, we measured their perceived control again after the ice-cream choice task with the same sense of control scale (α = .79).

Results

Manipulation Check. The participants in the social exclusion condition felt more excluded ($M_{exclusion}$ = 4.12, *SD* = 2.08) than those in the inclusion condition ($M_{inclusion}$ = 2.33, *SD* = 1.54; *F* (1, 163) = 39.06, $p < .001$). Thus, the social exclusion manipulation had the intended effect.

Variety Seeking Behavior. Following prior research on variety seeking (Nowlis, Dhar, and Simonson 2010; Simonson and Winer 1992), we calculated the index of the participants' variety seeking intention based on the number of different flavors that each participant selected (ranging from 1 to 4). The ANOVA revealed that there were no significant main effects of either social exclusion or control deprivation, nor a significant interaction effect (*ps* > .155).

Switching Behavior. We calculated the number of times that each participant switched from one flavor to another (ranging from 0 to 3) and used it as the index for switching behavior. The ANOVA revealed significant main effects of social exclusion (*F* (1, 161) = 5.46; $p = .021$) and control deprivation (*F* (1, 161) = 8.41; $p = .004$). As predicted, both social exclusion and control deprivation increased switching behavior. There was also a significant interaction between social exclusion and control deprivation (*F* (1, 161) = 4.96; $p = .027$; see figure 2). The planned contrasts showed that when there was no control deprivation, the socially excluded participants ($M_{exclusion}$ = 2.55, *SD* = 0.94) made more switches than the socially included participants ($M_{inclusion}$ = 1.85, *SD* = 1.35; *F* (1, 161) = 10.22, $p = .002$, $\eta^2 = .06$). However, this effect disappeared under the control deprivation conditions in which both the excluded and included participants exhibited a relatively higher number of switches ($M_{exclusion}$ = 2.65, *SD* = 0.81 vs. $M_{inclusion}$ = 2.63, *SD* = 0.77; *F* < 1, NS; significantly higher than the middle point of the

scale, *p*s < .001). We speculate that this moderating effect of control deprivation was likely to be caused by a ceiling effect on switching under the control deprivation conditions.

Insert figure 2 about here

Perceived Control before Switching. To determine whether we replicated our prior effects of social exclusion on perceived control, we first examined whether social exclusion reduced the level of perceived control before the ice-cream choice task was completed. Given that this measure was collected before the control deprivation manipulation, we conducted a one-way (exclusion vs. inclusion) ANOVA on perceived control. Consistent with our prediction, the excluded participants perceived that they had less control ($M_{exclusion}$ = 5.12, *SD* = 1.38) than the included participants ($M_{inclusion}$ = 5.66, *SD* = 1.17; *F* (1, 161) = 7.14, *p* = .008).

Moderated Mediation. Given that deprivation of choice moderated the effect of social exclusion on switching behavior, and perceived control was expected to mediate this effect only in the no-deprivation condition, we tested a moderated mediation model using bootstrapping procedures (Hayes 2012; PROCESS model 15; 5000 bootstrapping samples). Consistent with our expectation, the effect of social exclusion on switching behavior was moderated by control deprivation and mediated by perceived control (95% CI: -.3625 to -.0264). Specifically, the indirect effect of perceived control was only significant in the no-deprivation condition (95% CI: .0228 to .2875), but not in the control deprivation condition (95% CI: -.1348 to .0299).

Insert figure 3 about here

Control Restoration after Switching. Next, we investigated whether switching behavior restored the socially excluded participants' feelings of perceived control. We focused on the data in the no control deprivation condition, because in the control deprivation condition the second measure of perceived control was influenced by both control deprivation and switching. A 2 (social exclusion: exclusion vs. inclusion) × 2 (measuring time: before vs. after switching) mixed design ANOVA with time as the within-participant factor showed a marginal interaction effect of social exclusion and control-measuring time (F (1, 79) = 3.28, p = .074), and a significant main effect of control-measuring time (F (1, 79) = 5.96, p = .017; see figure 3). Consistent with our expectation, the planned contrasts showed that the excluded participants restored their perceived control after the ice-cream choice task (M_{before} = 5.24, SD = 1.31 vs. M_{after} = 5.58, SD = 1.22; F (1, 79) = 9.38, p = .003). However, this effect was not salient among the included participants (M_{before} = 5.76, SD = 1.15 vs. M_{after} = 5.81, SD = 1.29; F < 1, NS).

