

Contact With Dogs and Cats: A New Approach to Influencing Consumer Risk–Return Preferences

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Abstract

The present study examined whether, in the context of Chinese culture, dogs and cats influence consumers' risk–return preferences and how they do so. Participants played a poker game, which enabled them to make choices without interference from real-world factors. The results of Experiment 1 indicated that both long-term and short-term exposure to dogs and cats activated people's promotion and prevention focus, respectively, thereby increasing or decreasing risk tolerance and gain desire. The results of Experiment 2 indicated that stereotypes surrounding dogs and cats act as a regulatory factor for the change of regulatory focus. These findings can serve as a reference for marketers of financial products.

Keywords: Pet, Regulatory Focus, Risk–Return Preference

JEL Classifications: C12, C42, C91, G11

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1. Introduction

COVID-19 outbreak forcibly decreased social interaction among people; however, it increased the amount of time that people spent with pets. Since 2019, people's willingness to adopt pets in the United States and the number of pet adoptions have been rising steadily. Staff at the New York City Animal Care Center indicated that they received 25 times more adoption applications than expected. Undoubtedly, pets influence various aspects of their owners' behavior; therefore, they are likely to affect their owners' consumption behavior. Of course, owners frequently purchase pet supplies and products such as food, cleaning products, toys, and insurance for their pets. However, the influence of pets over their owners' consumption of products other than pet supplies, particularly financial products, remains unknown.

Although pets can be seen everywhere in life, research into the relationship between pets and humans is relatively limited in scope, with studies focusing primarily on sociological topics such as how pets affect human health and social relationships. Numerous studies have demonstrated the benefits of keeping pets: pets not only enhance their owners' physical and mental health (Herzog, 2001; Utz, 2014) but also have a positive impact on children's growth (Melson, 1991). Conversely, few studies have examined the influence of pets on their owners' consumption and investment. Lei et al. (2022) discovered that exposure to pets can affect consumers' judgement and behavior by changing their regulatory focus. Specifically, contact with dogs can trigger people's promotion focus, making them pay attention to whether a product has positive effects, whereas contact with cats can trigger people's prevention tendency, making them pay attention to whether a product can help them avoid negative effects. Despite these findings, no other researchers have conducted follow-up research. The study by Lei et al. (2022) was conducted in the context of Western culture and did not explore the stock and mutual funds market conditions in-depth. Therefore, it is unknown whether participants were influenced by external factors to make abnormal choices.

The images and statuses of dogs and cats vary in different cultural contexts, which raises the question of whether the impact of exposure to dogs and cats on consumers' regulatory focus is universal. The present study explored whether dogs and cats can influence promotion and prevention focusing on the context of Eastern culture. Specifically, the present study focused on the consumption of financial products and strived to profoundly explore the direction and mechanism of how dogs and cats affect the consumption of financial products.

2. Literature Review

2.1. Regulatory Focus Theory and Risk-return Preference

According to the regulatory focus theory, people take one of two approaches when attempting to achieve their goals: promotion focus or prevention focus (Higgins, 1997). People with a promotion focus are typically concerned about whether their actions can achieve positive outcomes. In other words, they are eager to achieve goals and pursue progress (Kirmani and Zhu, 2007), whereas people with a prevention focus are typically concerned about whether their actions can avoid negative

outcomes and losses (in other words, they focus on reducing errors and ensuring safety; Markman et al., 2005).

The regulatory focus is also closely related to people's risk appetite. Risk preference refers to the extent to which individuals are willing to take risks in order to achieve certain goals. Risk preference is a kind of psychological reflection, which is the different psychological state of individuals when they choose high-risk items or low-risk items. According to Markowitz (1952), the expected benefits and the risks involved in obtaining such benefits are essential factors in people's decision-making, and such considerations lead to the formation of different decision-making styles, for example, those who prefer a higher return but less predictable option call it a risk-taker, while those who prefer a certain outcome but a lower-return option call it a risk-taker, call this choice a risk-averse (Kahneman and Tversky, 1979). Risk-neutral is between risk-loving and risk-averse. In investment activities, risk-neutral individuals may exhibit positive risk-taking behavior that does not require risk compensation.

