The salience of choice fuels independence: Implications for self-perception, cognition, and behavior

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More than ever before, people across the world are exposed to ideas of choice and have opportunities to make choices. What are the consequences of this rapidly expanding exposure to the ideas and practice of choice? The current research investigated an unexamined and potentially powerful consequence of this salience of choice: an awareness and experience of independence. Four studies (n = 1,288) across three cultural contexts known to differ in both the salience of choice and the cultural emphasis on independence (the United States, Singapore, and India) provided converging evidence of a link between the salience of choice and independence. Singaporean students who recalled choices rather than actions represented themselves as larger than their peers (study 1). Conceptually replicating this finding, study 2 found that Americans who recalled choices rather than actions rated themselves as physically stronger. In a word/nonword lexical decision task (study 3), Singaporean students who recalled choices rather than actions were quicker at identifying independence-related words, but not neutral or interdependence-related words. Americans, Singaporeans, and Indians all indicated that when working in an organization that emphasized choice, they would be more likely to express their opinions. Similarly, Americans, Singaporeans, and Indians reported a preference for working in such an organization (studies 4a and 4b). The findings suggest that the salience of personal choice may drive an awareness and experience of independence even in contexts where, unlike in the United States, independence has not been the predominant ethos. Choice may be an unmarked and proximate mechanism of cultural change and growing global individualism.

choice | independence | individualism | culture

People in well-resourced contexts around the world make countless choices throughout the day: eggs, oatmeal, or rice for breakfast; blue or white shirt; coffee, tea, or flavored water at breaktime; which emails require a quick reply; what social media to check; when to return home in the evening; what to buy from the supermarket; when to go to sleep. Most of these everyday choices seem mundane, trivial, and of little lasting consequence. Yet we propose that a choice, even a simple one made without much deliberation or intention, is a complex act with a wide range of behavioral consequences that have yet to be examined and considered for their implications. Psychologists have examined multiple motivational consequences of choice (1). This literature has nearly exclusively defined choice in terms of the number of options available. The findings are robust. Many people are healthier, happier, and more motivated when they have more options (2–4), although having too many options can be demotivating and stressful (5–7).

Making choices is psychologically and behaviorally powerful because it allows people to express their preferences, influence their environments, and individuate themselves (8–10). As people choose what to buy at a supermarket, for example, they express and reinforce their personal preferences for various consumer products, influence the repertoire of consumer goods that stock supermarket shelves, and shape behavior in their own homes. These choices also reinforce their senses of self as people with preferences who play a role in their own fates and influence their worlds. Similarly, in other domains, by choosing which emails to reply to, which projects to work on, and which meetings to attend, choosers express their priorities and goals. We submit that these effects of choice might not be contingent on making actual choices: the mere exposure to the idea of choice—or in other words, the salience of choice in environments where choice is possible—can potentially activate these psychological processes.

Given that expressing one's personal preferences, values, beliefs, and goals, and influencing the environment are both central features of independence (11–13), the current research tests whether the psychological salience of choice fuels a general awareness of and experience of the self as independent, and leads to behaviors informed by this sense of independence. More generally, we ask whether choice—a phenomenon that increasingly underpins everyday life in all domains—is an increasingly salient but unmarked feature of the environment, one that fuels independent self-perception, cognition, and behavior, even in settings where independence has not historically been the dominant ethos. We use the term "unmarked" because, although the proliferation of choice has been well documented (e.g., refs. 6 and 7), the consequences of the mere salience of choice on people's psychological processes and behaviors have been underappreciated in the literature (14).

In a preliminary exploratory analysis, we conceptually assessed whether the salience of choice and the salience of independence

Significance

These studies find that choice—an increasingly salient feature of many cultural contexts—is linked with an array of previously undocumented behavioral consequences. When people think of their actions as choices, they feel larger and stronger than others, are attracted to ideas of independence, and feel empowered to voice their opinions. Choosing what to eat and which shampoo to buy may seem like trivial acts, yet the current research finds that the salience of choice alone can have a range of powerful psychological effects. As the ideas and practices of choice become increasingly salient worldwide, they will likely fuel a host of unanticipated consequences, including a sense of self as independent, and so contribute to the rise of global individualism.

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are correlated over time (Fig. 1). Specifically, we analyzed changes in the frequency of choice-related words and of independence-related words over the past century and a half, using the Google Ngram database, a corpus of fiction and nonfiction literature (15). We found a significant positive bivariate correlation between the use of choice-related words (e.g., choice, option) and independence-related words (e.g., achieve, personal) in English fiction and nonfiction literature between the years 1860 and 2006 ($r = 0.74$, $P < 0.001$). We also observed a significant negative bivariate correlation between the use of choice-related words and interdependence-related words (e.g., harmony, together) in the same time period ($r = -0.91$, $P < 0.001$). These findings are one indication of the growing cultural salience of ideas of independence relative to interdependence, and the increasing salience of the concept of choice that accompanies these changes in English-language literature. See *SI Appendix* for detailed methodology and additional analyses.

This archival finding aligns with recent experimental research examining the effects of the salience of choice on social judgments. For example, when the idea of choice was made salient in the United States, people were more likely to oppose policies aimed at increasing societal welfare by restricting individuals' freedom [e.g., banning violent video games (16)], were less concerned about wealth inequality (17), were more likely to engage in victim blaming (18), and had less empathy for a child living in underresourced circumstances (18). Researchers cited a heightened focus on independence as a potential underlying mechanism. Moreover, salience of choice leads people to think in a more analytic manner (19), a cognitive style that has been associated with more independent cultural contexts (20, 21). As such, in many of these studies, the mechanism explaining the effect of choice is assumed to be a sense of independence (for an overview, see ref. 14). Yet none of the studies have directly assessed this mechanism. The goal of the current research is to investigate the often-assumed link between the salience of choice and an awareness and experience of independence.

Specifically, as illustrated in the conceptual model in Fig. 2, we hypothesized—integrating multiple strands of research on independence of self, choice, and performance—that if choice is a means for expressing an independent self, then the salience of choice should amplify the importance of the self in people's minds, leading them to have more elaborated mental representations of the self than of others. For example, research has found that when people draw a diagram of their social network, North American respondents represent themselves as larger than their friends; they inflate the size of self. In contrast, Japanese

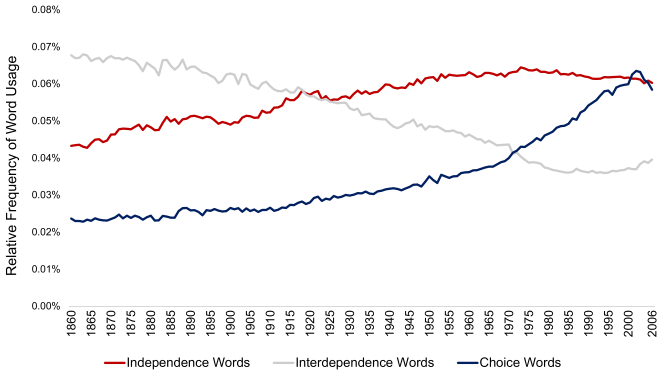

Fig. 1. Choice, independence, and interdependence word use in English fiction and nonfiction books between 1860 and 2006. The 1860 to 2006 period was selected following Grossmann and Varnum (15). We did not include data after 2006 because the introduction of mass market e-book readers drastically changed the Google Ngram sampling method after 2006 (15, 16).

