

When and why people *don't* accept cheating: self-transcendence values, social responsibility, mastery goals and attitudes towards cheating

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Abstract Although self-transcendence values have received top rankings as moral values, research has yet to show how they relate to cheating. In two studies, ($N = 129$) and ($N = 122$), we analyze the indirect motivational path between self-transcendence values and acceptance of cheating. Both studies were carried out with third-year students in an international management school: Study 1 included 58 male and 65 female students (six missing values), mean age: 22.38 ($SD = 1.60$). The study 2 sample comprised 46 male and 73 female students, (three missing values), mean age: 22.01 ($SD = 1.74$). We find that adherence to self-transcendence values positively predicts a social-responsibility driven motivation to study, namely wanting to study to help improve society. This, in turn, predicts the adoption of study-related mastery-approach achievement goals, characterized by a desire to understand course material. These learning-oriented goals negatively predict the acceptance of cheating. Study 2 also reveals that exposing individuals to representations of society characterized by opposing self-enhancement values of power and achievement is sufficient to render non-significant the negative relation between self-transcendence values and acceptance of cheating. The theoretical and practical significance of understanding motivational connections between higher-order life values and context-specific acceptance of dishonest behaviors is discussed.

Keywords Self-transcendence values · Cheating · Social responsibility · Mastery-approach goals

Introduction

Although an abundant body of literature has addressed the question of when and why people harbor positive attitudes towards cheating, the examination of when and why people don't has received sparse attention. This may be partly because statistics regularly show cheating to be a widespread phenomenon. Results of a worldwide survey carried out with business students reveal that over 60 % have a propensity to cheat (Teixeira and Rocha 2010). Although qualitative research on honor codes points to the presence of certain values underpinning individuals' relative reluctance to cheat (McCabe et al. 1999, 2002), quantitative research to date has not investigated the role of value adherence in the prediction of negative attitudes towards cheating. In the present article we intend to fill this gap and propose a model predicting when and why values are likely to reduce acceptance of cheating.

Self-transcendence values and cheating

Schwartz' (1992, 2006) quasi-circumplex model of individual values, features ten values, organized into two bipolar dimensions. One of these dimensions contrasts openness to change values, focusing on independent thought and the welcoming of change, with conservation values, which for their part emphasize self-restraint, orderliness and maintenance of the status quo. The other dimension, more relevant for the present research, contrasts self-transcendence values of universalism (understanding, respecting and protecting the welfare of all humans and the natural world) and benevolence (protecting the welfare of those with whom the individual has close relations), with self-enhancement values of achievement (attaining individual success leading to normative social approval) and

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power (gaining social status via the control of others and valued resources) (Schwartz 2006).

Self-transcendence values, thanks to their concern with ethical behavior and the preservation of the wellbeing of others (Schwartz et al. 2012), reflect traditional western visions of morality (Graham et al. 2011). This view of morality is captured by Turiel's (1983, p. 3) definition in which morality is "prescriptive judgments of justice, rights and welfare pertaining to how people ought to relate to each other". Indeed, Graham et al. (2011) found two of their foundations of morality, namely prevention of harm to others and fairness, to be correlated with Schwartz' (1992) self-transcendence values, respectively benevolence and social justice. A cross-cultural survey revealed that the value considered as most moral is the self-transcendence value of benevolence and the second most moral value, in individualist countries at least, is the other self-transcendence value of universalism (Vauclair 2009). Thus it is likely that the more individuals adhere to self-transcendence values, the less they will consider cheating behavior acceptable.

Self-transcendence value adherence is also likely to be negatively associated with the acceptance of cheating as prior research shows that self-enhancement values, values that are diametrically opposed to those of self-transcendence, positively predict deviant behavior (Konty 2005), the condoning of cheating in school (Pulfrey and Butera 2013) and tax fraud (Ganon and Donegan 2010). Self-enhancement values turned out to be negatively correlated with cooperation in a money-allocation game, whilst self-transcendence values were the only ones positively correlated with it (Schwartz 1996). In sum, if self-transcendence values represent in effect moral values, and are diametrically opposed to self-enhancement values, which positively predict unethical behavior, self-transcendence value adherence should *negatively* predict the acceptance of cheating. Our first hypothesis argues precisely this, and represents, to the best of our knowledge, the first attempt to quantitatively study negative predictors of the acceptance of cheating.

From self-transcendence values to the non-acceptance of cheating: a motivational pathway

Although values have been shown to have a direct influence on value-expressive attitudes, that is to say attitudes that express core values central to the self-concept (Maio and Olson 1995), they also constitute a higher form of life goal and, as such, drive motivational processes (Schwartz 1992). In view of this, our second hypothesis addresses the *why* question: what motivational pathways might connect the more general, situational-stable life values (Schwartz 1992) of self-transcendence to more concrete negative attitudes towards cheating in the academic context? We will argue that one significant motivational pathway connecting self-

transcendence values to negative attitudes towards cheating is likely to pass via social goals of social responsibility (Cole and Stewart 1996) and achievement-specific mastery-approach goals (Elliot and Church 1997) (see Fig. 1 for a depiction of the proposed relationships between these concepts). Let us see why.

Adherence to collective values has been related in different fields of research to a sense of responsibility to the community. Jansson and Biel (2009) have found that self-transcendence values guide socially responsible investment, and Shafer et al. (2006) have found that self-transcendence value adherence is positively associated with importance attached to social responsibility in business investment. From a more theoretical stance, Crilly et al. (2008) propose that individual values of self-transcendence, as opposed to self-enhancement, are likely to predict socially responsible behavior, namely decisions and actions effectuated with a primary aim of improving social welfare.

How does this relate to studying? Among social reasons for trying to succeed academically, namely social goals for studying (Urduan and Maehr 1995), namely social goals for studying, the goal of social welfare with its focus on studying to become a productive member of the wider society, seems particularly relevant to the adherence to self-transcendence values. However, what Urduan and Maehr (1995) categorized as social welfare goals are conceptually very close to what a number of other authors term as social responsibility goals. These can be defined as "the desire to act individually for the benefit of the larger group and the belief in one's own ability to do so effectively" (Cole and Stewart 1996, p. 132). They are characterized by commitment to working for the good of larger groups, concern for community and the next generation and the desire to contribute resources for the long-term good of society. Social responsibility goals among students have been defined as the motivation to help others even when nothing is to be gained personally and sincere concern about broader moral and ethical issues in the larger social and political arena as well as in the classroom (Berkowitz and Lutterman 1968; Berman 1997). Consequently, within the context of this research, we will refer to social responsibility goals as the motivation to study in order to contribute effectively towards the betterment of society.

