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The Role of Self-Control in Preventing Unethical Behaviors: Evidence from Delay Discounting Tasks

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Abstract. Unethical behavior often reflects a conflict between immediate self-interest and longer-term moral or reputational costs. Delay discounting (DD) provides a process-sensitive measure of temporal myopia in reward valuation, while self-control captures regulatory capacity in goal pursuit. This study investigates how DD and self-control jointly predict unethical behavior. A sample of 307 Chinese university students completed validated measures of DD, self-control, and unethical behavioral tendencies. Correlational analyses revealed that steeper DD was positively associated with unethical behavior, whereas higher self-control was negatively associated with unethical behavior. Moreover, self-control correlated negatively with DD, suggesting that individuals with stronger regulatory capacity are less biased toward short-term rewards. Regression analyses confirmed that both DD and self-control independently predicted unethical behavior, accounting for 53% of the variance. These findings provide evidence that unethical decision making is not an occasional lapse but a systematic outcome of intertemporal valuation biases and regulatory processes. The results support neurocomputational models of moral choice that emphasize value-based integration of immediate gains and long-term costs, moderated by control mechanisms. Practically, DD tasks and self-control measures may serve as early indicators of ethical risk, enabling targeted interventions.

Keywords: delay discounting, self-control, unethical behavior, moral decision making, impulsivity

1. Introduction

The unethical decisions often put short-term self-interest against sustaining longer term ethical expenses. Theories of impulse control are best tested in moral decision-making. Recent neurocomputational explanations state that moral choice is a value-based decision making where cognitive control is a combination of instrumental rewards and moral costs. The control system in these models does not only imply a brake but a weighting system that is capable of maintaining norms or licensing transgression in the event of the moral default of the decision-maker [1,2]. This framing suggests that decisions that are based on impulsive valuation mechanisms, parameterized by delay discounting, are systematically biased to make unethical decisions when immediate returns are high.

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Delay discounting (DD) is a way of measuring how people in the future discount the result of delayed gratification. Since 2018, meta-analytic and large-scale evidence have determined DD as a strong transdiagnostic predictor of impulsive choice. It has always been associated with a predominantly large set of maladaptive behaviors and symptoms [3]. When the essence of unethical behavior is a decision that overvalues proximal payoffs as compared to distal reputational or sanctioning payoffs, then steeper DD ought to yield a greater likelihood of engaging in unethical behavior. This process is feasible since DD represents consistent individual preferences and not situational manipulations that are short term. Because of that, the effect must be generalized to ethical situations.

Empirical evidence connecting intertemporal preferences to dishonesty is emerging. Experimental economics shows that present-biased participants are more likely to cheat, consistent with a myopic focus on immediate gains [4]. Delaying the payoffs of cheating does not reliably suppress dishonesty, which suggests that pushing benefits into the future is insufficient without addressing underlying preferences [5]. Converging neuroimaging work indicates that cognitive control enables norm-consistent behavior for chronic cheaters yet can enable opportunistic cheating for typically honest individuals. This demonstrates that self-control is a directional moderator rather than a uniform inhibitor [2]. These findings argue that trait like discounting and control processes, rather than surface timing tweaks, govern unethical choice.

Critical gaps remain despite this progress. Most studies examine DD or self-control in isolation and rarely model their joint, potentially antagonistic effects on unethical behavior within the same individuals. Heavy reliance on global self-control scales raises construct-validity concerns. Recent critiques call for moving beyond trait self-control questionnaires toward process-sensitive measurement that discriminates valuation from control [6]. Few studies triangulate behavioral DD tasks with validated unethical-behavior outcomes, which limits causal inference and external validity. The present project takes a clear stand that self-control is the proximal mechanism that counteracts the unethical pull of steep discounting and DD tasks provide a diagnostic signal of risk. Accordingly, three hypotheses are advanced. H1a: steeper delay discounting predicts higher unethical behavior scores. H1b: stronger self-control predicts lower unethical behavior scores. H1c: self-control is negatively correlated with delay discounting.