Providing consumers with various options from which to choose increases their sense of autonomy and perceived control (Baumeister et al. 2008; Ryan and Deci 2006; West 1985). Thus, it could be argued that in study 4, it was the choices the participants made in the ice-cream choice task that restored their sense of control, rather than the switching behavior. If that were the case, we would expect the ice-cream choice task to increase the feeling of control regardless of the number of switches made. Further mediation analysis indicated that among the participants in the exclusion condition the number of switches mediated the effect of the initial sense of control on the participants' level of restored control (i.e., perceived control after switching minus control before switching; PROCESS Model 4 with 5000 bootstrapping samples, 95% CI: -.0828

to -.0094). This suggested that the participants in the exclusion condition restored more internal control if they switched more often in the ice-cream task.

Discussion

Study 4 shows that greater perceived social exclusion leads to a lower sense of control, which results in more switching behavior. The findings of study 4 replicate the findings of our study 1 in regards to distinctive patterns of switching and variety seeking, confirming that social exclusion drives individuals to switch to alternative options, instead of simply increasing the variety of the option assortments at hand.

This study also confirms the effectiveness of switching in restoring control. After a series of ice-cream flavor choices, the participants in the exclusion condition reported a higher sense of control than before. That is, the socially excluded individuals not only believed that switching restored control, but that it actually restored their perceived control. Further, the number of choice switches the excluded participants made in the ice-cream task and the level of their restored control were positively correlated. This suggests that it was indeed the switching behavior (not the choices in general) that restored the socially excluded consumers' sense of control.

We expected that both social exclusion and control deprivation would decrease the participants' feelings of control. Thus these factors should produce two main effects on switching behavior. In addition, an interaction effect was observed between social exclusion and control deprivation. That is, the effect of social exclusion on switching was only significant when there was no control deprivation. It disappeared when there was additional control deprivation.

Based on the high mean switching indexes in the control deprivation conditions, our speculation is that this moderating effect is likely to be caused by a ceiling effect on switching under control deprivation conditions.

STUDY 5

Prior research has indicated that many consumer decisions are shaped by and connected to other individuals (Aaker and Lee 2001; Briley and Wyer 2002; Lakin et al. 2008; Twenge et al. 2007). Although in our earlier studies the consumers' switching behavior was not driven by the need to belong (as demonstrated in study 3), there are situations in which switching decisions involve social belongingness concerns. For example, in some situations the consumers' incumbent products or service options help them to maintain their social relationships. In these situations, the switching behavior of socially-excluded consumers may not only depend on a sense of control, but also on the consumers' need for belongingness. It is therefore necessary to understand how the need to belong may influence the observed associations among social exclusion, control, and switching behavior. In study 5, we examined how the two mechanisms triggered by social exclusion, namely, control restoration and belongingness maintenance, simultaneously influenced consumer switching behavior. Specifically, we directly manipulated the belongingness maintenance function of the incumbent product option through social conformity. We predicted that the effect of social exclusion on switching would be weakened when the consumers' incumbent product option was socially conformed. Thus, to maintain their sense of social belongingness, the excluded consumers would be motivated to stick to their incumbent option.