Anderman and Anderman (1999) and more recently, Horst et al. (2007) have noted a growing need for social goals to be considered in the analysis of achievement motivation in school. Urduan and Maehr (1995), for their part, argue that social goals are likely to drive more specific academic attainment-related goals. Although no research has directly addressed the question of which achievement goals social responsibility goals are likely to inspire, Vansteenkiste et al. (2004) have found that intrinsic goals of community contribution, self-development, affiliation and health are more likely to predict enjoyment of learning



Fig. 1 Model depicting levels of analysis and concepts studied in the model

than extrinsic goals of money and image. Furthermore, Vansteenkiste et al. (2006) have found that an intrinsic goal framing using these same goals generates greater pleasure and persistence in learning.

Mastery-approach achievement goals have been defined by Elliot and Church (1997) as goals that emphasize a drive towards task mastery and the acquisition of competence. As a consequence, it would seem probable that the endorsement of social responsibility study goals should predict mastery-approach achievement goals as mastering the content and skills inherent in school studies is likely to be a necessary step towards acting efficiently as a social agent for change for the better in the wider world.

Multiple findings have linked mastery-approach achievement goals to less cheating and less positive attitudes towards cheating. Anderman et al. (1998) found that mastery goals predicted more focus on learning for the sake of learning than performance goals. Newstead et al. (1996) for their part revealed that internally-oriented reasons for studying, which are akin to mastery-approach goals (Harackiewicz et al. 2002; Ryan and Deci 2000) were also related to lower amounts of self-report cheating than externally-oriented reasons.

Consequently, our second hypothesis contends firstly that adherence to self-transcendence values is likely to predict endorsement of social responsibility goals that translate a concern to study in order to contribute to a better society. Secondly, these social responsibility goals predict the adoption of mastery-approach achievement goals, which in turn predict less acceptance of cheating. This model is presented in Fig. 2.

Self-transcendence values, socialization and cheating

However, values, although relatively stable, are linked to social context. Firstly, they are a long-term product of

socializing forces and, secondly, different values may become more salient in different social contexts (Schwartz 2006). Thus it would seem likely that the social context has the potential either to maintain and reinforce or to erode the relation between existing individual value orientations and attitudes towards cheating. More specifically it has been argued that social contexts promoting individualistic, in particular, self-benefitting values will discourage pro-social behavior and encourage cheating. For example, according to Pope (2001), the emphasis put on individual achievement and good grades in a competitive educational system tends to discourage good behavior and breed dishonesty as students adapt to the system and seek to succeed by any means (Pope 2001; see also Gallant and Drinan 2006; Michaels and Miethe 1989). Conversely, environments promoting values in which human relations, interdependence and the good of the collectivity are evident have been shown to be more conducive to the reinforcement of moral judgment. Indeed, Haan et al. (1985) empirical work showed that it was in democratic groups with shared leadership, in which members felt they could participate freely, that scores in individual morality increased the most. Similar values are promoted in educational institutions that boast an honor code. McCabe et al. (1999, 2001) have affirmed the value of such honor codes with research findings showing lower levels of cheating in honor code institutions.

These generalized effects of social environment are likely to be act in concert with the core values individuals bring to the situation. Person–environment fit theory (Edwards 1993, 1996; Edwards et al. 2006; Finegan 2000) has shown that the match between individual values and organizational values is an important factor in generating organizational commitment (Ahmad et al. 2011; O'Reilly et al. 1991), and Treviño (1986) argued for a person–

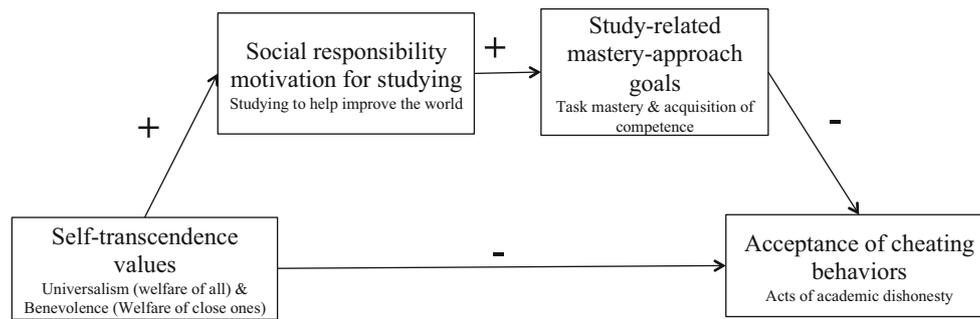


Fig. 2 Model predicting acceptance of cheating by adherence to self-transcendence values: direct effect and indirect effect via social responsibility motivation for studying and mastery-approach achievement goals

situation interactionist model in organizational ethical decision-making. More specifically, Chatman and Barsade (1995), worked with settings characterized as individualistic (defined as independence from in-group, priority given to individual goals, attitude-driven behavior, exchange-oriented relationships) versus collective (defined as ingroup interdependence, communal behavior, priority given to group goals, relationship orientation; Triandis 2002). Within these contexts they examined differences in levels of cooperation between individuals with idiocentric versus allocentric values, the individual-level equivalent of individualism and collectivism (Triandis 2002; Triandis et al. 1985). Chatman and Barsade's (1995) results showed that whilst allocentrics, in other words people highly disposed to cooperate, showed most cooperation in the collectivist condition, they did not show any more cooperation than idiocentrics, namely people less disposed to cooperate, in the individualistic condition.

Cooperative behavior has long been contrasted with individual cheating for personal gain (Fehr et al. 2002). Consequently, Chatman and Barsade's (1995) results would imply that individuals who adhere to other-oriented values of self-transcendence may be more likely to show negative attitudes towards cheating in contexts in which relational interdependence and common goals are salient. This effect would disappear in a context in which individual goals and instrumental relationships exist. This is important as, if we argue that individuals high on self-transcendence, relative to other values are those most likely to reject cheating, but that this resistance to academic dishonesty disappears in a self-enhancing context, we end up a step or two closer to a norm of cheating (Callahan 2004).

Whilst value socialization may be accomplished with what has been called espoused values, values that are explicitly articulated and communicated to institutional members via values-rich messages, they are also strongly communicated by enacted values, values that are implicitly communicated via societal or organizational practices and structures (Argyris and Schon 1978; Schuh and Miller

2006). Consequently, our third hypothesis addresses the question of *when* self-transcendence values negatively predict acceptance of cheating. We hypothesize that whilst exposure to a representation of societal practices that reflect self-transcendence values of equality, cooperation and caring should maintain the negative relation between individual self-transcendence value adherence and the acceptance of cheating, exposure to a representation of societal practices that reflect opposing self-enhancement values of individual power and achievement will attenuate this relationship.

