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## Cheating Behaviors in Academic Context: Does Academic Moral Disengagement Matter?

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### Abstract

This contribution investigated cheating behaviors in the academic context by translating a model developed by Bandura and his colleagues in the study of transgressive behaviors. We investigated the role of domain specific self-efficacy beliefs and academic moral disengagement in influencing students' cheating behaviors and academic performance. We included also a contextual factor, namely peers' cheating behaviors. A structural equation model was implemented on a sample of 416 Italian college students. Results confirmed the posited model, highlighting the pivotal role of academic moral disengagement and peers behaviors in facilitating cheating behaviors, above and beyond the impact of self-efficacy beliefs.

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### 1. Introduction

Cheating behaviors are becoming increasingly pervasive and frequent in academic context (McCabe & Trevino, 1997; McCabe, Trevino & Butterfield, 2001), with grave repercussions on the main mission of any educational institution: to promote the acquisition of actual knowledge and competences in students (Whitley & Keith-Spiegel, 2001). Longitudinal research in school environments reported an increase in cheating over the last decades, and a decrease in individuals' perceived severity of dishonest behavior (Murdock, Hale & Weber, 2001). Besides, evidence indicates that cheating is a very persistent and widespread behavior in school at all levels, and it increases from elementary schools into middle schools, toward university (e.g. Anderman, Griesinger, & Westerfield, 1998; Jensen, Arnett, Feldman, & Cauffman, 2002; Schab, 1991).

Literature suggested that changing in the structure of classrooms, in the relation between students and teachers (more impersonal), and in the goal orientation that progressively focuses more on performance and grades (rather than on mastery and learning), are all factors that induce a decreased cognitive engagement, maladaptive motivation

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patterns, and the use of dishonest strategies such as cheating to achieve one's own goals. Moreover, it is important to study cheating behaviors at school as antecedents of future unethical behaviors, since they may be considered an enduring characteristic and a model of behavior that widespread in different spheres of life, being a strong predictor of misconducts in workplace (Elias, 2009; Lawson, 2004).

Although a great attention was paid to identify individual and contextual factors that enhance students' odds to adopt cheating behaviors, there is still the need of a theoretical framework fostering the comprehension of the relation among those factors as well as the inclusion of mediational variables that may play a pivotal role in explaining the dynamics of the whole process leading to cheating behaviors. Specifically, in the present study we adopted a social-cognitive perspective and aimed to translate in the academic context a model proposed by Bandura and his colleagues in studying transgressive behaviors (Bandura, Caprara, Barbaranelli, Pastorelli & Regalia, 2001). In particular, we are interested in investigating the role of domain specific self-efficacy beliefs and academic moral disengagement in influencing students' cheating behaviors and, in turn, academic performance. We included also individuals' perception of their academic context, namely peers' cheating behaviors, to consider simultaneously the influence of variables at different level on individuals' behavior and the perceived permeability of the context to unethical conducts.

## 2. Social cognitive antecedents of cheating behaviors

Cheating behaviors may be considered a form of academic dishonesty: it is a way to present others' academic work as ones' own interfering with the learning and the evaluation process, a fraudulent means of achieving grades, being accompanied by the risk of detection and punishment (Jensen *et al.*, 2002; Michaels & Miethe, 1989). In this sense cheating is a form of deviant behavior, that refers to the violation of shared social norms and may be read through theories of deviance (Moeck, 2002).

Among personal factors that literature associates to deviant behaviors, one of the most relevant predictors is moral disengagement (MD), introduced by Bandura in his theory of moral agency to encompass social cognitive mechanisms that allow individuals to deactivate self-sanctions while saving the same moral standards (Bandura, 1990; 1991; Paciello, Fida & Tramontano, 2011; Paciello, Fida, Tramontano, Lupinetti & Caprara, 2008). In fact, the adoption of moral norms, although necessary, is not always sufficient to refrain from detrimental conduct. In this way MD could be considered as a cognitive distortion (Gibbs, Potter & Goldstein, 1995) by which an individual tends to view transgressive behavior and its negative consequences in a socially and morally favourable way, that may not require the abandon of social norms. In this conceptual apparatus, MD mechanisms clarify how people, despite being morally committed to ethical principles, may enact behaviors that violate those standards, while continuing to profess those principles and avoiding any feelings of conflict, shame or remorse. MD involves cognitive maneuvers by which moral self-sanctions can be selectively disengaged from detrimental aggressive conduct by converting transgressive acts to acceptable ones and giving free way to a variety of misbehaviors without carrying any moral sanctions.