Method

One hundred and eighty-five adult U.S. consumers (82 men, M_{age} = 36.54) participated through Amazon's Mechanical Turk in exchange for a small monetary incentive. The participants were randomly assigned to the conditions of a 2 (social exclusion: inclusion vs. exclusion) × 2 (social conformity: conformed vs. neutral) between-subjects factorial design. The participants first completed the same social exclusion recall task and manipulation checks that were used in study 4. Their sense of control and belongingness were then measured along the same 6-item sense of control scale used in the previous studies (α = .90) and a 4-item sense of belongingness scale (e.g., "I do not feel that I really belong around people I know," adapted from Lee and Robbins (1995); α = .90).

The participants were then told to imagine that they had given their old laptop computer to their little brother and needed to buy a new one from the store. Because the store offered both the model they had used before (brand A) and another model with a similar price and functions (brand B), they had to decide between "continuing to purchase the previous brand A" and "switching to brand B." The participants in the conformed conditions were further informed that after checking with their friends, they found that the majority of them were using their old brand A. By contrast, the participants in the neutral condition were told that some of their friends were using brand A and others were using brand B. The participants then indicated their preference between option A (i.e., "continuing to purchase previous brand A") and option B (i.e., "switching to brand B") along a 7-point scale (1 = *I strongly prefer option A*, 7 = *I strongly prefer option B*).

Results

The participants in the social exclusion condition felt more excluded ($M_{exclusion}$ = 3.35, *SD* = 1.73) than those in the inclusion condition ($M_{inclusion}$ = 2.41, *SD* = 1.47; *F* (1, 183) = 15.93, *p* < .001). The ANOVA showed a significant main effect of social conformity (*F* (1, 181) = 7.04, *p* = .009), qualified by a significant interaction between social exclusion and social conformity (*F* (1, 181) = 10.20, *p* = .002). Planned contrasts further showed that when there was no social conformity in the incumbent product option, excluded consumers had a higher intention to switch to another brand ($M_{exclusion}$ = 3.75, *SD* = 2.36) compared with those in the inclusion condition ($M_{inclusion}$ = 2.67, *SD* = 1.59; *F* (1, 181) = 10.20, *p* = .002, η^2 = .05). However, this effect disappeared when social conformity was associated with the incumbent product option ($M_{inclusion}$ = 2.29, SD = 1.37 vs. $M_{exclusion}$ = 2.81, SD = 1.19; *F* (1, 181) = 2.11, *p* = NS).

To examine the two underlying competing forces (i.e., control restoration and belongingness maintenance), we adopted the analytical approach followed in the literature (Berger and Iyengar 2013; Chen and Berger 2013) and performed two different sets of mediation analyses. Following recent statistical advances arguing that there need not be a significant effect between the independent and dependent variables before further mediation analysis (Hayes 2012; Zhao, Lynch, and Chen 2010), we first performed two separate mediation analyses for the neutral and conformed conditions respectively. In each mediation analysis, we simultaneously used the sense of control and sense of belongingness as mediators. The results indicated that for both the neutral and conformed conditions, the effect of social exclusion on switching intention via the sense of control was significant (conformed condition: 95% CI: -.5322 to -.0465; neutral condition: 95% CI: -.9072 to -.0552). However, belongingness mediated the effect in a different

direction in the conformed condition (95% CI: .5176, 1.3864), but not in the neutral condition (95% CI: -.2902, .4096). Second, a moderated mediation (PROCESS Model 15; Hayes 2012) was applied to belongingness, with social conformity conditions as the moderator. Conditional indirect effects showed that belongingness mediated only in the social conformity condition (95% CI: .3820, 9617), but not in the neutral condition (95% CI: -.5900, .3002).

Discussion

Study 5 shows that the effect of social exclusion on switching disappears when the incumbent option helps to maintain the consumer's sense of social belongingness. In addition, study 5 demonstrates the co-existence of two competing mechanisms triggered by social exclusion, namely, control restoration and belongingness maintenance. The series of mediation analyses we conducted confirmed that when they were in normal situations the consumers' sense of control drove their switching intention, however, when the incumbent option was socially conformed, their switching intentions were simultaneously determined by the desire for control and the desire for belongingness, which pointed in different directions.