Hypotheses and overview

To sum up, this research will test three main hypotheses. Firstly, we hypothesize that adherence to self-transcendence values will be related negatively to the acceptance of cheating. Our second hypothesis is that one motivational pathway between self-transcendence value adherence and the acceptance of cheating will pass via the motivation to study out of social responsibility and, consequently, the adoption of mastery-approach achievement goals. Thirdly, we hypothesize that whilst self-transcendence value adherence will negatively predict the acceptance of cheating, this relation will be significantly eroded in a context in which society is represented as enacting self-enhancement values compared to a control condition.

Study 1

In study 1 we aim to test our first hypothesis that self-transcendence values negatively predict the acceptance of cheating, and hypothesis two which posits that one motivational pathway from self-transcendence values to less positive attitudes towards cheating passes via social goals, more precisely social responsibility goals with a focus on the betterment of society, and consequent to these, mastery-approach achievement goals.

Methods

Participants

One hundred and twenty-nine third-year students attending an international management school based in Switzerland, with a mean age of 22.38 ($SD = 1.60$), participated in this study. This sample consisted of 58 male and 65 female students, with six non-respondents.

Procedure and measures

Students voluntarily completed the questionnaires during their human resources class. They were told that the aim of the study was to find out about their opinions about their life and their studies. Students filled in the questionnaire, then were debriefed and thanked for participating.

Values As the questionnaire included multiple scales, students' individual values were measured using an adapted version (Pulfrey and Butera 2013) of the Schwartz Portrait Values Questionnaire items (Schwartz et al. 2001). The questionnaire comprised scales of items for the four value types: self-enhancement (e.g.: "It is important to me to be successful", $\alpha = 0.74$); self-transcendence (e.g.: "It is important to me that every person in the world is treated equally", $\alpha = 0.83$); open to change (e.g.: "It is important to me to think up new ideas and be creative", $\alpha = 0.73$); conservation (e.g.: "It is important to me to follow rules and do what one is told", $\alpha = 0.72$). The answer scale ranged from 1 (*not at all important*) to 7 (*very important*). Multi-dimensional scaling analyses using SPSS Proxscal (see Schwartz et al. 2012) revealed good fit for the adapted version (Stress-1, 0.24, Tucker's coefficient of congruence, 0.97), showing the appropriate circumplex arrangement and order of the value items. Exploratory factor analysis produced a single factor explaining 47 % of total variance.

Schwartz (2006) explains that values are ordered by their importance or salience, relative to each other and it is this relative prioritization that guides action. Furthermore, respondents differ in the way they use response scales and consequently, *relative* value scores, in which the score of the value within the individual's value hierarchy is assessed, are what predict behavior and attitudes (Schwartz 2006). Consequently, in order to assess the degree to which each individual *prioritized* self-transcendence values relative to all the other value types, we calculated each individual's overall average score for all value types and then subtracted this from their score on self-transcendence values (Schwartz 2006) using the following formula: *relative individual value type* = *raw-score value-type/individual mean score for all values*.

Social responsibility motivation to study Social responsibility as a motivation to study was measured using four questions [I study at school because... I want to leave this world a better place for the next generation", "...society is in danger because people are less concerned about each other nowadays", "... the world needs responsible citizens", "... I want to assume a useful role in society" ($\alpha = 0.68$)], taken from Schuyt et al. (2010) philanthropy scale designed to measure individuals' feelings of personal responsibility towards social and ecological public welfare. Whilst the initial use of the questionnaire was to measure motivation to donate money to charitable causes, we adapted the root question to measure motivation to study at school. Exploratory factor analysis revealed that all four items loaded on a single factor, which explained 52 % of total variance.

Motivation to study to gain social approval As expression of attitudes towards cheating, a deviant behavior, may be influenced by social desirability concerns, a context-specific scale of seven items measuring the motivation to study to gain social approval, based on Ryan and Connell's (1989) Perceived Locus of Causality scale of controlled motivation with introjected regulation, defined as regulation by self-esteem contingent on others' opinions (Ryan and Deci 2000), and adapted to the level of studies in general, was also included in the questionnaire as a control. Sample items included: "I study at school because I want the teachers to think I'm a good student", "...I want the others to think I'm competent", "I want people to have a good opinion of me ($\alpha = 0.89$). Although this measure cannot be considered a direct proxy of a social desirability scale, it has the advantage of being context-specific and can give an indication of the degree to which student participants are concerned with the outward image they project, a form of controlled as opposed to autonomous motivation for studying (Ryan and Deci 2000).

Mastery-approach goals Mastery-approach goals were measured using the new Achievement Goal Questionnaire (Elliot and Murayama 2008) adapted to course level: (e.g.: "In my coursework, my aim is to completely master the material", $\alpha = 0.74$).

Acceptance of cheating An initial thirteen-item scale of explicit acceptance of different types of cheating behavior was created, drawing on Pope (2001) qualitative analysis of student behavior in school. The scale, whilst avoiding the words cheat or dishonest, covered a range of current academic cheating behaviors such as copying homework off others, getting test-related information off people who have already taken the test, taking notes into closed-book exams,

Table 1 Study 1 (N = 129): factor loadings for items social responsibility motivation to study and acceptance of cheating scales

Scale and items	Factor loading
<i>Social responsibility motivation to study</i>	
I want to leave this world a better place for the next generation	.84
Society is in danger because people are less concerned about each other	.76
The world needs responsible citizens nowadays	.75
I want to assume a useful role in society	.47
<i>Acceptance of cheating</i>	
Taking notes into exams that aren't open-book exams	.62
Put in a reference to an article without looking it up	.86
Get homework answers off the web without referencing them	.83
Copy some good material off the web without referencing	.82
Have someone else write a paper for me	.80
Program test information into a calculator or mobile phone	.80
Resubmit a project that I've done before for another class	.71
Copy homework off friends	.51

Table 2 Study 1 (N = 129): descriptive statistics and zero-order correlations among variables

	M	SD	Range	(2)	(3)	(4)	(5)
Self-transcendence values (1)	-0.13	0.59	-3.25–1.23	.19*	-.01	-.28**	-.33***
Social responsibility (2)	5.54	0.92	2.50–7.00	–	.33***	-.09	.10
Mastery-approach goals (3)	5.66	0.92	3.67–7.00	–	–	-.21*	.13
Acceptance of cheating (4)	2.78	1.23	1.00–6.50	–	–	–	-.08
Motivation to study to gain social approval (5)	4.74	1.41	1.00–7.00	–	–	–	–

* $p < .05$; ** $p < .01$; *** $p \leq .001$

not referencing web-sourced material, having a paper written by someone else and copying in tests. Initial exploratory factor analyses revealed two factors. The removal of five items produced an eight-item scale that loaded on one factor explaining 55 % of total variance. Sample items included: “In my courses, I think it’s ok sometimes to take notes into exams that aren’t open-book exams”, “... resubmit a project that I’ve done before for another class”, “...copy some good material off the web without referencing” ($\alpha = 0.90$). Social responsibility and acceptance of cheating scales are presented in Table 1 and descriptive statistics in Table 2.