A large body of research has demonstrated the disinhibitory power of MD in fostering aggressive behavior (Andrus, 1969; Bandura, 1990, 2006; Kelman & Hamilton, 1989; Rapoport & Alexander, 1982; Reich, 1990), as well as other forms of antisocial conducts (Bandura, Caprara & Zsolnai, 2000; Bandura, Barbaranelli, Caprara & Pastorelli, 1996; Bandura *et al.*, 2001; Caprara, Bandura, Barbaranelli & Vicino, 1996; Elliott & Rhinehart, 1995; Gini, 2006; Menesini *et al.*, 2003; Pepler, Jiang, Craig & Connolly, 2008). In academic context, students' orientation toward cheating are important determinants of cheating acts (cf. Whitley, 1998). Specifically, some studies revealed that cheating students expressed more frequently neutralizing attitudes, that are strategies to justify behaviors that are unethical or contrasting with college's rules (Jordan, 2001). Models for ethical decision-making include the step of moral reasoning, where situation-specific elements (such as pressure or the possibility of getting caught), are supported by the subjects' ability to rationalize their action as acceptable (Bernardi *et al.*, 2004). Deter and colleagues (2008) suggest that MD may influence decision-making process in unethical and cheating behavior.

MD operates at four major loci in the self-regulatory system (Bandura, 2002). At the behavior locus allows people to transform reprehensible conduct in moral means by portraying them as aimed at social and moral purposes (moral justification), by labeling their actions with euphemistic language (euphemistic labeling), or by comparing their behavior with worse and more flagrant conduct (advantageous comparison). Mechanisms operating at the agency locus allow people to obscure or to attenuate the agentic relation between their actions and their

consequences, by considering their behavior as dictated by social pressure or by a legitimate authority (displacement of responsibility), or by diffusing the responsibility for a joint action, making individual contribution undistinguishable (diffusion of responsibility). Mechanisms operating at the outcome locus allow people to avoid to acknowledge the blameful effects of their behavior by disregarding and distorting its consequences. Finally, mechanisms at the recipient locus allow people to withdraw empathetic and sympathetic feelings for the victims by considering them responsible for their condition and deserving harm and punishment (attribution of blame) or by impersonalizing and dehumanizing them (dehumanization) (Caprara, Fida, Vecchione, Tramontano & Barbaranelli, 2009). Furthermore, MD may be considered a domain specific construct, since the same taxonomy of mechanisms may be declined in different form through different fields of life.

Bandura and colleagues (2001), in developing their model, aimed at studying transgressive conducts considered self-efficacy beliefs as one of the most relevant predictors of MD. They are namely self-evaluation of one's own competence to successfully perform a task, to accomplish a particular goal or to overcome an obstacle (Bandura, 1977). As MD, it is a domain specific construct, since it reflects the perceived competence in a specific context of life. In particular, coherently with the above mentioned model, we included in our study academic self-efficacy for self-regulated learning and self regulatory self-efficacy beliefs. In add, we hypothesized that the capacity of managing moral emotions, such as shame or embarrassment (Eisenberg, 2000), is another essential precursor of MD. In sum the less people are able to manage their learning strategies, the less they are able to resist to peers' pressures, and the more they are able to manage moral emotions, the more they would be prone to morally disengage.

Moreover, research suggested that academic self-efficacy beliefs directly influence propensity to cheating behavior: specifically low academic self-efficacious students would more probably cheat (Murdock *et al.*, 2001; Voelkl Finn & Frone, 2004), since they would tend to select easier goals (Locke, Frederick, Lee & Bobko, 1984), would be less persistent in task (Schunk, 1991), would spend less time studying (Torres & Solberg, 2001), would have lower level of self-confidence (Cizek, 1999) and would have more fear of failure (Anderman *et al.*, 1998; Evans & Craig, 1990). All those findings suggested that students with low self-efficacy feel external demands as more threatening or challenging than their colleagues with higher self-efficacy, when required a learning performance (Elias, 2009).