GENERAL DISCUSSION

When attempting to create consumer loyalty, it is easy to look in the wrong place. Companies may craft the perfect product or have the swiftest service, but their customers may still switch to other providers. Our findings offer novel evidence to explain why this happens. A pilot study first tested the notion of whether switching is more effective at boosting personal

control than other choices. Thereafter, across five studies, we showed that socially excluded consumers demonstrated a higher intention to switch across either products or services. We further showed that this effect was caused by a heightened desire to restore the sense of control among socially excluded participants (studies 3 and 4). Moreover, this effect was moderated by the belongingness maintenance capacity of the incumbent option (study 5).

Our research contributes to the literature on consumer switching behavior by introducing social exclusion as a novel psychological antecedent of switching. The marketing literature on consumer switching behavior has mainly focused on the effects of factors that could potentially influence the utility trade-off between the incumbent and the new option (Bougie et al. 2003; Inman and Zeelenberg 2002; Van Trijp et al. 1996). Unlike this utility-driven perspective and consistent with more recent evidence on process-driven switching behavior (Drolet 2002; Jiang et al. 2014), we proposed and showed that the mere process of making a switching decision could restore people's sense of control. This finding suggests that switching is especially attractive to socially excluded consumers who lack a sense of control. We hope that our conceptual categorization of utility- versus process-driven switching behavior will stimulate future research on the different antecedents and consequences of these two types of switching motives.

Our research also makes an important contribution to the growing literature on social exclusion by adding to the repertoire of behavioral consequences derived from social exclusion in the consumption context. Studies examining the effects of social exclusion on consumer behavior have mainly focused on what types or which characteristics of products would be preferred by excluded consumers (Duclos et al. 2013; Mead et al. 2011; Wan et al. 2014). For instance, excluded consumers have been found to be more attracted to products that symbolize

group membership (Mead et al. 2011), provide potential financial benefits (Duclos et al. 2013), or demonstrate uniqueness (Wan et al. 2014). These findings suggest that the effect of exclusion on consumer behavior is manifested through a reflexive process in which behavior is guided by personal standards and evaluation of the pros and cons (Strack and Deutsch 2004). In contrast, our research demonstrates that social exclusion leads to more switching behavior. Moreover, the switching process, which is driven by a deprived basic need (i.e., personal control), is independent of the specific characteristics of the incumbent and new product/service options under consideration.

Following Williams's seminal work (Williams 2001, 2007, 2009), a substantial body of psychological and consumer research has examined the different human needs triggered by social exclusion and how they influence human behavior (Duclos et al. 2013; Lee and Shrum 2012; Warburton, Williams, and Cairns 2006). However, the interaction between these different needs-based mechanisms has been largely ignored. In this research, we have taken an initial step in this direction by examining the interactive effect between control restoration and belongingness maintenance, which are simultaneously triggered by social exclusion. The mediation results in study 5 suggest that the overall effect of social exclusion on switching behavior is dependent on the relative strengths of these two forces in the particular context. Future research could systematically examine the relationship between these exclusion induced psychological needs.

The theoretical implications of these findings for psychological research on personal control are worth noting. The lack of a sense of control can potentially cause severe negative consequences, such as distress and discomfort (Newcomb and Harlow 1986), depression and helplessness (Schulz 1976), more aggression (Warburton et al. 2006), and less