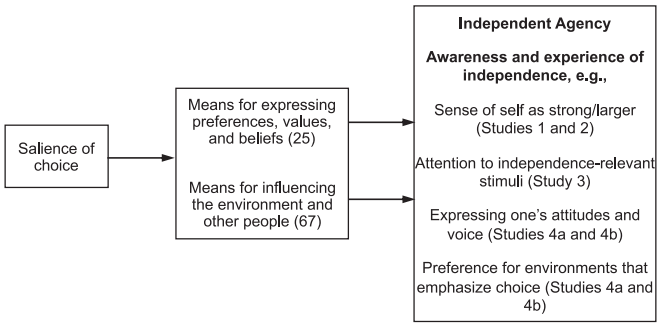

Fig. 2. Conceptual model: With increased exposure, choice becomes a means for people to express their preferences, values, and beliefs (25), and to influence others and the environment (67), which leads to a multifaceted awareness of and experience of one's own independence.

respondents represent themselves as about the same size as their friends (22). If the salience of choice leads people to perceive themselves as more independent, it might lead people to draw themselves as larger compared with others in their social network. Furthermore, if choice is a means for expressing an independent self, then when choice is made salient, concepts associated with independence (e.g., myself, individual) should be more accessible in people's minds. Finally, these cognitive effects of the salience of choice are likely to translate into a sense of self as stronger and more influential. Such an increased sense of independent agency may encourage people to exercise their voice and motivate them to take action.

Early research on choice assumed that the effects of choice are culture-general (4), but more recent research has documented that some of the motivational effects of choice do not generalize across cultures (23, 24), and that the practice, meaning, and function of choice varies by sociocultural context (25–28). Hence, to investigate the hypothesized link between the salience of choice and various manifestations of independence, we first carried out studies in the United States and in Singapore. We hypothesized that choice would be associated with independent agency but that the effects may vary depending on the salience of choice in the context.

The United States is an individualist culture with independent values where choice is extremely salient (7, 29, 30). Many contexts within the United States emphasize the value of choice, the opportunity for choice, and the practice of choice (17–19). Grocery aisles in the United States overflow with hundreds of varieties of cookies and chips, cafés offer several hundred permutations of drinks, and retirement plan options run into the thousands (6, 7). Choice is significant in every domain of life: parenting, education, health, and government policies. It is central to American notions of freedom and is a major mechanism of expressive individualism (25, 31). "Free" and unfettered choice is a defining element of American identity, and integral to life satisfaction and well-being (32). Choice is such an undeniably sacred concept in the United States that the United States has been called the "Republic of Choice" (33, 34).

Little is known about choice in Singapore but it offers a useful and pointed comparison with the United States. To begin with, Singapore, according to many cultural taxonomies, is a collectivistic nation that encourages and requires ways of being that prioritize attention and vigilance to others, along with interdependent values (7, 29, 30). However, unlike many other countries in Asia categorized as interdependent, Singapore is quite unique in that it is a multiracial (home to Chinese, Malaysians, and Indians), multireligious (home to Buddhists, Christians, Taoists, Muslims, and Hindus), primarily English-speaking country that underwent a rapid economic transformation to become one of the richest places in the

world, a role model for successful development in Asia and beyond (35, 36). With a higher gross domestic product per capita than the United States, Singapore affords very similar opportunities for the practice of choice as does the United States (37). Notably, however, with a strong collectivist heritage, the idea of choice is not imperative to Singapore's identity as a nation, nor is it inscribed in the sacred texts of the nation or prominent in everyday practices at home, school, or work, or in more formal institutional policies. Notably, Singapore's official "national values" emphasize duty and harmony rather than freedom and choice (38).

Some indirect evidence, however, suggests that personal choice is becoming important and more salient in Singapore. Mirroring findings from the United States, Singaporeans' satisfaction with the "self" predicted their life satisfaction (32). Research in the Singaporean context, then, provides an excellent opportunity to examine whether exposure to the opportunities and practices of choice can have a significant impact on the awareness and experience of independence, even in the absence of a prevalent cultural ethos that emphasizes the value and significance of personal choice. We thus focused on the Singaporean and United States context in studies 1 to 3.

In studies 4a and 4b, we added a third cultural context, India, which offers a compelling comparison with both the United States and Singapore. Cultural taxonomies also categorize India as a collectivistic country, similar to Singapore in many ways (29, 39, 40). Yet, research suggests that choice in India, although increasingly prevalent in urban parts of the country in the last few decades, carries a very different set of meanings and values than it does in the United States (25, 26). Indians are less likely to choose according to their personal preferences, less motivated to express their preferences in their choices, less likely to construe their actions as choices, less threatened by a lack of choice than Americans, and less motivated by the provision of choice (24–26). Furthermore, unlike in the United States and Singapore, in India, people's satisfaction with the self did not predict their life satisfaction (32).

Instead, even in well-resourced urban Indian contexts, choice is often conceptualized as a means to help people meet the requirements of duty and interpersonal responsibility (41–43). For example, Americans felt that it was their choice whom to help, and were more willing to help people whom they like over those whom they dislike; however, Indians indicated that it was their moral obligation to help others irrespective of whether they like the other person or not (44). Furthermore, when reminded of their parents, Indians made more conservative choices, consistent with their parents' expectations, but Americans made more liberal choices, thereby going against their parents' expectations (45). In addition, throughout India, even in middle-class urban areas where the salience of choice is rapidly increasing, there are still significantly fewer opportunities to exercise personal choice in India than in the United States or Singapore (46). As one important example, over 90% of Indian marriages are arranged (47). Moreover, India's median household income [about $3,000 (48)] is substantially lower than Singapore's and the United States' [about $32,500 and $43,500, respectively (49)]. Given the different meaning, value, and practice of choice in India compared with the United States and Singapore, personal choice is likely to be less salient and less significant in peoples' minds and in their everyday contexts. Thus, we expect choice to give rise to independent agency to a lesser extent in the Indian cultural context.

Overall, in four studies we tested whether the relationship between the salience of choice and an awareness of and experience of independence holds in three cultural contexts varying in their dominant cultural values (United States: independence; Singapore and India: interdependence), their practice of choice (United States and Singapore: higher; India: lower), and the meaning ascribed to choice (United States: means of self-expression; India: means to fulfill duty; Singapore: undetermined). We sought to test whether the salience of choice can fuel an awareness and experience of independence even in contexts in which neither choice nor independence are elaborated, inscribed, or reinforced in cultural ideas and practices. Furthermore, we also tested whether the importance and value ascribed to choice vary across these three contexts.