A structural equation model (SEM) with these variables showed adequate fit, $\chi^2(224, N = 129) = 343.19, p < .001, \chi^2/df = 1.53$, comparative-fit index (CFI) = 0.90, root-mean-square error of approximation (RMSEA) = 0.06, $p < .05$, standardized root mean squared residual (SRMR) = 0.07. Although the fourth item of the social responsibility scale, I want to assume a useful role in society” showed a low loading (0.40, $SE = 0.12, p = .00$), removing this item did not significantly improve model fit: $\chi^2(203, N = 129) = 304.07, p < .001, \chi^2/df = 1.50, CFI = 0.91, RMSEA = 0.06, SRMR = 0.07, \Delta\chi^2 = 30.12 n.s.$ Consequently, considering that this item contains a strong statement of social

responsibility intent, we retained this item. The measurement model is presented in Fig. 3. We did not run a path model using SEM because of the necessity of using a calculated *relative* self-transcendence score as opposed to a raw self-transcendence score for path construction.

Results

To test hypothesis one, an initial test of the relation between self-transcendence value adherence and acceptance of cheating was carried out using regression analyses. Motivation to study to gain social approval and gender were also included in the basic model as control variables, the latter as results of previous studies (Whitley et al. 1999) have shown gender differences in cheating-related variables. Results revealed that self-transcendence value adherence negatively predicted acceptance of cheating, $B = -0.47, F(1, 126) = 4.41, p < .05, \eta^2 = 0.04$, as did gender marginally, $B = -0.44, F(1, 126) = 43.88, p < .06, \eta^2 = 0.03$, with female participants holding less positive attitudes towards cheating than male. There was no significant relation between motivation to study to gain social approval and acceptance of cheating, $B = -0.03, F(1, 126) = 0.18, n.s.$

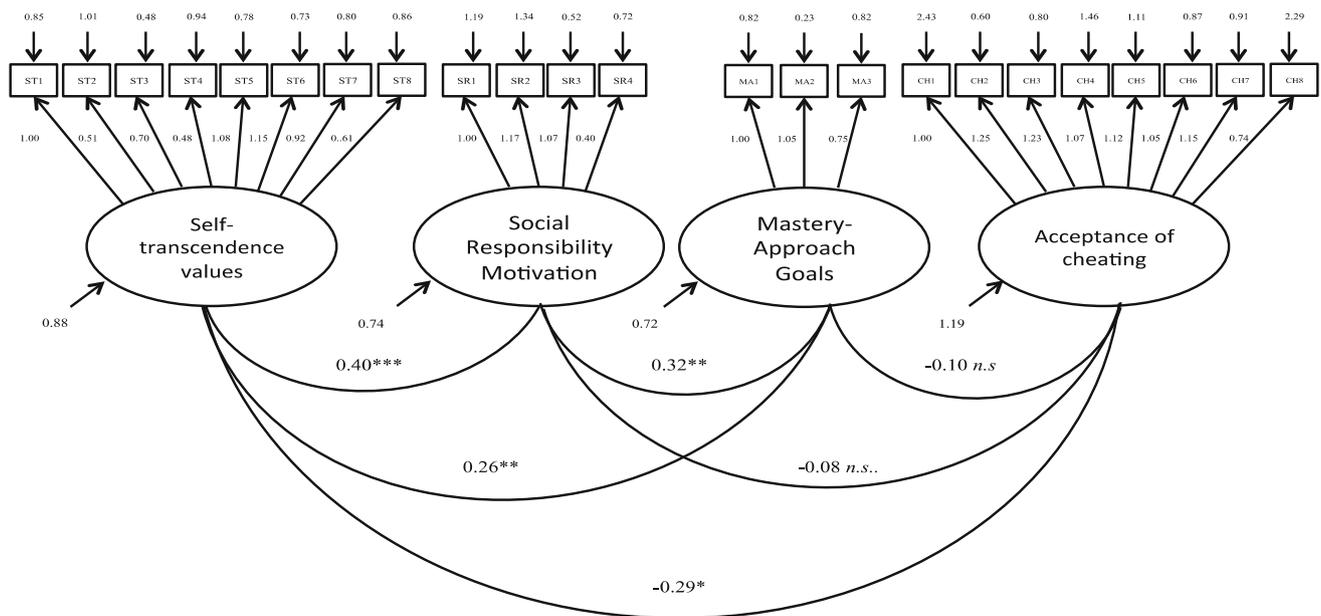


Fig. 3 Measurement model. All factor loadings have $p \leq .001$

To test our second hypothesis of a three-step indirect path between self-transcendence value adherence and acceptance of cheating (self-transcendence—motivation to study out of social responsibility—mastery-approach achievement goal adoption—less acceptance of cheating), analyses were carried out using Hayes' (2013) Process macro, model 6, which caters for multi-step indirect models with sequential mediators. As preliminary regression analyses with all model terms included revealed the presence of one outlier (Studentized deleted residual = 3.27, Dfit = 0.33) this case was removed for these analyses. A first model was run including self-transcendence values as independent variable, social responsibility study motivation and mastery-approach goals as sequential mediators and acceptance of cheating behaviors as dependent variable, with motivation to study to gain social approval and gender as statistical controls. Results revealed that self-transcendence value adherence did in fact positively predict social responsibility driven study motivation, $b = 0.43$, $F(1, 125) = 8.18$, $p < .01$, which positively predicted mastery-approach goal adoption, $b = 0.34$, $F(1, 124) = 10.37$, $p < .01$. In turn mastery-approach goal adoption negatively predicted acceptance of cheating, $b = -0.29$, $F(1, 123) = 5.06$, $p < .05$. In this model neither the direct effect, $b = -0.38$, $F(1, 123) = 1.25$, $n.s.$, nor the total effect, $b = -0.41$, $F(1, 125) = 2.28$, $n.s.$, of self-transcendence on acceptance of cheating were significant. However, the indirect effect was significant, albeit small, $b = -0.03$, $SE. = 0.02$, $CI (-0.10: -0.004)$. Calculating the indirect effect size using the method recommended by Kenny (2014), namely the product of partial correlations, controlling for covariates, for each stage of the indirect

effect, revealed an effect size of $r = 0.02$. No other indirect paths were significant. Results are presented in Fig. 4.