Since we are considering academic context, it seems crucial to take into account the impact of the involved constructs in relation to academic performance (Caprara *et al.*, 2009). In fact, accordingly to some authors, academic self-efficacy interacts with performance, being a protective factor toward cheating behaviors: the more self-efficacious students with high academic performance are, the less they tend to cheat (Voelkl Finn & Frone, 2004). Indeed students with low self-efficacy, having little confidence in their ability to maintain high grades and achieve academic success, adopt cheating behaviors as an alternative strategy instead of effort and commitment in study. So, even if research noted that lower ability students report cheating more frequently than their better performing colleagues (e.g. Newstead, Franklyn-Stokes & Armstead, 1996), relation between cheating and grade seems to be not linear.

Finally, accordingly to social cognitive framework, in order to deep investigate process leading to cheating behaviors through MD mechanisms, we included also peers transgressive behavior as an essential precursor. A context in which transgressive conducts are frequently acted by peers, through the activation of moral cognitive distortions without being apparently sanctioned, may in turn create a "morally disengaged culture" in which those mechanisms could be socialized, learned and activated, legitimating antisocial conducts. Literature attested that peers attitudes and behaviors influence students in cheating (e.g. Graham, Monday, O'Brien & Steffen, 1994; Stevens & Stevens, 1987). An high level of peers cheating is one of the most influential predictor of academic cheating (Carrell, Malmstrom & West, 2008; McCabe & Trevino, 1993; Teodorescu & Andrei, 2009). Students appear to be influenced by shared social norms, since actual exposure enhances their propensity to adopt dishonest behaviors: cheaters more frequently report they have seen colleagues cheating, perceive their colleagues as cheaters, and rate the academic engagement of their peers as lower (Jordan, 2001). The finally posited model is presented in Figure 1.

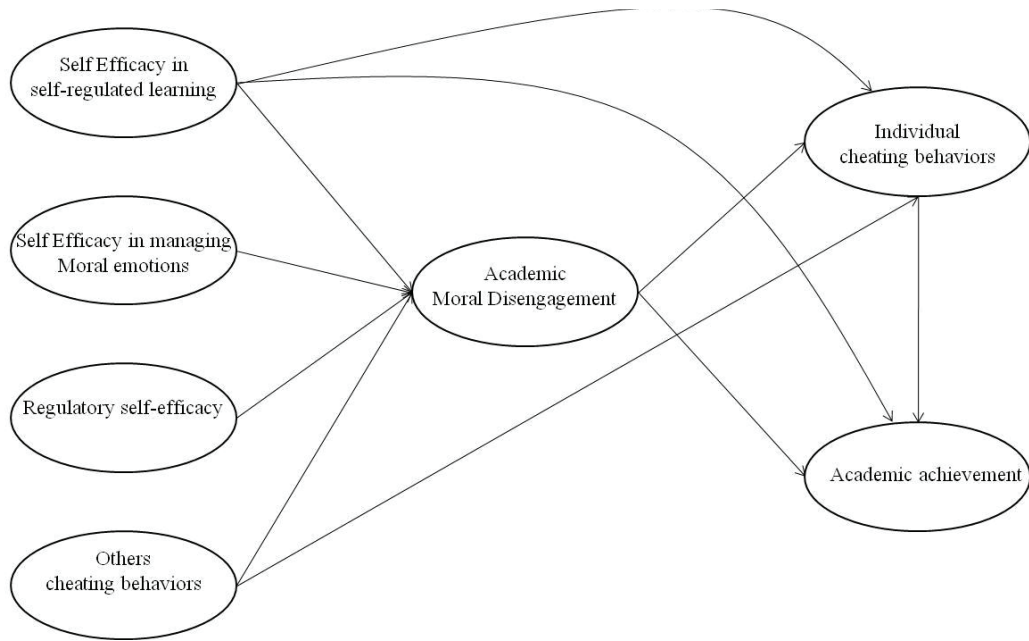


Figure 1. The posited model

### 3. Method

#### 3.1. Participants and Procedure

Participants were 419 Italian college students from different Faculties (60.6% women, 3 people did not indicate their gender), with a mean age of 24.23 years and a standard deviation of 2.52. Given the five-year Italian college curriculum, 30% of participants were first year-students, 23.9% were second year-students, 12.2% third year-students, 28.5% fourth year-students, 2.5% fifth year students. The remaining 2.8% were undergraduate who has failed to get their degree in the minimum time prescribed. In the expected range of marks in Italian college (from 18/30 to 30/30 *cum laude*), sampled students obtained on average 24.23 points (s.d.=2.52). The participants represent a sample of convenience, contacted and assessed by a group of trained researchers. They fill in the questionnaire individually and did not received any fee for their participation.