2. Method

2.1. Participants

A total of 307 participants were recruited from universities in China. After excluding incomplete or invalid responses, the final sample consisted of 307 individuals (149 male, 142 female, 16 other/prefer not to say). Participants' ages ranged from 18 to over 30 years, with the majority falling between 18 and 29 years (18–20 years = 8.5%; 21–23 years = 19.9%; 24–26 years = 36.5%; 27–29 years = 25.4%; 30 years and above = 9.8%). In terms of education, 50.8% were undergraduate students, 27.7% were master's students, and 8.8% were doctoral students. Participants represented diverse fields of study, including social sciences (16.9%), business/management (17.6%), humanities (8.5%), natural sciences (10.4%), engineering (25.4%), and medicine/health (11.1%), with the remainder (10.1%) from other disciplines.

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2.2. Procedure

Participants were recruited via online announcements and classroom invitations. Eligibility was restricted to individuals aged 18 years and above with sufficient proficiency in English or Chinese to complete the questionnaire. Prior to participation, respondents were informed of the study's purpose, confidentiality assurances, and their right to withdraw at any time without penalty. Informed consent was obtained electronically before accessing the survey. The survey was administered online using Wenjuanxing, and required approximately 15–20 minutes to complete. No monetary incentives were provided; participation was voluntary.

2.3. Measures

All items were rated on a 5-point Likert scale. Higher scores indicate higher levels of the respective construct. Reliability and validity indices reported in previous studies are provided below.

Delay discounting tendencies were assessed using a 5-item self-report scale adapted from delay discounting literature. Items capture the preference for immediate versus delayed rewards (e.g., "I prefer smaller immediate rewards over larger delayed rewards"). Higher scores reflect steeper discounting, or a stronger preference for immediate rewards.

Unethical behavioral tendencies were measured using the Unethical Behavior Scale developed by Kaptein [7]. This instrument includes 37 items across five domains: financiers, customers, employees, suppliers, and society. Respondents indicate the likelihood of engaging in unethical acts such as misreporting financial information or violating environmental regulations. Previous research has demonstrated good internal consistency and construct validity across samples ($\alpha \approx .90$). Higher scores indicate stronger tendencies toward unethical behavior.

Self-control was measured using the 11-item Brief Self-Control Scale (BSCS) [8]. Example items include "I am good at resisting temptation" and "I am able to work effectively toward long-term goals." Prior studies among Chinese university students reported high reliability ($\alpha = .84$) and evidence for unidimensional structure. Higher scores represent stronger self-control.

2.4. Research design and analysis

The study employed a cross-sectional survey design. All responses were coded and analyzed using SPSS. Descriptive statistics (means, standard deviations, frequencies) were calculated for demographic variables. Pearson correlation analyses were conducted to examine associations among delay discounting, self-control, and unethical behavior. To test hypotheses, multiple regression analyses were performed, with unethical behavior as the dependent variable and self-control and delay discounting as predictors. Gender, age, and education level were entered as control variables.

3. Results

3.1. Measurement quality

The reliability of the instruments was examined through internal consistency analyses. The Brief Self-Control Scale (11 items) demonstrated excellent reliability with a Cronbach's alpha of .933, indicating that the items consistently measured the construct of self-control. The Unethical Behavior Scale, which consisted of 37 items, also showed excellent reliability with a Cronbach's alpha of .952, suggesting that it provided a highly consistent measure of unethical behavioral tendencies across different domains. The Delay Discounting Scale, comprising 5 items, yielded a Cronbach's

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alpha of .848, which is considered good and indicates that the scale reliably assessed individual differences in discounting future outcomes. Together, these indices confirmed that all three measures had adequate psychometric quality and were suitable for subsequent statistical analyses.