tolerance/persistence (Bandura 1977; Staub et al. 1971). Although the concept of personal control has long been established (Averill 1973; Folkman 1984), little research has examined how individuals can effectively restore deficits in control (for exceptions, see Chen, Lee, and Yap 2017; Cutright and Samper 2014). Although making a choice can itself be viewed as exerting a form of control (Snibbe and Markus 2005; Stephens, Markus, and Townsend 2007), after controlling the effect of choice (i.e., the participants were granted the choice of either switching or staying), we found that switching from an incumbent option to a new one can restore people's feelings of control. Study 4 further confirmed that switching as a control restoration tool is indeed effective. In that study, the participants' sense of control increased significantly after they made their switching decisions, and the number of switches mediated the effect of the initial sense of control on the participants' level of restored control. This finding thus adds to the personal control literature by demonstrating the important function of switching in restoring the sense of control. Further research is needed to determine the nature of this phenomenon, such as its boundary conditions and whether there is always a monotonic linear relationship between the number of switches and their effectiveness in restoring control. Another direction along this line is to examine whether switching across brands/stores or products is related to different levels of control. In study 1, for example, the students could switch across canteens or across dishes within the same canteen (e.g., fish vs. chicken). Although our database does not provide specific dish-level data due to technical limitations, future research could probe the possible difference between the two types of switching options.

This study also provides insight into the debate on assimilation versus contrast effect of priming (Herr, Sherman, and Fazio 1983; Shen, Jiang, and Adaval 2010; Strack et al. 1993). Although the literature on consumer switching behavior shows an assimilation pattern (Jiang et

al. 2014; Rucker, Dubois, and Galinsky 2011), our findings are more consistent with a contrast explanation (Rucker and Galinsky 2008; Sharma and Alter 2012). We speculate that this apparent discrepancy between our findings and the literature arises because the mechanisms investigated had different natures. Research suggests that positive priming stimuli (e.g., positive affect, high power state, financial abundance) are likely to trigger assimilation effects (Huntsinger 2013; Kushlev, Dunn, and Ashton-James 2012; Rucker et al. 2011) and negative priming stimuli (e.g., negative affect, low power state, financial deprivation) are likely to trigger contrasting effects (Huntsinger 2013; Rucker and Galinsky 2008; Sharma and Alter 2012). Thus, consumers are likely to consider high power and high action orientations as being positive, thereby triggering consumer switching behavior in an assimilative manner as demonstrated in Jiang et al. (2014). However, exclusion and the lack of a sense of control are negative attributes, which also trigger consumers' switching behavior, though in a contrasting (compensatory) way. When and why consumer switching behavior is influenced by assimilative and contrasting psychological factors warrants further investigation.

Although switching is understood to be one of the major ways in which to attain variety, and the terms "switching" and "variety seeking" are sometimes used interchangeably in the media (Daily Mail 2015; Encyclopedia Britannica 2016) and even in the marketing literature (Menon and Kahn 1995; McAlister and Pessemier 1982; Van Trijp et al. 1996), they represent two distinct psychological constructs (Jiang et al. 2014). Whereas switching refers to a consumer's decision to move from an existing incumbent option to a new option, variety seeking refers to the tendency to seek diversity in the choice of services or goods (Kahn 1995). Our article contributes to both of these literature streams by demonstrating an effect that is unique to switching but not to variety seeking. In the sequential choice condition in studies 1 and 4, we

found that while excluded consumers switched more often between choices than included consumers did, the number of different options in their final choice sets did not differ from each other. This is consistent with our argument that the exclusion-induced control restoration motive can only be satisfied through switching behavior, but not by simply increasing the diversity of the options presented. We suspect that too much variety seeking (i.e., to accumulate a larger option assortment) may even reduce the consumers' sense of control, due to the increased randomness embedded in a larger option assortment (Chernev 2003; Iyengar and Lepper 2000).

The past literature on choice has suggested that it is one of the important means of creating feelings of control (Averill 1973; Botti and McGill 2011; Inesi et al. 2011). Thus one may question why mere choice itself (regardless of whether it is switching or not) is insufficient to recover perceived control dampened by social exclusion. In the pilot study, we showed that switching provided more sense of control than the choice to stay with the incumbent option. Given that social exclusion severely dampened people's sense of control and triggered a strong control restoration desire among them (Twenge, et al. 2007, Warburton et al. 2006), it was natural for these individuals to seek the maximum level of control restoration. We speculate that the sense of control perceived from the non-switching choices in our studies (similar to the low choice condition in Inesi et al. 2011) may not be enough for them. Future research is needed to further differentiate the effect of switching and non-switching choices on people's sense of control.