#### 3.2. Measures

The anonymous self-report survey included measures of self-efficacy, academic moral disengagement, and academic cheating behaviors.

*Self-efficacy* was assessed by a fifteen-item Likert scale aimed at measuring students' self-efficacy in different domain related to academic context (Bandura, Caprara, Barbaranelli, Gerbino & Pastorelli, 2003; Caprara & Gerbino, 2001; Pastorelli & Picconi, 2001). Response options were presented in a five point format ranging from 1= *cannot do at all* to 5= *highly certain can do*. Preliminary factor analysis revealed a three-factor solution. In particular, the first factor was related to *self-efficacy in self-regulated learning* (eight items), namely students' self perceived capacity to organize college activities, to structure contexts facilitating learning and to motivate themselves to study. Internal consistency reliability in the current sample was .82. The second factor was related to *self-efficacy in managing moral emotions* (three items), namely students' self perceived capacity to manage their shame and embarrassment. Internal consistency reliability in the current sample was .81. The third factor was related

to *regulatory self-efficacy* (four items), namely students' self perceived capacity to resist to peer pressure to act risky and deviant behaviors. Internal consistency reliability in the current sample was .69.

*Academic Moral Disengagement* was assessed by a fifteen-item Likert scale measuring students' proneness to moral disengagement of different forms of detrimental conduct in academic context. The scale was specifically developed for this study, on the basis of measures previously developed by Bandura and colleagues (Bandura *et al.* 1996). Response options were presented in a five point format ranging, from 1= agree not at all to 5= completely agree. Preliminary factor analysis revealed a two-factor solution. In particular, the first factor was mainly related to mechanisms of dehumanization, attribution of blame and distortion of consequences, identifying in low profile professors the origin of students' misconducts (e.g. *If students fall behind in their studies, it's because teachers overburden them with work*). Internal consistency reliability in the current sample was .77. The second factor was mainly related to mechanisms of diffusion and displacement of responsibility, and advantageous comparison, identifying in common peers' practices the origin of students' misconducts (e.g. *It's useless to blame the single dishonest student, since everybody is*). Internal consistency reliability in the current sample was .77.

*Cheating behavior* was assessed by a eight-item Likert scale specifically developed for this study, measuring the frequency of deviant behaviors acted by both participants and their peers (e.g. *To copy sections of texts or articles taken from the Internet*). Consequently each item, describing a specific behavior, was presented twice, asking students to indicate on a five point response-format (from 1= *never* to 5= *always*) how frequently these conducts are acted both by them directly and by their colleagues. Internal consistency reliability in the current sample was .80 and .77 respectively for individuals and others cheating behaviors.

*Academic achievement* was measured by asking students to report they average mark in college exams.

## 4. Data Analysis and Results

### 4.1. Data Analysis

We preliminarily tested the correlations among all variables under study, highlighting their consistence with the posited model (Table 1). Then we analyzed the hypothesized relation among the constructs by implementing a structural equations model with Mplus 6.1 (Muthén & Muthén, 1998-2010). Since there were missing data in all the variables we used the maximum likelihood estimation of parameters. This method is generally considered appropriate for handling missing data (Muthén & Shedden, 1999; Schafer & Graham, 2002) under the assumption that the data are missing at random (Arbuckle, 1996; Little, 1995).

Table 1  
Correlations among variables under study

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Self-efficacy in self-regulated learning (1)	1							
Self-efficacy in managing moral emotions (2)	.027	1						
Regulatory self-efficacy (3)	.438(**)	.105(*)	1					
MD against professors (4)	-.265(**)	.183(**)	-.216(**)	1				
MD against students (5)	-.233(**)	.118(*)	-.198(**)	.732(**)	1			
Individual cheating behaviors (6)	-.297(**)	.196(**)	-.321(**)	.572(**)	.480(**)	1		
Others cheating behaviors (7)	-.089	.005	-.168(**)	.249(**)	.159(**)	.463(**)	1	
Academic achievement (8)	.326(**)	-.112(*)	.143(**)	-.243(**)	-.207(**)	-.199(**)	-.039	1

\* Correlation is significant at the 0.05 level (2-tailed).