The degree of risk preference of individuals may vary from case to case, and previous studies on domain-specific risk have used two classification schemes for risk domains: one is based on common life situations; Risks such as moral, financial, health, and entertainment (Hu and Xie, 2012), and risks such as reproductive, resource allocation, and environmental risks based on evolutionary psychology (Kruger et al., 2007). Human risk appetite also changes under different circumstances, such as Tversky and Kahneman (1992) who argue that an individual's risk appetite changes depending on whether he or she is positive about the behavior. Empirical studies in psychology and recent economics clearly show that emotions can influence an individual's risk appetite to some extent (Drichoutis A and Nayga, 2013; Cohn et al., 2014). Many scholars have found that the adjustment focus is also one of the influencing factors of risk preference.

People with a promotion focus are sensitive to returns (Markman et al., 2005) and can tolerate high risks, whereas people with a prevention focus are risk averse (Zhou and Pham, 2004) and cautious in their decision-making (Pham and Chang, 2010). Therefore, people with a promotion focus differ from those with a prevention focus when making choices. The differences in sensitivity to risk and return may particularly affect people's choices of financial products. In the present study, researchers predicted that people with a promotion focus would tend to purchase aggressive products and people with a prevention focus would tend to purchase conservative products.

As a built-in pattern, regulatory focus may affect people's choices at any time. Numerous researchers have discussed the influence of regulatory focus on human life. In studies on physical health, obese people with a prevention focus lost more weight (Fuglestad, 2015); encouraging to people with a promotion/prevention focus helped them to increase their physical activity (Latimer et al., 2008). In the area of education, people with a promotion focus increased their study time when they wished to succeed, whereas people with a prevention focus increased their study time in the face of stress and mistakes (Federman, 2020). In a study on leadership styles at work, employees' attitudes

were associated with their regulatory focus: employees with a promotion focus felt relieved when empowered to act by their leader, whereas employees with a prevention focus considered autonomy to be an additional burden (Li et al., 2023). Regulatory focus also influences on student entrepreneurship. Students with an abstract prevention focus have demonstrated more interest in entrepreneurship than those with a concrete promotion focus (N'Guessan Pierre and Tovi, 2023).

In the field of marketing, regulatory focus has been shown to influence consumers' decision-making, and consumers typically prefer products or brands that match their regulatory focus (Higgins, 2002; Ashraf and Thongpapanl, 2015). After numerous investigations into the influence of regulatory focus on the purchase of various categories of commercial products, researchers have made several discoveries. First, regulatory focus affects consumers' purchases of daily necessities. For example, a toothpaste advertisement that emphasizes its effect on whitening teeth and freshening breath is attractive to consumers with a promotion focus, whereas a toothpaste advertisement that emphasizes its effect on preventing tooth decay is attractive to consumers with a prevention focus (Wang and Lee, 2006). A grape beverage advertisement that emphasizes its delicious taste is attractive to consumers with a promotion focus, whereas a grape beverage advertisement that emphasizes its effect on preventing vascular disease is attractive to consumers with a prevention focus (Aaker and Lee, 2001). Second, regulatory focus also affects consumers' purchases of services. For example, consumers' different focuses guide their preferences for different travel products, affecting tourists' travel plans and experiences (Beldona et al., 2022). Third, with regard to financial products, consumers have different regulatory focuses with different risks and returns as a result of mental accounting (Zhou and Pham, 2004). The influence of regulatory focus on consumers is universal, and marketers can employ this psychological phenomenon to promote product sales. Although numerous studies on daily necessities and life services have been conducted, few studies on financial products have been conducted. Thus, the present study focused on financial products.

Regulatory focus is affected by short-term experiences and by the intensity of chronic regulatory focus, which is shaped by the long-term living environment (Florack and Scarabis, 2010). In the long run, people in a collectivistic cultural environment and those with strong achievable aspirations may be inclined toward a prevention focus (Zhou and Pham, 2004). In a social relationship, parents' attitudes during their children's growth (encouraging achievements versus disciplining with punishments) can lead children to form a promotion or prevention focus (Higgins, 1996). College students hold a high promotion focus and a low prevention focus toward their parents, friends, and classmates, but hold a high prevention focus and a low promotion focus toward their teachers (Li et al., 2022). People are more risk-averse when making choices for themselves than when making choices for others (Polman, 2012). Experiencing social rejection typically makes people shift from a promotion focus to a prevention focus (Park and Baumeister, 2015). Compared with family members, friends are more likely to make people generate a promotion or prevention focus (Fei, You, and Yang, 2020).