Study 1 (preregistered) tested whether increasing the salience of choice would lead Singaporeans to represent themselves as larger than their friends when drawing a diagram of their social network, a form of symbolic self-inflation. Study 2 sought to conceptually replicate this finding in the United States. Specifically, we tested whether increasing the salience of choice leads Americans to engage in another form of symbolic self-inflation (i.e., to perceive themselves to be physically stronger). Study 3 assessed whether increasing the salience of choice shifts Singaporeans' attention to stimuli related to independence. Specifically, we tested whether participants who recalled choices rather than actions would be more attentive to independence and faster at detecting independence-related words (but not interdependence-related words or neutral words) in a word/nonword lexical decision task. Finally, studies 4a and 4b (preregistered) tested a downstream consequence of the salience of choice on experience of independence across three cultures. To that end, we assessed whether employees in the United States, Singapore, and India in organizations that emphasize choice would be more likely to express opinions and attempt to create change than employees in organizations that do not emphasize choice. We also assessed whether people in these three cultures would prefer to work for organizations that emphasize choice more than organizations that do not emphasize choice.

We obtained informed consent from all participants. The Institutional Review Board of Nanyang Technological University (protocol IRB-2015-07-018) approved this research. All study materials, data, and results are available at the Open Science Framework (OSF) repository for this project: https://osf.io/rtuyn/?view_only=cc1615da37d64f7aafc3367e54e647de.

Study 1: Choice and Self-Inflation

We conducted the first study in Singapore. As discussed above, while choice is omnipresent in Singapore, collectivism and interdependence are the dominant ethos. To that end, study 1 sought to experimentally test whether increasing the salience of choice would make people in Singapore represent themselves as more independent, and thus, engage in self-inflation. We expected that salience of choice would make participants represent themselves as larger than their friends in a sociogram task. Specifically, we sought to test if salience of choice would increase the positive difference between the size of the oval people draw to represent themselves and the size of the oval people draw to represent others. We selected an implicit measure of independence rather than a self-reported measure as our focus was on people's general awareness and sense of independence: that is, their sense of being positively different from close others, rather than on their cognitive assessment or linguistic representation of their own independence.

Method. The hypotheses, power analysis, sample size, participant inclusion criteria, and methods for this study were preregistered (https://osf.io/ena93). We conducted a pilot study with 22 undergraduate students using identical procedures as in the main study, which found an effect in the predicted direction with Cohen's d = 0.42. We conducted a power analysis using the G*Power software (50) for a t test for differences between two independent groups, and entered the following values: d = 0.42, α = 0.05 (one-tailed, given preregistered directional hypothesis), power = 80%. This analysis indicated that we would need to recruit a minimum of 142 participants. To ensure sufficient power, we decided on a sample size of 160. A study seeking 160 participants was conducted with the university participant pool in return for course credit. In response,

161 participants completed the study (82 women, 56 men, 23 unreported; mean age 20.3 y; 77 East Asian, 37 Southeast Asian, 1 South Asian, 10 biracial, 1 multiracial, 6 other, 29 unreported).

Participants were randomly assigned to either the choice condition or the control condition. Specifically, participants in the choice condition were asked to describe three choices they made the previous morning, afternoon, evening and night, whereas participants in the control condition were asked to describe three things they did in the same periods (adapted from ref. 17). We used this experimental manipulation because it produces similar results to a manipulation in which people are asked to make a choice versus not make a choice (17, 19), but does not involve associated confounds (e.g., people have to exert more cognitive effort to choose one of many options than to simply engage in an action as per the experimenter's choice).

Following the experimental manipulation, participants were given a sociogram task (51). Participants were instructed: "Start by putting yourself in an oval on the sheet of paper provided. Next, put your friends in ovals around you. If your friends are friends with each other, draw a line to connect their ovals. You have 5 minutes to create your sociogram on the sheet of paper lying on the table. You can make as complex a sociogram as you want." Participants were then given 5 min to complete the task, and a countdown timer on the screen displayed the remaining time.

After 5 min, participants were instructed, "In the room, there is a ruler located under the keyboard. Please use this ruler to measure the ovals that you have drawn. For each oval, measure the LONGEST diameter then record the length in centimeters (cm) on the following page. Please be accurate to one decimal place. In the example below, you would record '5.5'." To avoid ambiguity in the interpretation of the instructions, we included an example image of a ruler and an oval, explicitly demonstrating how to measure each oval. Participants were asked to measure and report the diameter of the self-oval first. Next, we asked them to label the ovals representing their friends (starting from 1, 2, 3, ...), measure the longest diameter of each oval, and enter it on the screen in the order in which they had labeled the ovals.

Results. In the choice condition, participants wrote about the choices they made the previous day (e.g., "I chose to wake up early yesterday"; "I chose to eat instant noodles instead of going out to eat"; and "I chose to wake up on the second alarm and move on with my day"). On the other hand, participants in the control condition wrote what they did the previous day (e.g., "I ate breakfast"; "I went shopping"; and "I went to the gym").

There was no difference in the number of friends that participants drew in their social network between the control condition (mean = 14.95, 95% confidence interval, CI [13.55, 16.34], SD = 6.30) and the choice condition: mean = 16.26, 95% CI [14.80, 17.71], SD = 6.58, $t(160) = -1.29$, $P = 0.198$, Cohen's $d = 0.20$. Additionally, there was no difference in the network density (calculated as the number of connections existing in the network divided by the total possible number of connections) that participants drew between the control condition (mean = 0.36, 95% CI [0.29, 0.43], SD = 0.32) and the choice condition: mean = 0.33, 95% CI [0.28, 0.38], SD = 0.23, $t(149) = 0.704$, $P = 0.48$, Cohen's $d = 0.11$.

Following the method described in Kitayama et al. (22), our dependent measure was the diameter of the self-oval (1 value per participant) compared with the average diameter of the other-ovals (between 3 and 30 measurements per participant, averaged) (Fig. 3). Participants in the choice condition drew a larger self-oval (mean = 2.81 cm, 95% CI [2.52, 3.10], SD = 1.33) than other-ovals: mean = 2.36 cm, 95% CI [2.16, 2.56], SD = 0.91, $t(80) = 3.55$, $P < 0.001$, Cohen's $d = 0.39$. In the control condition, there was no significant difference between the self-oval (mean = 2.55 cm, 95% CI [2.30, 2.80], SD = 1.13) and other-oval diameter: mean = 2.46 cm, 95% CI [2.31, 2.60], SD = 0.65, $t(79) = 0.94$, $P = 0.35$, Cohen's $d = 0.11$.

Following the preregistered analysis plan, for each participant, we computed the difference between the size of the self-oval and the average size of the other-ovals. We found that this difference was significantly larger in the choice condition (mean = 0.45 cm, 95% CI [0.20, 0.70], SD = 1.14) than in the control condition: mean = 0.09 cm, 95% CI [−0.10, 0.29], SD = 0.88, $t(159) = -2.22$, $P = 0.014$ (one-tailed, given preregistered directional hypothesis), Cohen's $d = 0.35$.

