Academic cheating and time perspective: Cheaters live in the present instead of the future

Gábor Orosz [a,b,*], Edina Dombi [c], István Tóth-Király [d,a], Beáta Bőthe [d,a], Balázs Jagodics [e], Philip G. Zimbardo [f]

[a] Institute of Psychology, Eötvös Loránd University, Budapest, Hungary
[b] Institute of Cognitive Neuroscience and Psychology, Hungarian Research Centre for Natural Sciences, Budapest, Hungary
[c] Doctoral School of Education, University of Szeged, Szeged, Hungary
[d] Doctoral School of Psychology, Eötvös Loránd University, Budapest, Hungary
[e] Institute of Psychology, University of Szeged, Hungary
[f] Department of Psychology, Stanford University, Stanford, CA, USA

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ABSTRACT

The goal of this research was to explore the relationship pattern of individual differences in time perspective and the frequency of self-reported academic cheating behavior among Hungarian high school students ($N_1 = 252$, $M_{age} = 16.46$, $SD_{age} = 1.16$; $N_2 = 371$, $M_{age} = 16.56$, $SD_{age} = 1.18$). According to the results of structural equations modeling, Future time perspective had a negative direct relationship with cheating, while Present hedonistic time perspective had a direct positive relationship with cheating. Moreover, academic motivations mediated the relationships between time perspectives and academic cheating. Future time perspective had direct negative relationship with amotivation and direct positive relationship with intrinsic and extrinsic motivation. Considering the malleability of time perspective, we claim both academic motivations and cheating can be influenced by time perspective.

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1. Introduction

Academic cheating matters. In Grimes' (2004) cross-cultural study, almost three-fourth of Eastern-European college students reported some forms of cheating. In Hungary, 75% of high school students used cheating sheets and >60% copied during exams in a single semester (Orosz, Farkas, & Roland-Lévy, 2013). These numbers are especially troubling when we consider the relatively strong link between university cheating and workplace dishonesty (Nonis & Swift, 2001) or organizational corruption (Crittenden, Hanna & Peterson, 2009). Behind the already explored motivational variables (e.g., Anderman, Griesinger, & Westerfield, 1998; Jordan, 2001; Pulvers & Diekhoff, 1999), there might be more general individual differences related to students' academic dishonesty. Time perspective can be a potential candidate. Students focusing on long-term goals versus students seizing the day might have different academic motivational patterns that in turn can lead to different level of cheating behavior. In the present study, we investigated the relationships between different time perspective dimensions and academic cheating considering the mediating role of academic motivations.

According to Zimbardo and Boyd (1999), time perspective (TP) is an unconscious and individually determined attitude toward time. The conceptualization of psychological time includes three time zones: past, present and future. People differ in the manner they relate to time and this attitude is strongly related to a wide range of behavior. Several studies identified TP dimensions behind a broad variety of behaviors such as health-related issues (e.g., Adams & White, 2009; Carstensen & Fredrickson, 1998; Guthrie, Butler, & Ward, 2009; Hall & Fong, 2003; Rothspan & Read, 1996), coping (Beiser & Hyman, 1997; Wills, Sandy, & Yaeger, 2001), perceived stress (Worrell & Mello, 2009; Zimbardo & Boyd, 1999), drinking habits (Zimbardo, & Boyd, 1999; Milfont, Andrade, Belo, & Pessoa, 2008), and substance use (Keough et al., 1999; Wills et al., 2001).

Zimbardo and Boyd (1999) distinguished five possible time perspectives (TP): Past negative TP, Past positive TP, Present hedonistic TP, Present fatalistic TP and Future-oriented TP. Past negative TP is a generally negative and past-oriented view of time, emphasizing the inconvenient memories. Contrarily, Past positive TP is a generally positive approach toward past which contains pleasurable memories. Present hedonistic TP refers to a pleasure-seeking and risk-taking attitude where one concentrates on the immediate satisfaction of needs while at the same time ignoring possible future consequences. Present fatalistic TP

* Corresponding author at: Institute of Psychology, Eötvös Loránd University, Izabella utca 46, Budapest H-1064, Hungary.
E-mail address: gaborosz@gmail.com (G. Orosz).

refers to a faith-driven, helpless and hopeless orientation of life. Finally, Future TP is a generally future-oriented view of time in which striving for future goals and rewards are predominant.