Pets have some traits similar to “personality” (Gosling and John, 1998). Pets are not only animals but also human companions with social functions. As a supplement to the interpersonal support system, pets play an important role in consumers’ lives. Both directly keeping pets and indirectly observing the interactions between others and their pets can affect consumers’ concepts and behaviors, thus affecting their regulatory focus (Lei et al., 2022).

2.2. Pets and Regulatory Focus

In recent years, as populations in developed countries age and birthrates decline, an increasing number of people are choosing pets as their lifetime companions. As members of the family, pets are deeply involved in the lives of family members and naturally impact all aspects of their owners’ lives. Studies have shown that humans and animals have a social relationship (AMIOT et al., 2016), and keeping pets can not only reduce the occurrence of diseases but also relieve people’s negative emotions, thereby improving mental and physical health (Herzog, 2011; Beetz et al, 2012; Utz, 2014). Hundreds of animal therapy centers can be found in the United States and Canada. Numerous patients with anxiety disorders, autism, or depression have received animal-assisted therapy. Pets can accompany children as they grow and enhance their empathy and perception (Melson, 1991). Pets can relieve loneliness and reduce anxiety in older adults (Geisler, 2004). Pets do not criticize their owners when their owners experience failure but instead provide acceptance and companionship. Regardless of how much pain, frustration, sadness, or fatigue a person encounters in daily life, with a pet companion at home, all worries disappear. Owners’ attention toward their pets has consistently increased over the years. Despite the impact of COVID-19, the pet supply and product market in China has become increasingly prosperous. In 2020, the scale of the pet market in China was RMB295.3 billion, a year-on-year increase of 33.5%. Pet product consumption plays an increasingly important role in owners’ lives. However, few studies have investigated whether pets affect owners’ consumption of non-pet products. If pets can change their owners’ moods or even personalities then pets may also affect their owners’ general consumption behavior and even influence their owners’ investment behavior.

The most common pets are cats and dogs. According to data published in the “China Pet Industry White Paper 2021,” as of 2021, 59.5% of pet owners in China owned cats and 51.7% owned dogs, making them the first and second most popular pets, respectively. In contrast, the third most common pets, aquatics, were owned by only 8.3% of pet owners, and the proportion of exotic pets such as birds, hamsters, tortoises, rabbits, snakes, etc. was even lower. People’s love for cats and dogs far exceeds that of any other animal. Not only is there a high percentage of cats and dogs, but cats and dogs are more interactive than other pets and have more communication and emotional resonance with their owners, so they have a deeper impact on their owners. Cats and dogs have more influence on human beings than other pets in time and space, so the study of cats and dogs has more practical significance.

Dogs and cats have completely different temperaments. Studies have shown that dogs tend to be outgoing and expressive, not only sticking by their owners' sides but also enjoying playing with strangers and other dogs (Bradshaw, 2012; Bradshaw, 2013; Oelze, 2018). Cats are independent and cautious, typically rejecting unfamiliar people and other cats who approach them or enter their territory. Even if a cat is left behind by its dear owner, the cat does not particularly care (Bradshaw, 2012; Bradshaw, 2013; Potter and Mills, 2015). These phenomena can also be observed in daily life: Dogs are full of energy and owners must take them out for walks every day to prevent them from destroying the house; conversely, some pet cats are terrified of unfamiliar environments and strangers and can even have a stress reaction when going outside. In fact, numerous people unconsciously label dogs as lively and playful, and cats as cold and quiet.

The different temperaments of dogs and cats correspond to the aforementioned promotion and prevention regulatory focuses. These tendencies may have been preserved from their biological evolution and development. Dogs' ancestors, wolves, learned to migrate and adapt to new environments in harsh climates (Langenfeld, 2020). This kind of response and adaptation to environmental changes has also been preserved in dogs (Bradshaw, 2012; Bradshaw, 2013), and aligns with the promotion focus on high acceptance of risk and change (Liberman et al., 1999). Compared with dogs, cats favor consistency and stability in their physical and social environments (Bradshaw, 2012). This aligns with the prevention focus that tends to emphasize "conservative" and "stable" options (Boldero and Higgins, 2011). Therefore, long-term companionship with dogs or cats may change owners' regulatory focuses, and their risk tolerance and preferences for returns may also change accordingly, driving the owners' preferences for aggressive or conservative financial products.