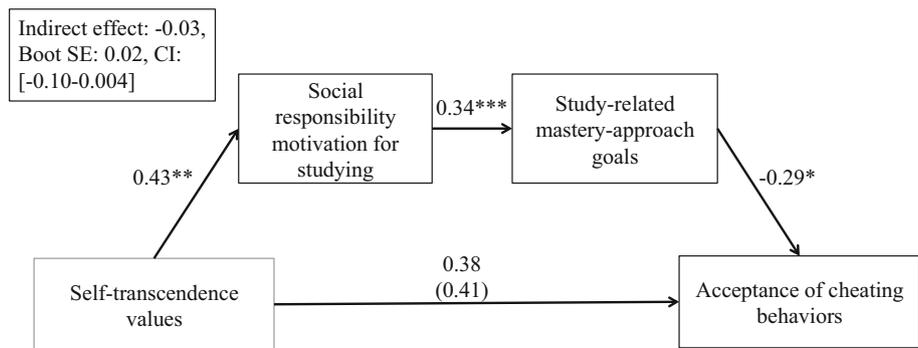
As neither social desirability nor gender had any significant predictive power at any of the stages of the model, we ran three more models, eliminating one, then the other, then both. This revealed that motivation to study to gain social approval, despite having a non-significant predictive effect on any variables, was sufficient to suppress the direct and total effects as in the model in which it alone was removed, both the direct effect became significant, $b = -0.51$, $F(1, 124) = 4.93$, $p < .05$, and the total effect, $b = -0.53$, $F(1, 126) = 4.88$, $p < .05$. The indirect effect remained unchanged in this model, $b = -0.03$, $SE. = 0.02$, $CI (-0.10: -0.003)$ and in that in which both statistical controls were removed.¹

Discussion

These results firstly confirm hypothesis one, with self-transcendence value adherence effectively predicting less acceptance of cheating behaviors, when controlling for gender and motivation to study to gain social approval. We also see that one motivational pathway linking more general life values of self-transcendence to more specific attitudes towards cheating in academic course work passes via social-responsibility induced motivation to study and, following on from this, mastery-approach goals. These

¹ In the original study material, in addition to testing the path model, there were three experimental conditions, which did not impact the dependent variable. They were therefore not considered in the analyses. Adding them as control variables does not change the path model result.

Fig. 4 Study 1: indirect effect of self-transcendence value endorsement on acceptance of cheating via social responsibility motivations for studying and mastery-approach goals. All values represent unstandardized coefficients. * $p < .05$



latter goals in turn predict lower levels of acceptance of cheating. This indicates that the more students adhere to self-transcendence values of universalism and benevolence, the more they feel a sense of responsibility towards the society around them and want to contribute to its betterment. This social motivation, in turn, promotes the adoption of mastery-approach goals denoting the desire to truly master course material and this enhances the attitudinal rejection of academically dishonest methods of succeeding.²

We also see in this study a marginal effect of gender on acceptance of cheating with women showing lower levels of acceptance of cheating than men. This result is in line with a number of research findings on cheating (Whitley et al. 1999) that show reasonably consistently that if gender differences emerge, women tend to be less pro-cheating than men.

However, some limitations need addressing. Firstly, even though the indirect effect is present and is robust to a control for motivation to study to gain social approval, it is small. Nevertheless, Kenny (2014) argues that, as an indirect effect is the product of two effects, the usual Cohen (1988) standards should be squared. Following Kenny’s (2014) logic, effect size standards for a two-stage indirect effect should be cubed, in other words, 0.001 for a small effect, 0.027 for a medium effect and 0.125 for a large effect. In the light of this, an effect size of 0.02 although still small, ceases to be potentially insignificant.

Secondly, the direct and total effects of self-transcendence values in the indirect model on acceptance of cheating are fragile and easily suppressed by the presence of motivation to study to gain social approval. According to Kenny (2014) and Kenny and Judd (2014), the tests of the direct and total effects have relatively low power when compared to the indirect effect, which explains why the indirect effect may be significant when the direct effect is not, as we see in our first model. This point is reinforced by

Hayes’ (2009, p. 414) assertion that X can have an indirect effect on Y even when a direct link between the two is absent as “the total effect is the sum of many different paths of influence, direct and indirect, not all of which may be a part of the model”. Accordingly, as recommended also by Hayes (2013), we steer clear of discussion of mediation, thinking in terms of an indirect effect instead. The fact that the inclusion of motivation to study to gain social approval can suppress the ostensibly much larger direct effect, whilst leaving the indirect effect untouched, also argues for the value of measuring indirect effects, which may even have the power to capture more subtle effects in areas in which social desirability concerns are inevitably present.

Nevertheless, if study one allows us to affirm the existence of a negative relation between self-transcendence value adherence and acceptance of cheating and a potential motivational path linking this higher order life value to context-specific academic dishonesty, it leaves unanswered the question of the potential of social context to sway this base relationship. Yet, this is an important question as research has shown the importance of the interaction of personal values with social context (Treviño 1986) and the sheer number of business, political and academic scandals revealed over the last few years (Tillman and Indergaard 2008) has incited reflections on the degree to which cheating is a norm in current society (Callahan 2004; Hutton 2009), characterized as it is by strong neo-liberal tendencies (Kasser et al. 2007; Pulfrey and Butera 2013).

From a scientific standpoint, Schwartz’ (2007a) macro-level, cross-cultural analysis of individual-level value correlates with different types of economic systems establishes a link between neo-liberalism at society level and aggregate adherence to self-enhancement values by citizens. Schwartz worked with Hall and Gingrich’s (2004) types of capitalism axis, which classifies the way corporate coordination with other societal actors is structured, opposing competitive, free markets (market coordination) with more structured coordination characterized by greater cooperation, regulation, power and information sharing (strategic coordination).

² Empirical material and data samples may be accessed by contacting the first author.

Schwartz' results revealed a significant positive correlation between the degree of competitive, market coordination in an economy and individual-level (aggregated to country level) self-enhancement value adherence. On the contrary, aggregated individual-level self-transcendence value adherence correlated with cooperative, strategic coordination (Schwartz 2007a).

As individual level self-enhancement value adherence has been shown to predict academic cheating, this begs the question as to whether exposure to representations of society as competitive, self-serving and power-driven, namely values which translate a neo-liberal societal orientation (Schwartz 2007a), has the power to erode the core negative relation between self-transcendence value adherence and acceptance of cheating.