According to the prior studies mentioned above, time perspective as a background variable has a general and pervasive influence on different aspects of life, and education is not an exception. Numerous studies confirm that FTP was related to good academic performance (e.g., Zimbardo & Boyd, 1999), which could be rooted in the ability to work in the present for delayed rewards in the future. De Bilde, Vansteenkiste and Lens (2011) found that students with Future TP were mainly driven by internal motives such as intrinsic motivation (i.e., when the student is engaged in an activity for its own sake and for the pleasure and satisfaction derived from it). According to Phan's (2009) findings, Future TP was significantly associated with mastery goals (i.e., when the goal is the self-development or improvement of competences by the learning activity), which can be related to deeper processing during learning and consequently to a better academic performance. On the other hand, Present hedonistic TP and Present fatalistic TP were connected to poor academic achievement among university students (Zimbardo & Boyd, 1999). In the case of Present hedonistic TP, the sensation seeking-related aspects of present-hedonism could indicate that students are looking for joyful situations in the present instead of working for rewards in the future. In the case of Present fatalistic TP, students consider their efforts to be unrelated to their school grades and they delay tasks which can also lead to lower academic performance (Jackson, Fritch, Nagasaka, & Pope, 2003).

To the best of our knowledge no prior study has focused on the possible effect of time perspective on academic cheating. However, the link between motivations (and achievement goals) and academic cheating has been extensively studied (Anderman & Murdock, 2007). Previous results suggested that intrinsic motivation (and mastery goals) were negatively related to cheating, while extrinsic motivations (and performance goals) were positively associated with cheating (e.g., Anderman et al., 1998; Jordan, 2001; Pulvers & Diekhoff, 1999). Eastern-European results also demonstrated a negative link between intrinsic motivation and cheating, however the link between extrinsic motivation and cheating was not supported (Orosz et al., 2013). Furthermore, amotivation (i.e., the lack of extrinsic or intrinsic motivation in terms of low inclination in academic activities as a result of the lack of perceived causality between one's action and the results and the lack of feeling competency) was positively related to academic cheating (e.g., Angell, 2006; Harding, Carpenter, Finelli, & Passow, 2004; Park, Park, & Jang, 2013).

Prior works (De Bilde et al., 2011; Phan, 2009) have already explored the differentiated effect of TP dimensions on academic motivations and goals. Moreover, it is also known how these academic motivations can influence academic cheating (Anderman & Murdock, 2007; Angell, 2006; Orosz et al., 2013). However, less is known about the potential direct and indirect effects of TP dimensions on academic cheating when taking academic motivations into account. Considering that TP can be identified as a rather general mind set variable in different fields of life (Guthrie et al., 2009; Keough et al., 1999; Wills et al., 2001; Worrell & Mello, 2009), the present research sought to investigate its relationship with academic cheating in a mediation model. More specifically, it was hypothesized that TP was directly related to academic motivations and indirectly related to cheating via these motivations. On the basis of De Bilde et al.'s (2011) results, it was hypothesized that FTP was negatively related to cheating with the mediating role of intrinsic motivation. Furthermore, based on prior results of Zimbardo and Boyd (1999) and Jackson et al. (2003), it was expected that PHTP was positively related to cheating as this TP was related to impulsive behaviors—and many forms of cheating have an impulsive background (Anderman, Cupp, & Lane, 2009; Anderman & Murdock, 2007).