Discussion. Study 1 found that Singaporean respondents who recalled past choices were more likely to engage in subjective self-inflation—representing the self as larger than others—which is a key indicator of independence (22). The findings suggest that the salience of choice leads people to experience themselves as more independent, and consequently, bigger than their peers. Notably, we obtained this finding in Singapore, an interdependent and collectivist cultural context (52), where ideas of freedom and choice are not highly elaborated in institutions of government, media, or religion, or in daily interactions in schools, workplaces, or homes, but where the opportunity for and practice of choice is a well-established and increasingly integral part of everyday life (37).

Study 2: Choice and Strength

This study aimed to conceptually replicate our findings from study 1 using a different implicit measure of independence among Americans. Specifically, recent research has found that priming the idea of independence compared with interdependence makes Americans feel stronger; they persisted longer on a handgrip task (53). In this study, we tested whether increasing the salience of choice would make Americans feel stronger. Self-perceived strength is also an indicator of self-inflation, the idea that the self is big and strong, which are hallmarks of independence (22).

Method. We used the effect size from study 1 to determine the sample size. We conducted a power analysis using the G*Power software (50) using $d = 0.35$, $\alpha = 0.05$ (two-tailed), power = 80%. This analysis indicated that we would need to recruit a minimum of 260 participants. We decided on a larger sample size of 400 participants as the effect size is likely to be lower in the current online study than in study 1, which was a laboratory study. We posted the study on Amazon's Mechanical Turk seeking 400 participants. In response, a total of 463 participants completed the study (258 women, 151 men, 3 other gender, 51 unreported; mean age 35.8 y; 297 European American, 36 African American, 20 Asian American, 15 Latin American, 6 Native American, 23 biracial, 2 multiracial, 11 other, 53 unreported).

We used the same experimental manipulation as in study 1 to activate the salience of choice. Participants in the choice condition

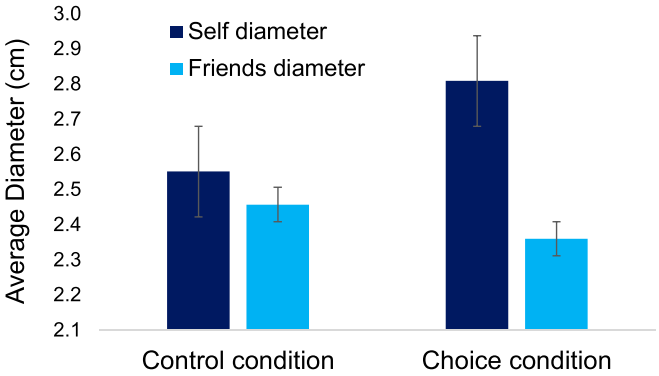

Fig. 3. Sociogram task diameters for self- and other-ovals by condition. Singaporean students asked to recall their choices drew a larger oval to represent themselves compared with the ovals that they drew to represent their peers (study 1).

were asked to describe three choices they made yesterday morning, afternoon, evening, and night, whereas participants in the control condition were asked to describe three things they did in the same time periods.

Next, we asked participants three questions about their physical strength ("How muscular are you?"; "How physically strong are you?"; and "How well-built are you?") on a five-point scale (ranging from "I'm not very muscular" to "I'm especially muscular"). The three items had high reliability ($\alpha = 0.85$) and were thus averaged to create a measure of perceived strength.

Results. As the dependent variable was not normally distributed [skewness = 1.01, kurtosis = 4.37, Kolmogorov–Smirnov $D(463) = 0.169$, $P < 0.001$], we analyzed the data using the Wilcoxon Mann–Whitney test, which does not make any assumptions about the distribution of the dependent variable. As predicted, we found that participants in the choice condition (mean = 2.07, 95% CI [1.97, 2.18], SD = 0.78) (actual rank: 51,663.50, expected rank: 54,984.00) were likely to view themselves as physically stronger than those in the control condition: mean = 1.93, 95% CI [1.83, 2.03], SD = 0.78 (actual rank: 55,752.50, expected rank: 52,432.00) $z = -2.34$, $P = 0.019$, Cohen's $d = 0.18$. The effect size was similar for men and women (Cohen's $d = 0.15$ and 0.16, respectively).

Discussion. Study 2's American respondents who recalled their past choices subsequently reported being more muscular, physically strong, and well-built compared with those who recalled their past actions. This finding is consistent with the results from study 1 among Singaporean respondents. Increasing the salience of choice led to a sense of self-inflation: in this case a sense of being positively different, bigger, and stronger than others, consistent with previous research that links a sense of independence to strength (53).

Study 3: Choice and Attention to Independence-Related Stimuli

Study 3 sought to extend the findings of studies 1 and 2 by testing whether the salience of choice not only makes people experience and represent themselves as more independent but also directs their attention to independence-related concepts, even in contexts where dominant cultural values do not promote and elaborate the significance of independence. Specifically, we tested whether when the idea of choice is salient and words related to independence are automatically primed in people's minds. We used a lexical decision task (54) in this study, in which people have to detect whether a given string of letters is a word or a nonword. If a given concept is salient in people's minds, then people are typically faster in judging that a word related to the salient concept is in fact a word (55). To test whether the salience of choice particularly activates the concept of independence, we also presented participants with words related to interdependence, along with neutral words. We hypothesized that when choice is salient, people will be faster at accurately detecting independence-related words but not interdependence-related words or neutral words. We once again sampled participants in Singapore, which is a predominantly English-speaking nation.

Method. Following past research on the effects of activating the salience of choice (17, 18), we assumed an effect size of Cohen's $d = 0.40$. A power analysis indicated that we would need a sample size of 100 to detect an effect of this size with $\alpha = 0.05$ (two-tailed) and 80% power. Thus, we posted a study for 100 participants at a large university in Singapore. Three participants who registered did not show up for the study, resulting in a final sample of 97 undergraduates (40 men; 57 women; mean age 22.1 y; 92 East Asian, 1 Southeast Asian, 3 biracial, 1 other).

All participants completed the task individually, in a quiet room, without any distractions. The practice trials were not included in the analysis. We used the same experimental manipulation as in studies 1 and 2 to vary the salience of choice. Participants in the choice condition were asked to describe three choices they made yesterday morning, afternoon, evening, and night, whereas participants in the control condition were asked to describe three things they did in the same time periods.

To measure the accessibility of independence-related concepts, we presented the participants with a word/nonword lexical decision task. Participants were presented with 80 strings of letters, including 10 independence-related words (e.g., myself, individual), 10 interdependence-related words (e.g., family, connected), 20 neutral words (e.g., record, television), and 40 nonwords (e.g., fsleym, yfimla). The nonwords were generated by scrambling the letters included in each of the 40 words. The words used in the Google Ngram analysis (Fig. 1) were formal words associated with independence and interdependence that are often used to define these terms. In the present study we used more colloquial words for independence and interdependence that come up in everyday interactions. We reviewed key literature on interdependence and independence (11, 53, 56–59) and generated lists of commonly used words that are associated with these concepts (e.g., together, share, single, autonomy) (*SI Appendix*, Table S2).