The current research also suggests that there are several questions deserving future research. First, consumers switch brand and product options under very different circumstances. For example, some types of switching behavior may represent an approach tendency (e.g., to pursue new and better product options), whereas others may be driven by avoidance motivation

(e.g., to get away from the unsatisfied incumbent option). Because we are mainly interested in process-driven (but not utility-driven) switching behavior, in most of our studies we controlled this motivational difference by providing the participants with somewhat neutral information regarding the switching context (e.g., the mere availability of new options or the incumbent product needed to be replaced for exogenous reasons). We believe that the effect of social exclusion on switching that we observed is robust and can be generalized to various switching contexts. However, the different motivations underpinning consumer switching behavior and their antecedents and consequences are important research areas that deserve further investigation. Last but not least, Pfundmair et al. (2015a; 2015b) recently showed that people from different cultural backgrounds react differently to social exclusion. For example, individualists experience less fulfillment of their psychological needs after social exclusion than people from collectivist cultures (Pfundmair et al. 2015a). Nonetheless, we found a converging pattern of data among participants from both individualistic (North American, Studies 3-5) and collectivist cultures (Hong Kong and China, Studies 1-2). Whether consumer switching is a culturally universal response to social exclusion requires further investigation.

Our results also have important managerial implications. For example, a recent survey conducted by J.D. Power and Associates (2011) revealed that the main reason consumers switch banks is strongly associated with two life circumstances: divorce and moving to another city. Considering that divorce and moving are associated with the significant loss of existing social connections and that they give rise to feelings of social exclusion (Berman 1988; Rubin, Paolini, and Crisp 2010), the current research can provide marketers with one possible reason for such marketing phenomena. In addition, Lachman and Weaver (1998) found that chronic social exclusion is associated with people's socioeconomic profiles, and that those with low

socioeconomic profiles (e.g., low income level and poor educational background) often feel excluded. Thus, an important implication of our research is that contrary to the current marketing practices suggesting that product/service variety is tailor-made for the high-end market, marketers should consider providing more product/service options to consumers with lower socioeconomic status. These product/service options may not need to be particularly different, that is, some variations in specific attributes may be enough to satisfy excluded consumers' switching desires. In this context, Apple's successful product strategy of providing a uniform high-end model (e.g., the iPhone 5S in only three colors) along with its diversified low-end models (e.g., the iPhone 5C in more diversified colors) may have contributed to its booming sales.

In addition, consumers' feelings of social exclusion may be triggered by the mix of marketing tools (e.g., rejected as a VIP member or intentionally or unintentionally ignored by a salesperson or service representative). This provides opportunities for companies to influence customers' temporary feelings of having a social connection and to strategically manage their switching behavior. Companies that want to retain their customers should endeavor to make them feel more connected to others (e.g., Harley-Davidson's H.O.G. riding club and the integration of social media into Xbox games). Companies desperately seeking new customers may want to induce feelings of loneliness in consumers or tap into their past experiences of social exclusion through marketing communications (e.g., AT&T's "Loneliness" campaign and McDonald's "Lonely Hearts" advertisement).

DATA COLLECTION INFORMATION

The first two authors jointly supervised the data collection and analyzed the data for the studies reported in the current manuscript. The pilot study was conducted in July 2016 through Amazon's Mechanical Turk. The data for study 1 were collected from December 2014 to February 2015, at the Shandong Agricultural University, China. Research assistants at the Hong Kong Polytechnic University carried out study 2 in January 2016. Studies 3 and 4 were conducted in December 2014, and study 5 was carried out in January 2016 through Amazon's Mechanical Turk.