Each individual has a different long-term tendency. For example, some people have a strong promotion tendency and others have a strong prevention tendency. However, in the short term, humans' regulatory focus can be activated independently (Higgins, 1998). Lei et al. (2022) proposed a new priming mechanism: contact with dogs and cats. They discovered that contact with dogs and cats reminds consumers of the animals' stereotypical temperaments and behaviors, which in turn stimulates a promotion- or prevention-focused mindset and increases consumer responsiveness to advertisements with a promotion or prevention focus.

The present study examined whether long-term pet ownership or short-term contact with dogs and cats can change people's views on financial products by changing their regulatory focus, and why this phenomenon occurs. The research results are intended to serve as sales advice for marketers.

3. Experiments

Lei et al. (2022) revealed a significant correlation between long-term exposure to dogs or cats and the regulatory focus tendencies of pet owners. Even among people who were not pet owners, merely recalling dog- or cat-related experiences or viewing related image data increased consumer willingness to invest in stocks (or mutual funds), to purchase (or not purchase) lottery tickets, to

purchase pet toothpaste, vitamins, or sport shoes with promotional or preventive effects. Researchers have adopted a variety of experimental methods to test the risk–return regulatory focus theory, such as examining decisions regarding the amount of money used to purchase various products with different effects and decisions about the amount of money used to invest in various products with different levels of risks and returns. Considering that these types of decisions are closely tied to reality and can be easily influenced by daily habits and news events, the present study instead employed a simplified poker game for its experiments.

This simplified version of the poker game was first proposed by Kuhn and Tucker in 1950; researchers also referred to the 1997 study by Koller and Pfeffer. The poker game possessed most of the characteristics and problems seen in imperfect information game theory, such as imperfect information, multiple players, risk analysis and avoidance, opponent modeling, and fraud (Billings et al., 2002). The decision-making process in the poker game resembled that in real life; however, the game mechanism caused people to relax their vigilance and reduced the interference of real-life factors. The game rules appeared complicated at first but guided participants to think carefully as they entered the scenario. After the participants became familiar with the rules, they would find that they could not use statistical methods to make judgements in a short period, and therefore, they would revert to relying on subjective feelings. Following the experiment, some participants were asked whether they could figure out the intention of the experiment; they did not guess correctly. After the intention of the experiment was revealed, the participants all appeared to be enlightened. The specific game rules were as follows:

In the game, two players participate. Each player initially holds two experimental coins (the participant is asked to imagine that one experimental coin is equivalent to RMB1,000). The deck contains only three cards: J, Q, and K; and the card strength is set to $K > Q > J$. At the beginning of the game, each player must hand over one experimental coin to participate in the game; each player then draws a card at random. After both players have seen the cards in their hands, the first round of betting begins. Player 1 decides whether to bet one experimental coin again, followed by Player 2 deciding whether to bet another experimental coin. If Player 1 does not place a bet during the first round and Player 2 chooses to place a bet during the first round, then Player 1 can choose to place a bet during the second round. If Player 1 places a bet during the first round and Player 2 does not place a bet during the first round, Player 2 does not have a second chance to place a bet. If neither player bets during the first or second round, the player with the higher card strength receives one experimental coin from the player with the lower card strength. If only one of the two players chooses to bet, then that player automatically wins and receives an experimental coin from the other player. If both players place bets during the first or second round, then the player with higher card strength will receive two experimental coins from the player with lower card strength.

Researchers let participants play the role of Player 1 and assumed that the poker card drawn by Player 1 was Q. In this case, Player 2's poker card had a 50% chance of being either weaker or

stronger than Player 1's card. Additionally, Player 2 could clearly know whether their hand was weaker or stronger. The final profit of Player 1 under different choices is presented in Figure 1. Player 1 was playing the game with imperfect information; therefore, they could not accurately calculate the expectations of the different choices. The player's choices represented the regulatory focus of the player at this time. According to the present study's hypotheses, if Player 1 was in a state of promotion focus at this time, their desire to win and risk tolerance would be higher. Therefore, Player 1 would be more likely to place a bet. If Player 1 was in a state of prevention focus at this time, they would be more likely to avoid exacerbating losses and decide not to bet.