\*\* Correlation is significant at the 0.01 level (2-tailed).

#### 4.2. Structural Model

According to a multifaceted approach to the assessment of the models' fit (Tanaka, 1993) we considered the following fit indices: (a) Chi Square, (b) Comparative Fit Index (CFI; Bentler, 1990), (c) Root Mean Square Error of Approximation (RMSEA; Steiger, 1990), and (d) Standardized Root Mean Square Residual (SRMR; Jöreskog & Sörbom, 1984). In structural equation modeling, the  $\chi^2$  value is obtained from the minimum of the fitting function used to derive parameter estimates, and it is usually considered a measure of fit rather than a test statistic (e.g. Byrne, 1994). Accordingly, its value is an indicator of the correspondence between the sample and the fitted covariance matrices. Nonetheless it is sensitive to sample size, hence it is necessary to consider also information derived from other indices of goodness of fit. The CFI assesses the reduction in misfit of a population target model relative to a population baseline model in which no structure is specified. Usually, values equal to or higher than .95 are indicative of a good fit (Hu & Bentler, 1999). The RMSEA index is a criterion that takes into consideration the error of approximation in the population with values up to .05 indicating a good fit, and values as high as .08 representing a reasonable error of approximation in the population (Browne & Cudeck, 1993). This index also has the advantage of measuring the parsimony of the model, because it takes into consideration model's degrees of freedom. Finally the SRMR index is an absolute index that is reported as a summary statistic based upon residuals between the elements of the implied and observed covariance matrices. Values lower than .08 indicate an adequate fit (Hu & Bentler, 1998, 1999).

The posited model showed an unsatisfactory fit. After inspecting Modification Indices we included direct effect of self-regulatory efficacy on individuals cheating behaviour and self-efficacy in managing moral emotions on academic achievement and cheating behaviors. Unsignificant hypothesized path were fixed to be equal to 0. The revised model provided an excellent fit,  $\chi^2(8) = 7.952$ ,  $p = .44$ ; CFI = 1.00; RMSEA = .000 (Confidence Interval= .000 - .057),  $p = .90$ ; SRMR = .023, confirming our hypothesis (see Figure 2).