3.2. Descriptive statistics and zero-order correlations

Descriptive statistics are reported in Table 1. The mean scores were: Self-Control (SC) M = 2.46, SD = 0.70; Unethical Behavior (UB) M = 3.43, SD = 0.56; Delay Discounting (DD) M = 3.51, SD = 0.72. Correlation analyses revealed that DD was positively associated with UB ($r = .624$, $p < .001$), supporting H1a. SC was negatively associated with UB ($r = -.619$, $p < .001$), supporting H1b. SC was also negatively associated with DD ($r = -.458$, $p < .001$), supporting H1c.

Table 1. Descriptive statistics and correlations (n = 307)

Variable	M	SD	Unethical Behavior (UB)	Unethical Behavior (UB)	Self-Control (SC)
Unethical Behavior (UB)	3.43	0.56	—		
Unethical Behavior (UB)	3.51	0.72	.624***	—	
Self-Control (SC)	2.46	0.70	−.619***	−.458***	—

Note. **p < .001. Higher scores indicate higher levels of each construct.

3.3. Hypothesis tests

To test H1a and H1b, a multiple regression analysis was conducted with Unethical Behavior as the dependent variable and Delay Discounting and Self-Control as predictors. The model accounted for 53.0% of the variance in UB ($R = .728$, $R^2 = .530$, adj. $R^2 = .527$), $F(2, 304) = 171.40$, $p < .001$. Delay Discounting positively predicted UB ($\beta = .430$, $t = 9.73$, $p < .001$), supporting H1a. Self-Control negatively predicted UB ($\beta = -.422$, $t = -9.55$, $p < .001$), supporting H1b. Variance inflation factors (VIF = 1.265) indicated no collinearity concerns. H1c was supported by the significant negative correlation between SC and DD reported in Table 2.

In line with expectations, steeper delay discounting predicted stronger unethical tendencies, while higher self-control predicted weaker unethical tendencies. Self-control was also negatively associated with delay discounting. Overall, all three hypotheses (H1a–H1c) received empirical support.

Table 2. Regression predicting unethical behavior (n = 307)

Predictor	B	SE	β	t	p
Constant	3.088	0.179	—	17.25	<.001
Delay Discounting (DD)	0.333	0.034	.430	9.73	<.001
Self-Control (SC)	−0.337	0.035	−.422	−9.55	<.001

Note. Model fit: $R = .728$, $R^2 = .530$, adj. $R^2 = .527$, SEE = 0.383, $F(2, 304) = 171.40$, $p < .001$.

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4. Results

4.1. Interpretation of findings

The findings of this study indicate that steep delay discounting is a structural risk factor for unethical choice and that self-control is the proximal regulatory mechanism that counteracts this valuation bias. Delay discounting positively predicted unethical behavior, self-control negatively predicted unethical behavior, and self-control correlated negatively with delay discounting. These results suggest that individuals who overvalue immediate rewards are more willing to engage in norm violations while individuals with stronger regulatory capacity report fewer unethical tendencies and also display less steep temporal myopia. This evidence supports models that treat moral choice as value-based decision making in which immediate instrumental gains and longer-term moral costs are integrated by control processes rather than governed by a simple inhibitory brake. Neurocomputational research demonstrates that control modulates the weighting of moral costs, stabilizing norm-consistent action or, when harnessed to self-interest, licensing transgression [1, 2]. The present findings align with this mechanistic account since individuals with steeper delay discounting display greater unethical inclinations while those with stronger self-control display lower unethical inclinations [1, 2].

The positive association between delay discounting and unethical behavior is consistent with behavioral economics research showing that present-biased individuals cheat more when immediate benefits are available [4] and that dishonesty persists even when the timing of benefits is altered [5]. Meta-analytic and large-scale evidence positions delay discounting as a broad, transdiagnostic correlate of impulsive choice with domain-general consequences for maladaptive behavior [3]. The present study extends this reasoning to the ethical domain and provides evidence against the idea that moral decision making is insulated from intertemporal preferences. Temporal myopia operates across consumption, health, and financial domains and also extends to ethical conduct [3].