The task was programmed using Inquisit software. To familiarize participants with the task, we included 10 practice trials (consisting of 5 neutral words and 5 nonwords). Next, the 80 test trials were presented one at a time in random order. The strings were displayed in black color font on a white background in the middle of the screen. Each string was displayed for 250 ms, followed by a mask (a string of X's of the same length as the string used in that trial). As is typical with lexical decision tasks, this was done to ensure that an afterimage of the string did not remain active in the periphery of the visual system (60). Participants were instructed to press the "I" key if they saw a word and the "E" key if they saw a nonword. The dependent variable was participants' reaction time to accurately detect whether the string was a word or a nonword, with faster reaction times indicating greater accessibility of the associated concept.

Results. In the 80 test trials, participants' average accuracy was 84%. For all trials on which participants identified the word or nonword correctly, we used their cleaned reaction time as the dependent measure. Following standard data-cleaning procedures for response times (61), we dropped observations with reaction times that were 100 ms or less, or three or more SDs above the mean. We then log-transformed the response times. This reduced skewness from 3.98 to −1.38 and kurtosis from 43.73 to 9.95, thus bringing the distribution of the data closer to a normal distribution.

We analyzed the data using a hierarchical linear model (HLM), treating the 80 trials as nested within participants. Log-transformed reaction time was our trial-level dependent variable. We further had two trial-level dummy variables, one indicating whether the trial contained an independence-related word and another indicating whether the trial contained an interdependence-related word. Neutral words were treated as the baseline condition. We had one participant-level predictor: experimental condition (control = 0, choice = 1). We also included a cross-level interaction between the experimental condition and the independence dummy, and another cross-level interaction between the experimental condition and the interdependence dummy. For the slope of the key predictor the independence dummy was allowed to vary across participants, and covariance between participants' slope and intercept was estimated. A model with robust SEs was used.

The simple effect of type of word was not significant for either independence-related words ($B = 0.013$, 95% CI [−0.0098, 0.035], SE = 0.011, $z = 1.10$, $P = 0.27$) or interdependence-related words ($B = -0.012$, 95% CI [−0.031, 0.0075], SE = 0.0099, $z = -1.20$, $P = 0.23$), indicating that on average, participants took a similar amount

of time to detect independence-related, interdependence-related, and neutral words. The simple effect of experimental condition was nonsignificant ($B = 0.063$, 95% CI [−0.047, 0.17], SE = 0.056, $z = 1.12$, $P = 0.26$), indicating that participants in the choice and control conditions detected the neutral words with similar speed. The interaction between condition and interdependence-related words was also nonsignificant ($B = -0.019$, 95% CI [−0.061, 0.023], SE = 0.021, $z = -0.88$, $P = 0.38$). However, as predicted, the interaction between condition and independence related words was significant ($B = -0.042$, 95% CI [−0.079, −0.0055], SE = 0.019, $z = -2.25$, $P = 0.024$). The negative sign on the B-coefficient indicates that participants in the choice condition were faster in correctly identifying independence-related words compared with neutral words than participants in the control condition (Fig. 4).

To further examine the interaction between condition and independence-related words, we conducted separate HLMs within each condition. In the control condition, participants' reaction times were no different across the independence-related words and neutral words: $B = 0.014$, 95% CI [−0.0081, 0.037], SE = 0.011, $z = 1.26$, $P = 0.21$. However, in the choice condition, participants' reaction times were significantly faster for independence-related words compared with neutral words: $B = -0.035$, 95% CI [−0.067, −0.0031], SE = 0.16, $z = -2.15$, $P = 0.031$.

In additional analyses, to test whether the experimental condition influenced participants' accuracy for recognizing different types of words, we ran a hierarchical logistic model paralleling the above hierarchical linear model, but while including all 40 trials involving words and using participants' accuracy as the dependent variable (0 = incorrect, 1 = correct). We found that participants were significantly more accurate at detecting interdependence-related words compared with neutral words: $B = 0.44$, 95% CI [0.041, 0.83], SE = 0.20, odds ratio = 1.55, $z = 2.16$, $P = 0.031$. None of the other effects were significant, Ps > 0.38.

Discussion. This study extended the findings of the previous studies by documenting that the salience of choice activates an attention to independence in general. Participants in the choice condition detected independence-related words versus neutral words more rapidly than participants in the control group, indicating that recalling past choices facilitated participants' detection of independence-related words.

As shown in study 2, in the United States context, construing one's actions as choices leads to feeling physically stronger, which we suggest reflects an experience of independence. Given the many historically derived and multilayered associations among freedom, choice, and independence in the United States,

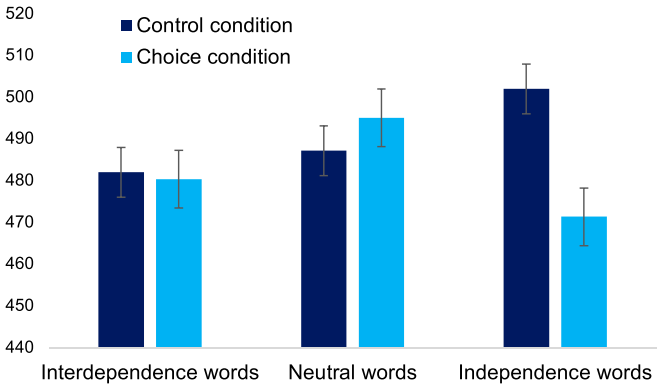

Fig. 4. Adjusted mean reaction times for the lexical decision task by condition. Singaporean students asked to recall past choices recognized independence-related words as a word faster than students asked to recall past actions. This difference was not significant for interdependence-related or neutral words (study 3).

this finding might be expected, yet this study directly demonstrates this consequence. More surprising, however, is the finding that in study 1 in the context of Singapore, where the opportunity for choice is widely available but where independence is not pervasively inscribed and promoted in ideas and policies, construing one's actions as choices also creates an experience of being larger than others and, in addition, as shown in study 3, fosters greater attention to concepts related to independence compared with concepts related to interdependence or neutral concepts.

Studies 4a and 4b: Choice and Employee Voice

Studies 1 to 3 focused on the links between choice and the experience and attention to independence in the United States and Singapore. Studies 4a and 4b were designed to accomplish multiple objectives. First, we sought to test whether the salience of choice leads to more independent behavior of a type that would have some clear ecological validity and practical relevance. To that end, we focused on independent behavior in an organizational setting: employee voice. We examined whether the salience of choice would be related to voice, or the willingness to express ideas and beliefs and to make suggestions. Second, we sought to disentangle behavioral consequences of choice from attitudes toward and preferences for choice. To do so, we also examined whether employees display a preference for accepting a job in a company that emphasizes the idea of choice. Third, we tested whether the choice-independence link generalizes beyond Singapore to another interdependent cultural context, such as India. Choice is not as widely practiced in India as it is in the United States or Singapore, and choice is known to have very different moral meanings and associations in India vs. the United States (26). Finally, we tested whether these three cultural contexts (United States, Singapore, and India) are similar or different both in the choice-independence link and in the extent to which people are attracted to the idea of choice.