2. Methods

2.1. Participants and procedure

In the present research, two separate samples were applied. After data screening,[1] Sample 1 consisted of 252 Hungarian students from three high schools (152 women, 96 men and 4 undefined). Their age ranged from 14 to 19 years ($M = 16.5$, $SD = 1.16$). Sample 2 consisted of 371 Hungarian high school students from four high schools (197 females, 174 males), aged between 14 and 18 years ($M_{age} = 16.56$ years; $SD_{age} = 1.18$ years). As a consequence of online data gathering in the classroom, there was no missing data. In the case of both samples, the research was done in accordance with the Declaration of Helsinki and was approved by the Institutional Review Board of the related university. Participants were informed about the content of the questionnaire when they volunteered for the study and they did not receive compensation for the participation. They were assured about their anonymity and the confidentiality of their answers. The schools and parents were informed about the topic of the research through an opt-out passive consent.

2.2. Measures

The *Academic Dishonesty Scale* (McCabe & Trevino, 1997) includes behavioral items about academic cheating. Participants are asked to respond how often they have engaged in each type of behavior since the beginning of their studies (10 items; e.g., "*Using crib notes on a test.*"; $\alpha_{S1} = 0.88$, $\alpha_{S2} = 0.92$). Participants answer by using a slightly modified 5-point scale (1 = not even once, 2 = 1–2 times; 3 = 3–5 times; 4 = 6–10 times; 5 > 10 times). This five-point scale was different from the original version of McCabe and Trevino (1997) as higher rates of cheating were measured in previous Hungarian and Eastern-European studies (Grimes, 2004; Orosz et al., 2013; Orosz et al., 2015). McCabe and Trevino (1997) did not specify the frequency of the cheating (1 = never; 2 = once; 3 = a few times; 4 = several times; 5 = many times) and the academic time span (one semester vs. during all high school years) in their original scale. In the present study, the scale was modified by restricting the time span to the last semester and by applying more precise labels to the scale (1 = not even once, 2 = 1–2 times; 3 = 3–5 times; 4 = 6–10 times; 5 = >10 times). We carried out these modifications because we expected that this version can more appropriately grasp individual differences in academic dishonesty in case of relatively high cheating rates. Moreover, several previous studies suggested the appropriateness of questionnaire studies in the field of academic cheating (i.e., Whitley, 1998).

The Hungarian adaptation of the *Zimbardo Time Perspective Inventory* (Zimbardo & Boyd, 1999) was used to measure TP. This shorter version (Orosz, Dombi, Tóth-Király & Roland-Lévy, 2015) proved to have good psychometric characteristics and factor structure with 17 items. The questionnaire contains five dimensions: Past-Negative (four items; e.g., "It's hard for me to forget unpleasant images of my youth"; $\alpha_{S1} = 0.78$, $\alpha_{S2} = 0.77$), Past-Positive (three items; e.g., "I enjoy stories about how things used to be in the 'good old times'."; $\alpha_{S1} = 0.58$, $\alpha_{S2} = 0.63$), Present Hedonistic (three items; e.g., "I take risks to put excitement in my life."; $\alpha_{S1} = 0.78$, $\alpha_{S2} = 0.75$), Present Fatalistic (three items; e.g., "My life path is controlled by forces I cannot influence"; $\alpha_{S1} = 0.50$, $\alpha_{S2} = 0.52$), and Future (four items; e.g., "I complete projects on time by making steady progress."; $\alpha_{S1} = 0.73$, $\alpha_{S2} = 0.74$) based on a 5-point Likert type scale (1 = Very Untrue; 2 = Untrue; 3 = Neutral; 4 = True, 5 = Very true). As the Cronbach alpha values were unsatisfactory in the case of PPTP and PFTP, inter-item correlations (IIC; Clark & Watson, 1995) were also calculated which showed adequate reliabilities: FTP (IIC$_{S1}$ = 0.40, IIC$_{S2}$ = 0.42), PNTP (IIC$_{S1}$ = 0.47,

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[1] Participants were removed for the following reasons: they did not wish to participate in this study or had the same answer to every questionnaire item.