The negative association between self-control and unethical behavior and its inverse correlation with discounting highlights that self-control is not merely inhibitory. Trait self-control promotes goal-consistent action by shaping valuation, prioritization, and habit routes that alter what individuals attend to and pursue before inhibition is required [9]. The present results support this process-oriented account since individuals with higher self-control report fewer unethical tendencies and also show shallower discounting. Converging evidence warns that control is directional because it increases honesty among chronic cheaters but can facilitate opportunistic dishonesty among typically honest individuals when self-interest is salient [2]. This nuance reinforces the view that ethical behavior emerges from how control processes modulate value signals rather than from inhibition alone [2, 9].

A critical perspective argues that delay discounting has been over-reified as a psychological core process [10]. Delay discounting may not serve as a biomarker of specific disorders but the present data support the interpretation that discounting is a structural determinant of how moral costs are weighted in the near term. Critical reviews emphasize the need for stronger construct validity and multi-method assessment rather than abandoning the construct altogether [10]. The present design integrated discounting with validated measures of self-control and unethical behavior to test their joint relations. The observed pattern supports mechanistic, value-control models of moral choice. Field evidence on civic honesty demonstrates that when the cost of damaging self-concept increases, individuals become more honest even as monetary stakes grow, which further illustrates that valuation and control jointly influence ethical action [11]. Delay discounting and self-control

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therefore represent two measurable psychological processes that together shape moral cost weighting [10, 11].

The normative stance follows directly. Institutions that prioritize ethical behavior must treat steep discounting as a risk factor to be reduced and self-control as a capability to be strengthened. Interventions that reduce discounting, such as episodic future thinking, reliably produce medium to large reductions in discounting across experimental contexts [12]. Field-level interventions on corruption also show that social norm nudges can decrease bribery by shifting perceived prevalence and expectations [13]. The present results support combining these approaches rather than relying solely on timing manipulations because timing shifts alone do not reweight preferences [12,13].

4.2. Practical significance

The practical significance of this study is that organizations and educational institutions can measure psychological risk for unethical conduct with brief delay discounting tasks and validated self-control scales and then act on these results. Screening is not a matter of labeling individuals but of risk management. Delay discounting tasks are behaviorally anchored and less vulnerable to social desirability biases than self-reports. Profiles characterized by high delay discounting and low self-control can be targeted for ethics training that emphasizes future consequence salience, pre-commitment, and habit scaffolding. Evidence from public health research demonstrates that delay discounting predicts compliance with protective norms when benefits are temporally delayed and that tailoring messages to temporal profiles improves adherence [14]. This logic can be extended to ethics because framing downstream disciplinary and reputational costs in immediate and concrete terms may prove more effective for high discounting individuals, whereas long-horizon benefits may suffice for those with lower discounting tendencies [14].

Interventions should target both valuation and control. To reduce discounting, institutions should make future moral outcomes vivid and certain. Meta-analytic work confirms that episodic future thinking reduces discounting reliably and robustly [12]. To strengthen control, organizations should focus on shaping prioritization and habits through implementation intentions tied to codes of conduct and through repeated practice of disclosure and verification procedures before temptation points. Social environments should align individual control with visible norms. Field evidence from South Africa shows that norm-based nudges on posters reduced bribery by altering both perception and behavior [13]. Norm-based nudges raise ethical considerations concerning autonomy but can be implemented responsibly within transparent accountability frameworks [15]. Programs that target valuation and control simultaneously are more likely to generate durable ethical conduct than those that rely on delaying sanctions or benefits [12-15].

4.3. Limitations and future directions

This study has several limitations that should be addressed by future research. The cross-sectional design precludes strong causal inference. Although theoretical and empirical evidence indicates that steep discounting elevates unethical tendencies and that self-control reduces them, only longitudinal or experimental designs can establish causal directionality. Future research should implement interventions that directly reduce discounting, such as episodic future thinking, and interventions that strengthen control, such as implementation intention training, to test whether these manipulations lower unethical behavior [4, 5]. Laboratory paradigms like the matrix task or dot-task should be paired with field studies to capture both dishonesty under controlled conditions and integrity outcomes with real stakes [4, 5].