The downstream consequence of choice in this study was employee voice. Specifically, we tested whether participants are more willing to express their views in organizations that emphasize choice. "Employee voice" refers to employees' proactive communication of ideas, suggestions, or concerns, with the intent to bring about improvement or change (62). Employee voice is inherently an act of expression as it involves making suggestions or sharing ideas based on preferences, values, and beliefs. Furthermore, employee voice is an act intended to influence others and the environment given that the intended outcome of employee voice is some sort of improvement or change. Despite the benefits of exercising voice, both for employees and for organizations, employees often refrain from voicing their ideas because they fear speaking up or believe that it is futile to do so (63). Given that choice makes individuals feel stronger, we hypothesize that people will be more likely to engage in employee voice in organizations that emphasize choice.

We conducted two studies using identical methods but with different samples. Study 4a was an online study conducted with working adults in the United States and India, and Study 4b was an online study conducted in Singapore with undergraduate students in their final year of study.

Method. The hypotheses, power analysis, sample size, participant inclusion criteria, and methods for this study were preregistered on the OSF for India (https://osf.io/ny4p8/?view_only=89785ab7318f414aaf1c779f3d3b1cca, study 4a) and Singapore (https://osf.io/2jchp/?view_only=5d98bfbb08194036b4d0c4c2136b9a2d, study 4b). We decided on a sample size of 52 participants in the United States and in India, which would give us 80% power to detect the effect size we observed in study 1, Cohen's $d = 0.35$, using a within-participant design.

For study 4a, we sought 52 United States residents and 52 Indian residents on Amazon's Mechanical Turk. Following preregistered

inclusion criteria, we excluded 1, 42, and 5 participants in our analyses (in the United States, India, and Singapore, respectively), who did not respond to, or provided an irrelevant response to, an open-ended attention-check question. In the United States, a total of 51 valid participants completed the study (26 women, 23 men, 1 other gender, 1 unreported; mean age 45.2 y; 37 European American, 1 African American, 8 Asian American, 1 Latin American, 2 biracial, 2 other). In India, a total of 42 valid participants completed the study (14 women, 28 men; mean age 31.9 y; 41 South Asian, 1 East Asian). Nearly all of the respondents from India reported attaining a Bachelor's degree (BA, 57.1%) or Master's degree (MA, 38.1%), while most United States respondents reported attaining a Bachelor's degree (54.9%) or lower (27.5%). Study 4b was conducted after study 4a. Based on a preregistered power analysis, we posted a survey seeking 60 undergraduates from Nanyang Business School's subject pool. In response, 61 valid student participants completed the study (39 women, 22 men; mean age 22.6 y; 58 East Asian, 2 South Asian, 1 other). Although we posted the study seeking final year students (which is typically year 3 or 4 of college, depending on the program), we had students from other years in the dataset (16 students in year 1, 4 students in year 2, 25 students in year 3, 11 students in year 4, 1 student in year 5, and 4 students in year 6). As we had not specified any exclusions related to school year in the preregistration, we used responses from all participants.

Whereas studies 1 to 3 used an experimental manipulation of choice that asked participants to recall either their past choices or their past actions, this study manipulated choice by asking participants to read descriptions of companies that either did or did not emphasize the salience of choice and that actions are choices. Specifically, we asked participants to assume the role of a job applicant and to read brochures for two companies that were recruiting new employees. One of the companies ("The Smith Group" or "The Kapoor Group" or "The Tan Group," depending on the country) emphasized the idea of choice, and the other company ("The Wilson Group" or "The Singh Group" or "The Lim Group") emphasized the importance of hard work (adapted from ref. 64) (see *SI Appendix* for contents of the brochures). For example, in the choice condition, the brochure said "Knowing that we always have choices available can help us grow as a company. I look forward to our employees continuing to act on the knowledge that we always have a choice." In the control condition, the brochure said "Knowing that we must work hard can help us grow as a company. I look forward to our employees continuing to work hard."

This was a within-participant design, so each participant was exposed to both the choice condition and the control condition. The order of the conditions was counterbalanced across participants.

After reading each company's brochure, participants responded to a six-item employee voice measure (65) ($\alpha = 0.88$ to 0.97 across cultures and conditions). A sample item was, "If you accepted a job with the [Smith] Group, how likely would you be to speak up in the department with ideas for new projects or changes in procedures?" After responding to both the choice condition and the control condition, participants were asked to indicate how likely they would be to accept a job at each company (e.g., "How likely would you be to accept a job at the [Smith] Group?"). The employee voice measure, and the likelihood to accept a job questions, were both rated on a seven-point scale ranging from "not at all likely" to "extremely likely." In all three cultures, we presented participants with materials in English. The United States and Singapore are both predominantly English-speaking countries, and although India is host to multiple languages throughout the country, English is the common language of instruction for higher education. In our Indian sample, 95% of respondents reported being comfortable in English in the demographic questionnaire. As we did not preregister exclusions based on language, we included all respondents in our analyses.

Study 4a Results. We first submitted participants' employee voice ratings to a repeated-measures ANOVA with whether the company emphasized choice versus constraints as a within-participant variable, and culture as a between-participant variable. We found a main effect of condition [$F(1, 91) = 24.05$, $P < 0.001$, $\eta_p^2 = 0.21$], indicating that participants were more likely to exercise voice in the choice condition (mean = 5.63, 95% CI [5.40, 5.85], SD = 1.10) than in the control condition (mean = 5.04, 95% CI [4.76, 5.32], SD = 1.37). We did not find a significant main effect of culture [$F(1, 91) = 0.41$, $P = 0.522$, $\eta_p^2 = 0.005$], indicating that overall, there was no significant difference in how likely people were to exercise voice between Indians (mean = 5.41, 95% CI [5.11, 5.72], SD = 0.99) and Americans (mean = 5.27, 95% CI [4.93, 5.60], SD = 1.20). We found that the interaction was not significant [$F(1, 91) = 0.19$, $P = 0.660$, $\eta_p^2 = 0.002$] (Fig. 5).

Following our preregistered analyses, we conducted independent samples t tests within each culture. In the United States, participants in the choice condition (mean = 5.58, 95% CI [5.25, 5.92], SD = 1.19) were more willing to engage in employee voice than those in the control condition: mean = 4.95, 95% CI [4.54, 5.36], SD = 1.47, $t(50) = 3.89$, $P < 0.001$, Cohen's $d = 0.55$. Similarly, in India, participants in the choice condition (mean = 5.68, 95% CI [5.37, 5.99], SD = 1.00) were more willing to engage in employee voice than those in the control condition: mean = 5.15, 95% CI [4.76, 5.54], SD = 1.25, $t(41) = 3.09$, $P = 0.004$, Cohen's $d = 0.48$. Thus, participants were more likely to voice their ideas and concerns in a company that emphasizes choice not only in the United States, where choice and independence are widely valued and practiced, but also India, where choice and independence are less central to the cultural ethos.