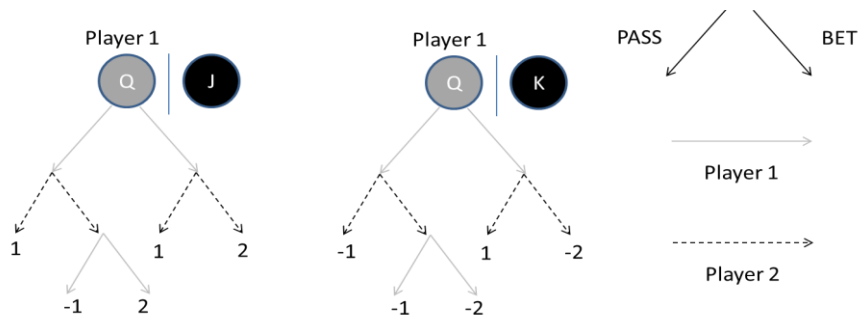


Figure 1. Naive Attempt at a Partial Game Tree for Simplified Poker (Koller and Pfeffer 1997)

3.1. Experiment 1

The purpose of Experiment 1 was to verify that exposure to dogs or cats can elicit a promotion or a prevention focus, respectively. Experiment 1 comprised two sub-experiments. The purpose of Sub-experiment 1 was to explore whether long-term contact with dogs or cats increased promotion or prevention focus; therefore, the researchers chose dog and cat owners as participants. The purpose of Sub-experiment 2 was to explore whether brief contact with dogs or cats encouraged promotion or prevention focus; therefore, the researchers selected participants who did not own dogs or cats for the experiment.

Based on the literature, researchers hypothesized that dog owners and people who had temporary contact with dogs would be affected by the positive and lively traits of dogs, thereby triggering a promotion focus, whereas cat owners and people who had temporary contact with cats would be affected by the cautious trait of cats, thereby triggering a prevention focus. The dog groups' promotion focus would increase their sensitivity to returns and enhance their risk tolerance, making them more attentive to gains and more likely to place a bet. Conversely, the cat groups' prevention focus would increase their desire to avoid losses, making them less likely to place a bet.

Sub-experiment 1 was conducted on-site at a university. A total of 200 participants were recruited; 41 participants only had dogs, 30 participants only had cats, 11 participants had both cats and dogs, and the remaining participants had neither a dog nor a cat. Among the participants, 87% were aged between 18 and 25 years, and 54% were women. Other information included the participants' education levels and incomes. Data obtained from the participants who only owned dogs

and those who only owned cats were analyzed. Each participant in the experiment was given a detailed explanation of the poker game rules. To ensure that each participant fully understood the game rules, they were administered a multiple-choice comprehension test after the game rules were explained.

After the experiment began, participants were asked to express their willingness to place a bet on two 5-point Likert scales. The average of the two scores from the two scales was used as the measurement result for the dependent variable.

For Sub-experiment 2, participants were recruited from the online platform, Questionnaire Star (WJX). After screening and selection, the dog group and the cat group each had 31 samples available for data analysis. The dog and cat owners would view a set of dog or cat images, respectively. To reduce interference from real-world factors (such as using photos of internet-famous pets that might lead participants to make associations with other content), the dog and cat images used in the experiment were generated by AI. All participants were asked to express their willingness to place a bet on a scale of 1–100. The larger the value, the stronger the willingness to bet. The average value was used as the measurement result for the dependent variable.

The Results of Sub-experiment 1 are shown below.

The software package used in the present study was STATA 16.0. First, the samples were tested for normal distribution and homogeneity in terms of sums and variances. In the normal distribution test, the p-values for the dog owner group and the cat owner group were 0.8832 and 0.3109, respectively. The p-values for both groups were greater than 0.05; therefore, the assumption of normal distribution was verified. The p-value for the test of the homogeneity of variances was 0.6907, which was much greater than 0.05, supporting the homogeneity of variances. After the assumptions of normal distribution and homogeneity of variances were confirmed, the samples were tested further. The t-test was performed to examine whether the means of the two groups differed significantly. The results of the t-test, as shown in Table 1, indicated that the mean scores of the dog owner group and the cat owner group were 3.55 and 3.2, respectively. The p-value was 0.029, which was less than 0.05. The mean score of the dog owner group was significantly higher than that of the cat owner group. The dog owner group was more inclined to place bets, representing a tendency to pursue gains, which was consistent with a promotion focus. The cat owner group was more likely not to bet, representing a risk-averse tendency, which was consistent with a prevention focus.