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The reliance on self-report for unethical tendencies and self-control raises concerns about social desirability and construct validity. Recent critiques argue for moving beyond global trait self-control questionnaires toward process-sensitive assessments that can differentiate valuation, prioritization, and inhibition [6]. Multi-method designs should also include behavioral and neurocognitive tasks. Cognitive control paradigms in honesty research have begun to reveal differential mechanisms under varying conflict scenarios, such as reaction-time based tasks [16]. These approaches would strengthen construct validity and clarify the mechanistic role of discounting and self-control in ethical behavior.

The sample was composed of university students in China and may not generalize to broader populations. Extending research to organizational and cross-cultural contexts is necessary. Evidence from global field studies of civic honesty reveals substantial cultural variation in honesty and in sensitivity to costs [11]. Cross-cultural replication will be essential to assess whether the discounting–control–ethics relationship holds consistently across societies.

Finally, theoretical consolidation is needed. Some critiques emphasize that delay discounting's construct validity is inconsistent across tasks [10]. Others argue that discounting remains a consequential and modifiable correlate of maladaptive and ethical conduct across domains [3]. The present results support the latter view but also underscore the need for multi-method approaches and explicit modeling of when control aligns with honesty versus when it facilitates opportunism [2]. Pre-registered, high-powered studies that manipulate future vividness, norm salience, and control demands while measuring dishonest behavior will sharpen causal claims and policy relevance [2].

5. Conclusion

In the current literature, the combined effects of both delay discounting and self-control in forecasting unethical behavior were explored based on the results of a large sample of university students. The results showed that the more delayed the discounting, the more ethically unscrupulous behavior tendencies were found, and the more self-control, the less ethically unscrupulous behavior tendencies. Besides, there was a negative association between delay discounting and self-control, and that is, those who are more focused on the short-term rewards are also the ones with lower regulatory strength. Taken together, these results are excellent hints that decisions of unethical nature are not occasional failures but can be explained as systematic over time due to intertemporal values and self-control.

This research is rather an essential input as it introduces the constructs that are frequently examined separately and implies the necessity of combining the two valuation mechanisms and the two control mechanisms in cases of unethical behavior. Delay discounting is a manifestation of the structural prejudice of immediate gratification, and self-control is the ability to restrain impulsiveness and act based on more pro-social standards. In other words, it is possible to create a coherent psychological model, which would provide the answer to the question of why some individuals would always be prone to unethical temptations more than others. The merit of this model is that it could provide the explanation of the pressure of motivation by short-term rewards as well as the pressure of regulation.

The implications are not simply theoretical, but they will offer practical recommendation to the organizations and institutions that are interested in reducing unethical behavior. These early warning mechanisms of ethical risk may be screening devices that are based on short delay discounting tests containing a measure of self-control that has been proven. Interventions which are individualized can then be formulated depending on the profile and the strategy that can be employed to reduce steep-discounting disposition on people who tend towards more of this, and reinforce regulation

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with habits on those with weaker regulation can be adopted. It is interesting to note that the results have highlighted the fact that a simple delay of sanctions or rewards will hardly be effective unless there is a support through the endeavors of changing the primary preferences and regulatory capabilities.

Although the restrictions can be seen in the form of cross-sectional nature of the study, the use of self-report data, there is still an indication that there is a strong relationship between temporal valuation, regulatory capacity, and unethical behavior. These findings can be expanded upon with help of the experimental and longitudinal research designs, such as behavioral tasks and by extending the study to bigger populations in the future. This way, the field will get even further into the creation of a thorough understanding of how psychological processes affect ethical decision making and how there can be interventions that would allow people to act more responsibly.

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