Next, we submitted participants' rating of how likely they would be to accept a job at the company to a parallel repeated measures ANOVA. We found a main effect of choice [$F(1, 91) = 27.94$, $P < 0.001$, $\eta_p^2 = 0.24$], indicating that participants were more likely to accept a job in the company that emphasized choice (mean = 5.74, 95% CI [5.49, 6.00], SD = 1.23) rather than hard work (mean = 4.81, 95% CI [4.47, 5.14], SD = 1.60). We also found a main effect of culture [$F(1, 91) = 4.45$, $P < 0.038$, $\eta_p^2 = 0.05$], indicating that overall, Indians were more willing to accept a job (mean = 5.55, 95% CI [5.20, 5.90], SD = 1.13) than Americans (mean = 5.04, 95% CI [4.73, 5.37], SD = 1.14). We did not find a significant interaction [$F(1, 91) = 0.43$, $P = 0.513$, $\eta_p^2 = 0.005$] (Fig. 6).

Following preregistered analyses, we conducted independent samples t tests within each culture. American participants were more willing to accept a job in the company that emphasized choice (mean = 5.56, 95% CI [5.22, 5.92], SD = 1.25) rather than hard work: mean = 4.53, 95% CI [4.07, 4.98], SD = 1.62, $t(50) = 4.18$, $P < 0.001$, Cohen's $d = 0.58$. Similarly, Indian participants were more willing to accept a job in the organization that emphasized choice (mean = 5.95, 95% CI [5.58, 6.32], SD = 1.19) versus hard work: mean = 5.14, 95% CI [4.67, 5.62], SD = 1.52, $t(41) = 3.39$, $P = 0.002$, Cohen's $d = 0.52$.

Study 4b Results. For this study with Singaporean participants, we again conducted a repeated-measures ANOVA with participants' employee voice ratings as the dependent variable and whether the company emphasized choice versus hard work as a within-participant predictor variable. We found a significant difference by condition [$F(1, 60) = 36.35$, $P < 0.001$, $\eta_p^2 = 0.38$], such that participants were more willing to exercise voice in the choice condition, (mean = 5.40, 95% CI [5.17, 5.64], SD = 0.93) than in the control condition: (mean = 4.27, 95% CI [3.92, 4.61], SD = 1.33, $t(60) = 6.03$, $P < 0.001$, Cohen's $d = 0.76$ (Fig. 5). The effect size in the Singapore sample was larger than the effect sizes we found in India and the United States by about 1.5 times.

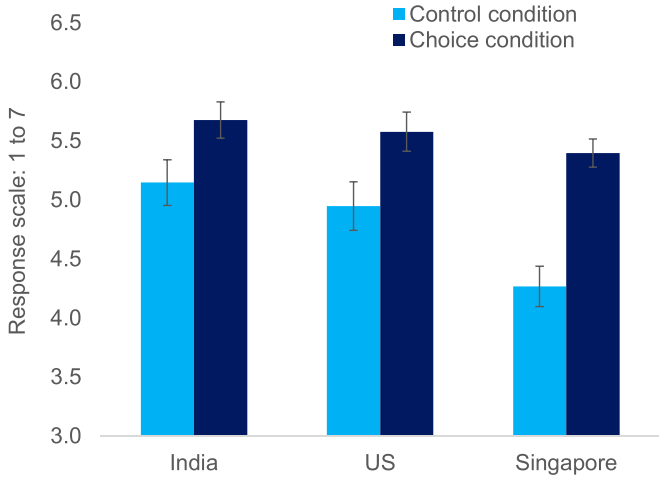

Fig. 5. Participants' willingness to express their voice and speak up in a company that emphasizes choice versus hard work (control) across the three countries (studies 4a and 4b). Indians, Americans (US), and Singaporeans all reported that they would be significantly more willing to express their ideas and opinions in a company that emphasized choice compared with a company that emphasized the importance of hard work. Error bars depict SEMs.

Furthermore, we conducted a parallel repeated-measures ANOVA with participants' responses to how likely they would be to accept a job at the company. We again found a significant difference by condition [$F(1, 60) = 62.22$, $P < 0.001$, $\eta_p^2 = 0.51$] such that participants were more willing to accept a job at the organization that emphasized choice (mean = 5.44, 95% CI [5.11, 5.77], SD = 1.28) than the one that emphasized hard work: mean = 3.85, 95% CI [3.51, 4.20], SD = 1.35, $t(60) = 7.89$, $P < 0.001$, Cohen's $d = 0.98$ (Fig. 6).

Discussion. Studies 4a and 4b uncovered employee voice as a novel but practical and important consequence of choice. Specifically, across the United States, India, and Singapore, individuals were more willing to report they would speak up and express themselves in an organization that emphasized choice. The effect of choice was similar in the United States (a well-resourced, independent culture in which the practice of choice is omnipresent), India (a collectivist culture in which the availability of choice, even in urban contexts, is still limited), and Singapore (a collectivist culture in which the practice of choice is omnipresent in the consumer domain). The findings suggest that the salience of choice leads to an awareness and experience of independence even in cultural contexts in which the practice of choice is not so prevalent and in which choice might have different meanings.

Similarly, in all three cultures, individuals were more willing to accept a job at a company that emphasized choice. This finding is somewhat surprising in the Indian context. Specifically, given the importance placed on deference to authority figures in India (45), we expected that the idea of working for a company that emphasizes choice may not be congruent with Indians' expectations from work. However, we found that Indians were similar to Americans: they were more attracted to an employer that valued choice. Notably, however, the Indian participants in this study were the most formally educated (57% BA; 38% MA) of the three groups, and many studies show a strong correlation between level of educational attainment and preference for choice (9). Singaporeans also emphasize duty and respect for authority, yet they frequently practice choice in the consumer domain, and they may increasingly want to exercise choice in the realm of employment. Singaporeans, although interdependent in many respects, also preferred working at a company that emphasized choice. Overall, the findings suggest that even outside the West, people with some college or higher levels of educational attainment may now exhibit a preference for employers that value choice, irrespective of whether the national culture supports the availability and practice of choice. This may be particularly likely for companies that emphasize their global reach.

General Discussion

The increasing availability of choice is the unmistakable consequence of economic development all over the world. Growing consumerism, coupled with the rise of social media, now affords people the opportunity to make more choices than ever before, and research has begun to uncover the multitude of ways in which the act as well as the idea of choice shape the experience of the self. The manner in which people experience the self is an important predictor of cognition, motivation, and behavior (11, 56, 66). Here we sought to understand how the salience of choice influences the experience of the self, and serves as an engine that drives patterns of both thoughts and behaviors. Taken together, the current findings suggest that choice shifts people's awareness and behavior in a more independent direction: that is, leads them to perceive themselves as larger and stronger, focuses their attention on independence-related stimuli, and moves people to want to express their own ideas and work in an environment where choice is valued. Together, these results indicate that mere salience of choice can lead to consequential differences in people's self-perception, cognition, and behavior. Importantly, in these studies, the observed effects were not contingent on people making actual choices. As outlined in Fig. 2, merely activating the idea of choice in people's minds (e.g., by asking them to recall choices rather than actions from the previous day, or by asking them to envision a context that supports the idea of choice), was sufficient for respondents to experience some aspects of independent agency.