Table 1. T-test Results for Sub-Experiment 1

Two-sample <i>t</i> test with equal variances						
Variable	Obs	Mean	Std. Err.	Std.Dev	[95% Conf. Interval]	
dog	41	3.54878	0.1219817	0.781064	3.302246	3.795315
cat	30	3.2	0.132613	0.7263513	2.928776	3.471224
combined	71	3.401408	0.0917194	0.7728413	3.21848	3.584337
diff		0.3487805	0.1822471		-.0147926	.7123535
diff = mean(dog) - mean(cat)					t = 1.9138	
Ho: diff = 0				degrees of freedom = 69		
Ha: diff < 0		Ha: diff != 0		Ha: diff > 0		
Pr(T < t) = 0.9701		Pr(T > t) = 0.0598		Pr(T > t) = 0.029		

The Results of Sub-experiment 2 are shown below.

First, the samples were tested for normal distribution and homogeneity in terms of sums and variances. In the normal distribution test, the p values for the dog owner group and the cat owner group were 0.1826 and 0.0558, respectively. Both p values were greater than 0.05, and thus the normal distribution assumption was met. The p value for the test of the homogeneity of variances was 0.7107, which was much greater than 0.05; therefore, the homogeneity of variances was verified. After the assumptions of normal distribution and homogeneity of variances were confirmed, the samples were tested further. A t test was performed to examine whether the mean scores of the two groups significantly differed and the results are presented in Table 2. The mean scores of the dog owner group and the cat owner group were 56.11 and 47.48, respectively. The p value was 0.0214, which was less than 0.05. The mean score of the dog owner group was significantly higher than that of the cat owner group. After brief exposure to dogs or cats, the participants tended toward a promotion or prevention focus, respectively.

Table 2. T-test results for Sub-experiment 2

Two-sample <i>t</i> test with equal variances						
Variable	Obs	Mean	Std. Err.	Std.Dev	[95% Conf. Interval]	
dog	31	56.1129	3.045772	16.95814	49.89261	62.3332
cat	31	47.48387	2.844678	15.8385	41.67426	53.29348
combined	62	51.79839	2.139208	16.84414	47.52078	56.076
diff		8.629032	4.167604		.2925835	16.96548
diff = mean(dog) - mean(cat)					t = 2.0705	
Ho: diff = 0				degrees of freedom = 60		
Ha: diff < 0		Ha: diff != 0		Ha: diff > 0		
Pr(T < t) = 0.9786		Pr(T > t) = 0.0427		Pr(T > t) = 0.0214		

3.2. Experiment 2

Based on the results of Experiment 1, it can be reasonably concluded that both long-term and short-term exposure to dogs or cats can elicit a promotion or prevention focus, respectively. The purpose of Experiment 2 was to examine whether the participants' changes in regulatory focus were related to the stereotypes associated with pets. Therefore, in Experiment 2, researchers included the

stereotype factor in the analysis. Participants were divided into four groups according to dogs versus cats and stereotype versus non-stereotype. Researchers informed the participants of dog and cat related stereotypes. Some participants were asked to recall images of dogs or cats that fit the stereotypes, whereas other participants were required to recall images of dogs or cats that contrasted with the stereotypes. Researchers believed that stereotypes of pets were a regulatory factor that could affect risk–return preferences of people who were exposed to pets; therefore, a significant two-way interaction between exposure to pets and the stereotypes of pets was anticipated. Researchers predicted that the dog and cat owner groups would demonstrate a greater preference for betting or not betting when their pets were described in ways consistent with their stereotypes. However, if players were asked to recall non-stereotypic images of pets, the regulatory effect of the pet stereotypes would be weakened or even eliminated.

For Experiment 2, participants were recruited from the online platform, Questionnaire Star. The research samples for the dog stereotype group, dog non-stereotype group, cat stereotype group, and cat non-stereotype group comprised 31, 32, 33, and 32 people, respectively (other information regarding the participants included gender, age, education level, income, and having pets or not). Similar to the approach in Experiment 1, each participant in Experiment 2 was first informed of the detailed rules of the poker game and was required to take a rule comprehension test after the game rules were explained. The experiment was conducted after the participants passed the rule comprehension test.

After the experiment began, participants in the dog and cat owner groups were first informed that the stereotype of dogs was extroverted, expressive, and clingy and that the stereotype of cats was independent, cautious, and quiet. Then, the participants were required to write down their experiences related to dogs or cats. Participants in the stereotype groups were asked to write down their experiences related to stereotypical dogs and cats; participants in the non-stereotype groups were asked to write down their experiences related to dogs and cats that differed from the stereotypes. All participants were subsequently required to express their willingness to bet on a scale of 0–100. The larger the value, the stronger the willingness to bet.