Study 2

Consequently, the aim of study two was twofold: firstly to carry out a replication test of the indirect path effect presented in study one and, secondly, to assess the importance of societal context in the self-transcendence to acceptance of cheating relationship. To fulfill the latter aim, we tested hypothesis three, whereby exposure to a representation of society as more driven in its structures and institutions by self-enhancement values will erode the negative relationship between individual-level adherence to self-transcendence values.

Methods

Procedure

A visiting researcher informed a class of third-year students in the same management school in which study one took place that the aim of the study they were invited to participate in was to find out about their opinions about their life and work. They voluntarily completed a questionnaire during their economics class. The questionnaire started with the same values questionnaire as in Study 1, after which figured an experimental induction featuring three conditions. Following this came the scales of social responsibility motivation to study (Schuyt et al. 2010), motivation to study to gain social approval, mastery-approach goals and acceptance of cheating. Participants were randomly assigned to conditions. The questionnaires for both studies were pre-sorted, systematically mingling conditions 1, 2 and 3 before distribution in class. Students filled in the questionnaire, then were thanked for participating and debriefed.

Experimental instructions

The experimental part of the study consisted of three conditions: a description of an individual-oriented “self-enhancement” society ($N = 42$), a description of a group-oriented “self-transcendence” society ($N = 42$) and a control condition with no society description in it ($N = 38$). The aim of the second condition was to render salient the notion of society expressing alternative values to those of a neo-liberal one and the third condition was intended to create a “pure” control condition without any possibility of value-priming, as it was considered that any text might be likely to render salient certain values above others and hence obviate the necessary neutrality of the condition. In the two value-driven society conditions, participants were asked to read an extract from a lecture ostensibly given to business school students by a Nobel prize winner in Economic Sciences, which described to students the society their studies were preparing them for.

As the market coordination end of Hall and Gingrich's (2004) types of capitalism axis can be equated with neo-liberal economic policy, defined as support for market liberalism (Larner 2000), characteristics of the “self-enhancement” driven society were drawn from peer-reviewed texts presenting neo-liberal ideology, policies and structures (Beck 1999; Clarke 2004; Ericson et al. 2000; Larner 2000; Larner and Craig 2002; Rose 1993) in addition to Hall and Gingrich's (2004) core description. Giacalone and Thompson (2006) pit what they term the organization centered worldview (OCW), which closely reflects the neo-liberal, self-enhancement focus, against what they term a human centered worldview (HWV), characterized as an economy that goes beyond money, embracing physical as well as social wellbeing as necessary economic and business goals, reflecting closely the concretization of collective and, more specifically, self-transcendence values. Hence, characteristics of the “self-transcendence” driven society were drawn from Giacalone and Thompson's (2006) human centered worldview as well as Hall and Gingrich's (2004) description of strategic coordination.

In the self-enhancement society condition, students read the following text:

Competitive market. The society your studies are preparing you for is a market, which functions through competition. Economic efficiency and consumption are central – your wellbeing is enhanced by having things. The accumulation of material wealth, status and consequently power is a worthy objective. You need to think about your individual needs and how to gain a competitive advantage in life. You are free to choose what you buy and to decide what you want to achieve in your life. For companies, financial

accountability and technical rationality are paramount: profit is the goal and the end justifies the means. Prioritizing corporate interests helps society as the wealth trickles down to create a healthy economy. Human resources are valued and rewarded to the extent that they advance company interests. As Charles Darwin said, “In the struggle for survival, the fittest win out at the expense of their rivals”.

In the self-transcendence society condition participants were given the same instructions and read the following text:

Cooperative community. The society your studies are preparing you for is a community, which functions through cooperation. Non-financial, human outcomes are central – your wellbeing is enhanced by self-actualization – and the generation of human happiness and life satisfaction, altruism and transcendence is a worthy objective. You need to balance individual and community needs across generations, invest in the future and focus on living life with meaning. For companies, physical, social well-being, quality of life and the well-being of the broader society are paramount; the betterment of people, society and the ecological system is the goal and how you act at work counts as much as the outcome. Business is there for the good of all involved, but also to serve humanity and advance the interests of all humankind. As Martin Luther King said, “We may have all come on different ships, but we’re in the same boat now”.

To ensure participants had read the text, immediately following it a control question asked them to list the three most important characteristics of the society described by the Nobel Laureate. Participants in the two experimental conditions who had not replied to the control question with at least one characteristic of the society portrayed in the text were excluded from analyses. This left 100 participants, 31 in the self-enhancement society condition, 31 in the self-transcendence society condition and the original 38 in the control condition.

Participants were assured in writing that the questionnaires were anonymous and that all information provided was treated confidentially and the visiting researcher was not familiar to the students. As classroom conditions encouraged individual work with no overlooking of neighbors’ papers, *and* students were reminded at the beginning of the experiment that individual opinions were essential to ensure scientific accuracy, students simply went at their own pace individually filling in the questionnaire, handing it in when finished and getting on with something else while waiting for others to finish. Post-

experimental discussion with the students indicated that they were not aware during the experiment of having different versions of the questionnaire. Participants were debriefed at their next class.

Measures

Values

Students’ individual values were measured using the same adapted version of the Schwartz Portrait Values Questionnaire items (Schwartz et al. 2001). As before, the four value types were included: self-enhancement ($\alpha = 0.67$); self-transcendence ($\alpha = 0.82$); open to change ($\alpha = 0.83$); conservation ($\alpha = 0.61$), and a relative value priority score for self-transcendence value adherence was worked out (Schwartz 2006).

Social responsibility motivation to study

The same scale of social responsibility motivation to study (Schuyt et al. 2010) was used ($\alpha = 0.69$).

Motivation to study to gain social approval

We included the measure of motivation to study to gain social approval ($\alpha = 0.89$) as a control.

Mastery-approach goals

Mastery-approach goals were measured with the same scale as in study 1 ($\alpha = 0.70$).

Acceptance of cheating

The same scale of acceptance of cheating was used as in Study 1 ($\alpha = 0.91$). Descriptive statistics are presented in Table 3.