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Table 1

Regression Results for Study 1

Variable	*B*	*t*	*p*
QQ usage index	-3.099	-2.145	*.034*
Age	.912	1.304	*.195*
Gender [a]	.763	.351	*.726*
Monthly spending	- .001	-.400	*.690*
Taste preference [b]	1.520	.642	*.522*
Intercept	33.274	2.144	*.034*

[a] "Male" = 1; "Female" = 2

[b] "Yes" = 1; "No" = 2

FIGURE 1

PROCEDURES OF STUDY 4

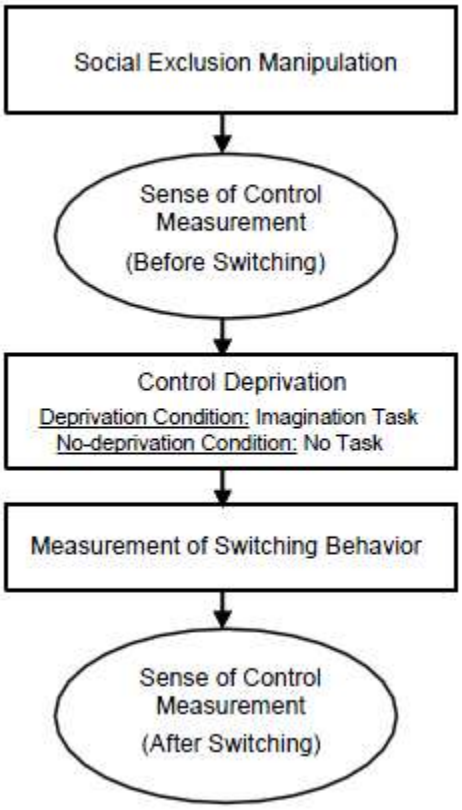

FIGURE 2

MEAN NUMBER OF SWITCHES AS A FUNCTION OF SOCIAL EXCLUSION AND CONTROL DEPRIVATION - STUDY 4

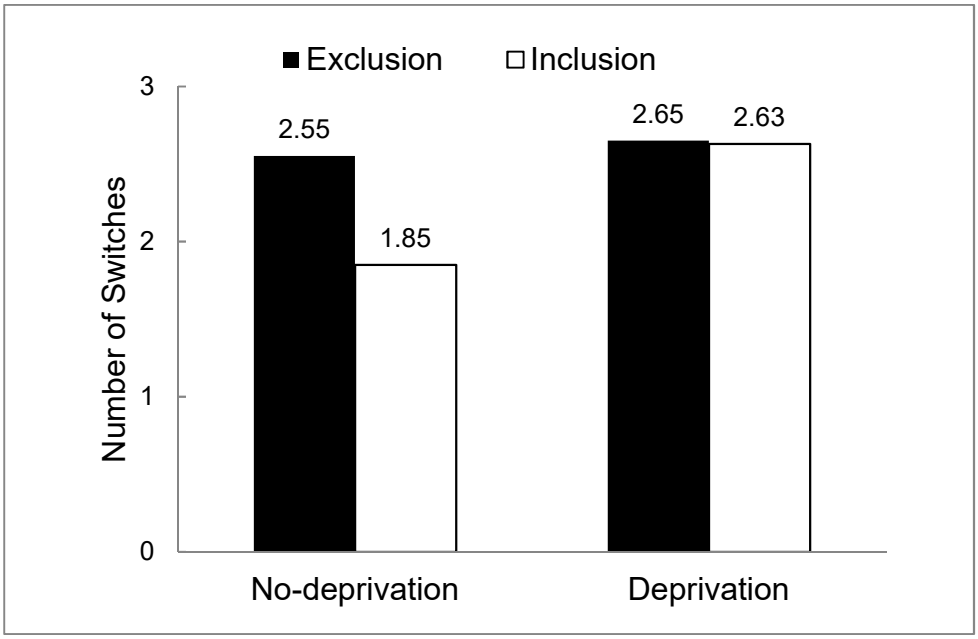

FIGURE 3

MEAN SENSE OF CONTROL AS FUNCTION OF MEASURING TIME, SOCIAL EXCLUSION IN THE NO DEPRIVATION CONDITION - STUDY 4