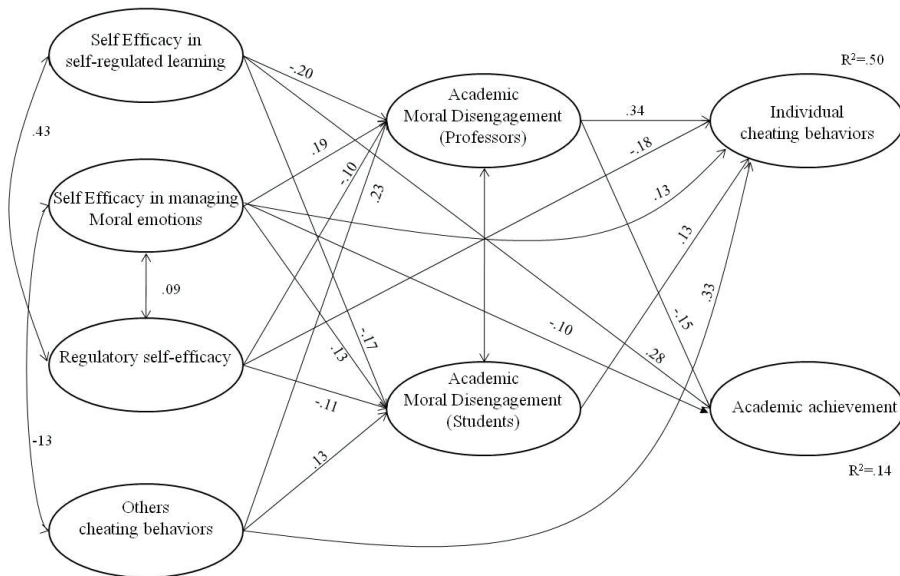


Figure 2. The tested model

In particular, self-efficacy beliefs and colleagues’ cheating behaviors strongly influenced individual cheating behaviors both directly and indirectly, through the mediation of MD ( $R^2=.50$ ). Specifically, self-efficacy in self-regulated learning and regulatory self-efficacy showed significant negative paths on MD both against professors and students, whereas self-efficacy in managing moral emotions and colleagues’ cheating behaviors showed significant positive path. In turn, both dimensions of academic MD significantly affected individual cheating behaviors. Furthermore, individual cheating behaviors were negatively and directly related to regulatory self-efficacy, and positively linked to self-efficacy in managing moral emotions, and others’ cheating behaviors. Finally academic performance is mainly influenced by self-efficacy in self-regulated learning, self-efficacy in managing moral emotions and MD “against” professors. Individual cheating behaviors do not influence significantly performance.

**5. Discussion**

Overall results supported the posited model, highlighting the relevance of MD in mediating, even if partially, the relation of both self-efficacy beliefs and perceived peers’ behaviors with individual cheating behaviors. In fact, a consistent part of this process is mediated by academic MD, since justification mechanisms neutralizing social norms give an important contribution in explaining the effective adoption of cheating behaviors. As we hypothesized, academic MD, both toward other students (e.g. applying an advantageous comparison with one’s own colleagues) and toward professors (e.g. attributing the whole blame of one’s own conduct to them), is concurrently affected by both self-efficacy beliefs and peer cheating behaviors. Specifically, as expected, the less students are able to manage their learning strategies, the less they are able to resist to peers’ pressures, the more they are able to manage moral emotions and the more they perceive their peers as cheaters, the more they would be prone to morally disengage.

In line with prior research, that attested the independent contribution of perceived academic self-efficacy and perception of cheating colleagues on individuals’ adoption of dishonest behaviors, in our model self-efficacy in self-regulated learning and regulatory self-efficacy, reduced the proneness to adopt dishonest conducts. In contrast, self-efficacy in managing moral emotions enhanced the likelihood that a student will adopt cheating behaviors. Probably, acting cheating behaviors imply the necessity to control moral emotions like shame and embarrassment that may have the social function to inhibit behaviors contrasting with shared norms. Similarly, managing those emotions is useful to activate cognitive mechanisms conducing to MD, that in turn foster cheating behaviors. Moreover results confirmed that perception of peers’ dishonesty facilitates individuals’ cheating. In particular, this relation resulted to

be the strongest one, even though in Italian academic context the peer-group does not represent a stable classroom along the entire academic path.

Academic achievement is significantly related to self-efficacy in managing complex emotions and self-efficacy for self-regulated learning. More interesting, academic performance results associated with mechanisms of moral disengagement leading to identify in unqualified or uncommitted professors the origin of one's own cheating behaviors. Students declaring a worse performance tend to show a lower academic self-efficacy but also to use more frequently justificatory mechanisms that allow them to devalue social norms, the relevance of learning goals, trustworthy of teachers as institutional representatives, and integrity of academic policies.

Overall, our findings highlighted the pivotal role of MD mechanisms and perceived peers' behavior in supporting the decision to cheat, above and beyond the impact of self-efficacy beliefs. Our results highlighted that especially MD against professors and peer cheating behavior strongly affected student cheating behaviors. Hence it seems relevant the need to consider not only individual factors, but also determinants linked to the social context of reference, since these dimensions may legitimate and foster misconducts. Blaming professors for one's own cheating behaviors and perceived peers as cheaters, open the way for a "morally disengaged culture". Results suggest the necessity of promoting the sense of responsibility of every actor involved in educational institutions in order to obstruct the process toward transgressive behaviors.

Future studies should include also students' motivation goal orientation as a extremely relevant individual dimension influencing the adoption of cheating behaviors. Moreover it would be essential to further analyze professors' teaching, evaluation and monitoring strategies, in order to identify factors useful to discourage students' mechanisms of MD. As well it would be important to include also a measure of students' knowledge and interpretation of social norms to better understand their impact on MD mechanisms. To summarize, future studies should focus on a deep investigation of the interaction of individual and contextual dimensions to identify the most efficacious strategies to discourage dysfunctional and unproductive conducts, such as cheating behaviors.

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