Results

In order to replicate the findings of Study 1, we firstly ran the same indirect path model (Hayes 2013) as used in study one. The model once again included the scale of relative adherence to self-transcendence values, social responsibility motivation to study, mastery-approach goal adoption, acceptance of cheating, with motivation to study to gain social approval and gender included as statistical controls. In addition, the two contrasts for the three experimental conditions were also included as statistical control variables. The coding for these contrasts is described in full in the following section, which focuses on the interaction results. As preliminary regression

Table 3 Study 2 (N = 100): descriptive statistics and zero-order correlations among variables

	M	SD	Range	(2)	(3)	(4)	(5)
Self-transcendence values (1)	0.18	0.48	−1.17–1.30	.21*	.11	−.21	−.09
Social responsibility (2)	5.58	0.90	2.00–7.00	–	.33**	−.10	.37***
Mastery-approach goals (3)	5.87	0.81	4.00–7.00	–	–	−.27**	.07
Acceptance of cheating (4)	2.60	1.21	1.00–5.75	–	–	–	.09
Motivation to study to gain social approval (5)	5.01	1.32	1.00–7.00	–	–	–	–

* $p < .05$; ** $p < .01$; *** $p \leq .001$

analyses with all model terms included revealed the presence of one outlier (Studentized deleted residual = 2.93, Dfit = 0.17) this case was removed for analyses. Consistent with Study 1, results again revealed that self-transcendence value adherence did in fact positively predict social responsibility driven study motivation, $b = 0.46$, $F(1, 94) = 5.06$, $p < .05$, which positively predicted mastery-approach goal adoption, $b = 0.31$, $F(1, 93) = 5.76$, $p < .015$. Mastery-approach goal adoption negatively predicted acceptance of cheating, $b = -0.40$, $F(1, 92) = 5.06$, $p < .05$. In this model the total effect of self-transcendence on acceptance of cheating was marginal, $b = -0.55$, $F(1, 94) = 2.62$, $p < .11$, and the direct effect not significant, $b = -0.41$, $F(1, 92) = 1.39$, $n.s.$ The indirect effect was small but significant, $b = -0.06$, $SE = 0.05$, $CI(-0.21; -0.01)$. Calculating the indirect effect size using the method recommended by Kenny (2014) revealed an effect size of $r = 0.02$. There was a main effect of gender on social responsibility motivation to study, $b = -0.38$, $F(1, 92) = 5.43$, $p < .05$, with women showing less social responsibility motivation than men and also on acceptance of cheating, $b = -0.60$, $F(1, 92) = 5.02$, $p < .05$, with women showing less acceptance of cheating than men.

Secondly, an interaction analysis was run using Hayes (2013) Process model number 1 to examine whether the negative relation between self-transcendence value adherence and the acceptance of cheating would be significantly attenuated in the self-enhancement society description condition as compared to the control condition. Our regression model included self-transcendence value adherence, and two dummy-coded contrasts with the control condition as the reference condition coded 0 in both contrasts. In the first contrast, the *self-enhancement society* contrast, the self-enhancement society condition was coded 1 and the other two conditions coded 0, and in the second contrast, the *self-transcendence society* contrast the self-transcendence society condition was coded 1 and the other two conditions coded 0. Motivation to study to gain social approval and gender were once again included in the model as statistical controls along with the interactions between the two contrasts and self-transcendence values, making a total of seven terms.

Neither the main effect of the first *self-enhancement society* contrast nor that of the second *self-transcendence*

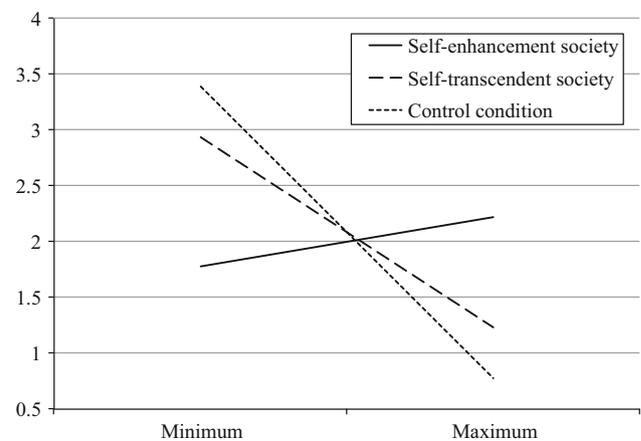


Fig. 5 Study 2: interaction of self-enhancement society and control conditions with adherence to self-transcendence individual values on acceptance of cheating

society contrast on the acceptance of cheating were significant, $b = -0.16$, $F(1, 92) = 0.28$, $n.s.$ and $b = -0.02$, $F(1, 92) = 0.01$, $n.s.$ There was a main effect of self-transcendence value adherence on acceptance of cheating, $b = -1.06$, $F(1, 92) = 7.56$, $p < .01$. Furthermore, the predicted interaction between self-transcendence value adherence and the first *self-enhancement society* contrast (self-enhancement society condition vs. control condition) was significant, $b = 1.24$, $F(1, 92) = 4.45$, $p < .05$. The R^2 increase due to the interaction was significant, $R^2 \Delta = 0.04$, $F = 4.46$, $p < .05$. Simple effects revealed that self-transcendence value adherence negatively predicted acceptance of cheating in the control condition, $b = -1.06$, $F(1, 92) = 7.56$, $p < .01$, but this relation was non-significant in the self-enhancement society condition, $b = 0.17$, $F(1, 92) = 0.17$, $n.s.$ The second *self-transcendence society* contrast (self-transcendence society condition vs. control condition) was not significant, $b = 0.37$, $F(1, 92) = 0.31$, $n.s.$ Results are presented in Fig. 5.

Discussion

Results of Study 2 firstly replicate the indirect path findings of Study 1, showing that adherence to self-transcendence

values tends to positively predict social responsibility related study motivation, which in turn predicts mastery-approach goal adoption, which, in its turn, negatively predicts acceptance of cheating. This indirect effect reaches significance even when controlling for experimental condition, motivation to study to gain social approval and gender.

Secondly, they show that the portrayal of a society as more driven in its structures and institutions by self-enhancement values significantly attenuated the negative relationship between individual-level adherence to self-transcendence values and acceptance of cheating. Whilst in the self-transcendence society and control conditions combined, self-transcendence value adherence negatively predicted the acceptance of cheating, in the self-enhancement society condition, this relation ceased to be significant. Thus it would seem that exposure to the mere portrayal of enacted self-enhancement values in a societal context has the potential to significantly erode the negative relation between self-transcendent values and acceptance of cheating.