The relationship between choice and independence held across a number of different cultural contexts: the United States, Singapore, and India. In particular, although Singapore is a more collectivistic country compared with the United States that emphasizes duty and harmony (38), we found that salience of choice reliably activates the concept of independence in Singapore. Furthermore, we found that Singaporeans were as attracted to the idea of choice as Americans. Consumer choice is widely practiced in Singapore; insiders and outsiders alike claim that Singaporeans

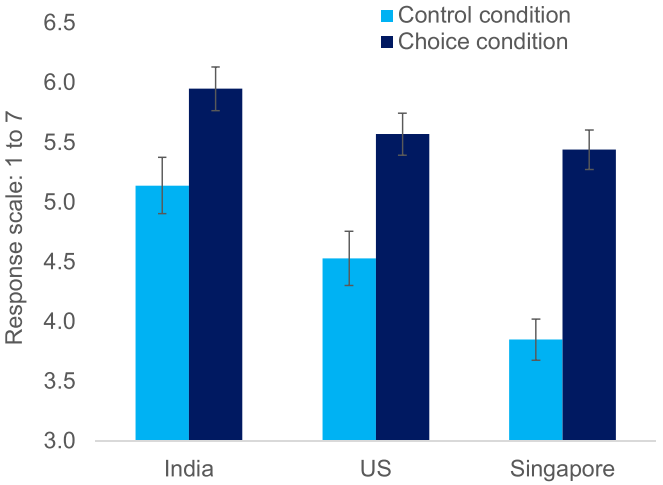

Fig. 6. Participants' willingness to accept a job at a company that emphasizes choice versus hard work (control) across the three countries (studies 4a and 4b). Indians, Americans (US), Singaporeans all reported being significantly more willing to accept a job in a company that emphasized choice compared with a company that emphasized the importance of hard work. Error bars depict SEMs.

are "always shopping" (37). These findings suggest that the frequent practice of choice can engender the attention to and experience of some aspects of independence even in collectivistic countries. Future studies can explore other ways in which rapid economic growth has influenced the psychology of Singaporeans, and study the mechanisms that link economic growth with choice and independence. For example, as Singapore has become a prosperous and choice-full country, it increasingly places an emphasis on individual achievement and meritocracy, factors likely to simultaneously foster both a sense of independence and the further salience of choice.

The salience of choice increased the experience of independence even in India. This finding further indicates that even in cultures where the practice of choice is not widespread, construing actions as choices can activate a sense of independence as strongly as in cultures where choice is highly prevalent. Importantly, similar to Americans and Singaporeans, Indians were interested in working in a company that emphasizes choice (i.e., they were attracted to the idea of choice). Some studies have found that the meaning of choice is different in India than in the United States (43, 44), where even in relatively affluent contexts, choice often references the expectations and preferences of others rather than one's own. These studies provide evidence that although the meanings and associations of choice may be different in India, the behavioral consequences of choice (e.g., in promoting independent behavior) and preference for choice may be similar to cultures such as the United States, where choice often references one's own expectations and preferences. Future research might productively disentangle the distinction between the meaning of choice, the behavioral consequences of choice, and the preference for choice. Furthermore, as the Indian economy grows more affluent, the ideas and practices of choice are likely to become more prevalent. The effect of this increased salience of choice, and whether the behavioral outcomes of choice in India will become similar to other cultures is a question for future research.

Another question that remains unanswered is whether the effects of choice vary within national cultures. For example, even within American contexts, the effects of choice are not uniform. What we have described here as the American pattern of choice-related behavior characterizes choosers who are predominantly White, college-educated, and living in well-resourced contexts. Previous research suggests that this pattern is less common among choosers in poorly resourced or low socioeconomic status contexts (9, 23, 67). One potential explanation for these findings is that salience of choice is most likely to foster a sense of independence or independent agency only in certain contexts (57). Choice may have the full range of hypothesized individual consequences only in those contexts of abundance in which choosers have the opportunity to choose among good alternatives, or only in those contexts in which individualizing one's self by expressing and acting on one's preferences need not signal a lack of interdependence or disregard for the preferences of others. Although we did not intentionally sample individuals across different socioeconomic strata, we did collect measures of self-reported social class in our studies. As reported in *SI Appendix*, we did not find that the relationship between salience of choice and independence varied by social class. Future research needs to examine this question more closely because previous studies in the United States have found that the meanings, practices, and consequences of choice do vary by social class.

The current research raises some additional important questions. Research in multiple disciplines highlights a growing trend in individualism across the globe that tracks economic development (15, 68–71). A variety of socioeconomic factors (15) are cited as explanations for the growth. In the same time frame, choices in many domains of life have exploded exponentially (7). Is the global growth in both choice and individualism coincidental? One possible explanation is that global economic growth has allowed for the expansion of choice in cultures that could not previously afford choice, and that this growth in choice has provided people with a greater sense of independence, as demonstrated in the present research. Personal choice, therefore, may be an unseen contributor to cultural change. Future research can investigate the role of choice (or lack of choice) resulting from economic conditions and the associated individual and societal consequences as mediated through a stronger or weaker sense of independence.

These findings lead us to ask: What are the individual and societal consequences that arise when people see themselves as strong and independent actors who can influence the world around them? On one hand, an enhanced sense of agency and independence may fuel people's determination to work toward their own goals, and therefore improve individual achievements and well-being. Shifting people's self-representation in a more independent direction may lead to better individual outcomes, such as helping them negotiate better working conditions, pushing back against sexual and power harassment, and taking action against oppressive governments. On the other hand, an increased focus on personal independence may backfire when collective action is critical for the greater good, such as arresting climate change, restoring economic mobility, and integrating millions of migrants displaced by war and natural disasters. By focusing people on their personal independence, the salience of choice might reduce people's support for environmental policies (e.g., a gas tax) because such policies can be construed as restricting individual freedom. Hence, while beneficial for the individual, the increased salience of choice and the sense of independence that tracks it may have adverse consequences for society. Given the proliferation of choice in our lives and its potentially divergent consequences for the individual and the society, there is a pressing need for more research on the broad ramifications of choice (14).

Individualism as originally identified and described by Hofstede (29) and Triandis (72) is a syndrome with many features, importantly including an awareness and experience of the independence of the self from others. The present research suggests that choice can serve as a proximate and unmarked engine of the global increase in individualism documented in many places around the world (73). This enhanced focus on the self and the empowerment of the self, in turn, leads to consequences, such as willingness to express one's views in the workplace. This enhanced focus on the self may also have broader implications for policymaking and personal decision making, and for thinking about how an emphasis on personal choice fosters behavioral change (e.g., I can choose to wear a mask, but I can also choose not to wear a mask). If, how, and when the enlargement and empowerment of the self that accompanies the choice afforded by economic development can be beneficial for both the individual and the larger community that supports the individual is a pressing question for behavioral scientists.

Data Availability. Anonymized Excel (.xlsx) and Stata (.dta) data have been deposited in the Open Science Framework (https://dx.doi.org/10.17605/OSF.IO/RTUYN).

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