The Results of experiment 2 are shown below.

Participants memories regarding stereotypical dogs included “love wagging their tails”, “enjoy playing and going out with people”, “enjoy rubbing against people’s legs”, and “enthusiastically jump on people”. The memories of non-stereotypical dogs included “staring blankly at the ground”, “physical resistance”, and “cowers from people”. The memories of stereotypical cats included “quietly loafing”, and “ignoring the owner”. The memories of non-stereotypical cats included “dashing after a laser pen”, and “lively, clingy, and proud”.

First, the samples were tested for normal distribution and homogeneity in terms of sums and variances. The p-values for the normal distribution test for the dog stereotype group, dog non-

stereotype group, cat stereotype group, and cat non-stereotype group were 0.2280, 0.9554, 0.9713, and 0.1184, respectively. The p-values for the four groups were all greater than 0.05, verifying the assumption of a normal distribution. The p-value for Bartlett's test was 0.323, verifying the assumption of homogeneity of variances. Therefore, a two-way ANOVA was performed. The assumption of homogeneity of variances was also applied to t-tests, and the samples were further tested.

Table 3 presents the results of the two-way ANOVA. The overall p-value for the model was 0.0316. The p-value for the interaction term was 0.005, indicating that exposure to pets and pet stereotypes had a significant two-way interaction effect on risk–return preferences. Further analysis was then performed using a t-test. When the dog stereotype group with the dog non-stereotype group were compared, the mean scores were 67.68 and 56.69, respectively, and the p-value was 0.0363. This result indicated that the mean score of the stereotype group was significantly higher than that of the non-stereotype group and suggested that the stereotype of dogs being outgoing, expressive, and clingy indeed made participants more willing to bet. For the cat groups, the mean score of the stereotype group was significantly lower than that of the non-stereotype group, confirming that the stereotype of cats being independent, cautious, and quiet reduced participants' willingness to bet. Based on the results of the two t-tests, after participants were reminded of non-stereotypical pets, the effect of the stereotype influencing the regulatory focus vanished. Therefore, people's stereotypes of dogs and cats were the regulatory factor that changed the promotion or prevention focus.

Table 3. Results of Two-way ANOVA for Experiment 2

Number of obs = 128		R-squared = 0.0685			
Root MSE = 23.17		Adj R-squared = 0.0459			
Source	Partial SS	df	MS	F	Prob>F
Model	4892.8032	3	1630.9344	3.04	0.0316
pet	493.57706	1	493.57706	0.92	0.3395
impression	15.975818	1	15.975818	0.03	0.8633
pet#impression	4375.8438	1	4375.8438	8.15	0.005
Residual	66569.251	124	536.8488		
Total	71462.055	127	562.69334		

Table 4. T-test Results for the Dog Stereotype and the Dog Non-stereotype Groups

Two-sample t test with equal variances						
Variable	Obs	Mean	Std. Err.	Std.Dev	[95% Conf. Interval]	
dogi	31	67.67742	4.092581	22.78653	59.31925	76.03558
dogni	32	56.6875	4.394241	24.85758	47.72539	65.64961
combined	63	62.09524	3.062476	24.30765	55.97344	68.21704
diff		10.98992	6.013291		-1.034399	23.01424
diff = mean(dogi) - mean(dogni)					t = 1.8276	
Ho: diff = 0				degrees of freedom = 61		
Ha: diff < 0		Ha: diff != 0		Ha: diff > 0		
Pr(T < t) = 0.9637		Pr(T > t) = 0.0725		Pr(T > t) = 0.0363		

Table 5. T-test results for the cat stereotype and the cat non-stereotype groups

Two-sample t test with equal variances						
Variable	Obs	Mean	Std. Err.	Std.Dev	[95% Conf. Interval]	
catni	32	72.3125	3.303663	18.68834	65.57464	79.05036
cati	33	59.90909	4.460552	25.62392	50.82324	68.99494
combined	65	66.01538	2.872992	23.1628	60.27592	71.75485
diff		12.40341	5.577308		1.258049	23.54877
diff = mean(catni) - mean(cati)					t = 2.2239	
Ho: diff = 0				degrees of freedom = 63		
Ha: diff < 0		Ha: diff != 0		Ha: diff > 0		
Pr(T < t) = 0.9851		Pr(T > t) = 0.0297		Pr(T > t) = 0.0149		

4. Discussion

Experiments 1 and 2 adopted different scoring methods (5-point Likert scale versus 100-point scoring system), employed different manipulation methods (selecting dog and cat owners, viewing pet pictures, and depicting memories of pets), and recruited different participants (college students, versus netizens) to increase the robustness of the experimental results. The results of Experiments 1 and 2 supported the present study's hypotheses. Particularly, the results of Experiment 1 demonstrated that both long-term and short-term exposure to dogs or cats activated people's promotion or prevention focus, respectively, thereby increasing or decreasing risk tolerance and gain desire. The results of Experiment 2 indicated that the stereotypes of dogs and cats were a regulatory factor that changed the regulatory focus. Once the stereotypes were "debunked", the effect of dog- or cat-guided promotion or prevention focus disappeared. After the stereotype was removed, the cat non-stereotype group had a higher willingness to bet than the dog stereotype group did, and the dog non-stereotype group had a lower willingness to bet than the cat stereotype group did.

5. Theoretical Contribution and Practical Significance

The experiments in the present study were based on a poker game, which allowed participants to make decisions without the interference of real-world factors. Furthermore, the participants could not easily guess the intention of the experiments, which further prevented the confounding of

experimental results. Experiment 1 examined the effects of long-term and short-term exposure to dogs and cats and Experiment 2 screened the participants according to whether they kept dogs or cats, making the experiment results reliable. The participants in the present study were from China, indicating that despite different cultural backgrounds, the guiding effect of dogs and cats on human promotion and prevention focus is universal. At the same time, the effect of dogs/cats on people's risk-return preferences, which in turn leads to the effect on investment and consumption activities, is also widespread. In 2023, China's population growth was negative. Young people were less willing to have children. Some people considered raising pets instead of having children and called their pets "sons" or "daughters". The status of pets has become similar to that of family members, and their influence on people has been growing. The results of this study suggest that dog/cat owners may change their inherent risk-return preferences, become more aggressive/conservative, and become risk-averse/risk-averse under the influence of long-term environment. So, marketers can assume that to some extent, dog/cat owners are more willing to buy high-risk/Low-risk financial products. Moreover, the experiment also proved that people's regulatory focus was affected in the case of short-term exposure to dogs/cats, and marketers could use this mechanism to temporarily change investors' risk-return preferences, thus improve the conversion rate of sales promotion.

Based on the results of Sub-experiment 1 of Experiment 1, dog owners may prefer financial products with high risk and return, whereas cat owners may prefer financial products with low risk and return. So, marketers may be better at pitching high-risk, high-yield products to dog owners, and lower-risk, low-yield products to cat owners. Nowadays, many customers conduct financial management through mobile apps. App marketers can employ big data or other technologies to present product information and increase product click-through rates. Such as the dog owner to promote equity products, to the cat owner to promote debt products. Based on the results of Sub-experiment 2 of Experiment 1, brief contact with dogs or cats can lead people to a promotion or prevention focus. Therefore, marketers can add dog- or cat-related elements to product promotion, such as placing cat pictures on posters for conservative products, asking cat pet bloggers to shoot video advertisements, and conducting offline activities in an environment with cats. Based on the results of Experiment 2, the regulatory factor for dogs and cats with regard to guiding a promotion or prevention focus was stereotypes. Therefore, marketers should endeavor to maintain or strengthen pet-related stereotypes when utilizing the effects imposed by dogs and cats. The pets involved in various publicity and sales activities should be selected to match the typical characteristics. Additionally, some prompts can be added to sales pitches to evoke people's stereotypes of pets.

6. Future Research Direction

First, studies on the effects of dogs and cats on products other than pet products, daily necessities, and financial products can be conducted. For example, Song et al. (2023) discovered that private consumption behavior may be related to extroverted personality and self-presentation motivation; extroverted personality and self-presentation motivation may also be related to contact with dogs and cats. Future research can focus on consumption areas that have rarely been studied. Second, the

topic of dogs and cats eliciting a promotion or prevention focus can be discussed in detail. For example, different breeds of dogs and cats have different personalities; the variations among breeds remain to be studied. Dogs and cats with different characteristics also play various roles in people's lives. For example, working dogs, guard dogs, hunting dogs, and companion dogs may have different statuses in people's minds, which may affect people's regulatory focus in terms of direction and degree. Third, specific aspects of how dogs and cats affect the promotion or prevention focus can be discussed in depth, such as examining the influence level and valid period of regulatory factors and intermediary factors.

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