But what about the small indirect effect size? Although Kenny (2014) argues that a small indirect effect even with just one intermediary variable is a likely occurrence, we carried out post hoc analyses to test whether the overall path was potentially less strong because of interactions between one or more of the three steps and the experimental conditions. As no pre-established models exist for conditional indirect effects of a model with two intervening variables, we worked in two stages, testing first the conditional indirect effects of the relation between self-transcendence and mastery-approach goals via social responsibility motivation and secondly those of the relation between social responsibility motivation to study (controlling for self-transcendence in one model and using the residual of the regression of social responsibility on self-transcendence in another) and acceptance of cheating via mastery-approach goals. Results revealed a marginal interaction between the first *self-enhancement society* contrast and social responsibility motivation in the prediction of mastery-approach goal adoption, $b = 0.36$, $F(1, 91) = 3.03$, $p < .09$. A breakdown of this conditional indirect effect revealed a significant positive relation between self-transcendence values and mastery-approach goal adoption via social responsibility motivation in the *self-enhancement society* condition, $b = 0.27$, $SE = 0.15$, $CI (0.05: 0.68)$, but a non-significant positive relation in the *control* condition, $b = -0.09$, $SE = 0.09$, $CI (-0.02: 0.36)$. A similar pattern appeared for the relation between social responsibility motivation and acceptance of cheating via mastery-approach goals, in other words a negative relation between social responsibility motivation and acceptance of cheating via mastery-approach goal adoption in the *self-enhancement society* condition, $b = -0.21$, $SE = 0.12$, $CI (0.04: 0.52)$, but a non-significant positive

relation in the *control* condition, $b = -0.07$, $SE = 0.08$, $CI (-0.02: 0.29)$. Tests with the second *self-transcendence society* contrast revealed no significant conditional indirect effects.

This result is of double interest as it not only provides a potential explanation for the small indirect effect size, since the effect is in part dependent on the experimental condition, but also, following the logic of inconsistent mediation (Kenny 2014) shows the potential existence of a form of inconsistent *moderated* mediation. Indeed, while the self-enhancement society condition erodes the direct, negative relation between self-transcendence values and acceptance of cheating, it would seem to enhance the indirect negative relation between the same two variables. Why might this be? It is possible that people adhering to self-transcendence values within a resolutely self-enhancing societal context experience moral ambivalence. On the one hand, they might be subject to a generalized normative pressure to relax moral imperatives and go with the flow, but, on the other, the very salience of self-enhancing principles and mores might inspire reactance. In this case, the motivational equivalent of self-transcendent life values, namely social responsibility motivations for studying, could be more likely to predict a determination to act that expresses itself in the academic arena by a desire to master course content. Would Gandhi have devoted himself so assiduously to his law studies or Martin Luther King to his first degree in Sociology, if societal conditions had not shown them the need to act?

General discussion

The aim of this research was to explore territory that is as yet surprisingly undiscovered in research on cheating, namely when and why people *don't* buy into cheating as a means to succeed. Results of two studies working with the Schwartz' (1992) quasi-circumplex model of individual values, revealed firstly that adherence to self-transcendence values of universalism and benevolence negatively predicted the acceptance of cheating (Study 1). Secondly, we saw that one way in which higher-order life goals of self-transcendence are linked to more negative attitudes towards cheating was via a two-step motivational path including firstly social-responsibility inspired motivation to study, in which studying is engaged in as a means to enable the individual to contribute to the betterment of society, and, secondly, mastery-approach achievement goal adoption in studying, in which the individual's goal is to fully master the course material studied (Studies 1 and 2). A third finding was that this relation was moderated by the societal context, with exposure to the portrayal of society as characterized by practices reflecting the cultural level

equivalent of self-enhancement values of power and achievement, namely neo-liberal values of competition, self-interest and material gain (Kasser et al. 2007; Pulfrey and Butera 2013; Schwartz 2007a), as opposed to a control condition and self-transcendent values of universalism and benevolence rendering the negative relation between self-transcendence values and the acceptance of cheating non-significant.

These results contribute in a number of ways to the literatures on values, morality, motivation and cheating. Firstly, the present research is the first to show that self-transcendence indeed negatively predicts the acceptance of academic cheating behaviors; This root finding is fully compatible with values research by Schwartz (2007b) and Vaclair (2009) that shows that self-transcendent values of benevolence and universalism are ranked as among the most moral values in a range of cultural contexts. In addition to this, the fact that self-transcendence values can be classified both as collectively-oriented values that prioritize social relations (Schwartz 2006) and also as egalitarian values that generate socially responsible behavior via the recognition that others are moral equals who share basic human interests (Schwartz 1999), indicates that they are likely to generate more ethical attitudes in school.

Our second finding that self-transcendence values predict higher levels of motivation to study out of social responsibility concerns, which in turn predicts mastery-approach goal adoption, which itself predicts less acceptance of cheating behaviors, provides a new contribution to the literature on motivation. Firstly, it ties in neatly with work by Duriez et al. (2007), Grouzet et al. (2005), Vansteenkiste et al. (2006), to name but a few, which presents numerous results showing the potentially positive motivational and social outcomes of adherence to intrinsic life aspirations and intrinsic goal framing in school. In similar vein to this research work, the results of the two studies show that adherence to self-transcendence values, themselves comparable to intrinsic life aspirations, actually predicts social-responsibility study motivation, in other words, reasons for studying that are related to long-term intrinsic goals. These in turn predict adoption of mastery-approach achievement goals which have been shown to have adaptive learning outcomes (Elliot and McGregor 2001) and which, in our studies as in others (Jordan 2001; Vansteenkiste et al. 2010), negatively predict the acceptance of cheating. This integrated, hierarchical model of more general to more specific motivations that collectively constitute antecedents of anti-cheating attitudes, in providing a deeper understanding of what drives the refusal to cheat, can also make a contribution towards the development of ways of tackling cheating that dig deeper than the surface measures of regulations and surveillance, providing

a springboard for values and motivationally-driven methods of socialization and learning.

In addition, the sequential indirect effect presented in studies one and two indicates another area in which the social goals underlying achievement goals are worthy of attention in motivation research (Anderman and Anderman 1999; Urdan and Maehr 1995, Urdan and Mestas 2006) as they may play a significant role in linking specific contextual study goals to more overarching life issues, and also in linking present attitudes and motivations to future aspirations. It also indicates that student awareness of the larger society in which they will be acting as adult social agents indeed counts in the relationship between individual values and cheating in school.

Furthermore, the present results contribute to the literature on morality, confirming on an individual level the sociological perspective that morality functions to maintain solidarity and engender altruism and just treatment (Gouldner 1971), as these are precisely the features that characterize self-transcendence values and they are also the elements of the social situation eroded by cheating behavior. In this respect the negative relation between self-transcendence values and acceptance of cheating illustrates the aforementioned definition of morality as “prescriptive judgments of justice, rights and welfare pertaining to how people ought to relate to each other” (Turiel 1983, p. 3) and the habitual operationalization of it as engagement in behavior that helps rather than harms and fair play (Graham et al. 2011). Bearing in mind the findings of Doering (2008) that self-transcendence values are the highest ranked values among younger children, the negative relation between self-transcendence values and condoning of cheating also provides an explanation for Gino and Desai’s (2012) findings that childhood memories increase pro-social behavior.

Our third finding that the negative relation between self-transcendence and acceptance of cheating behaviors is sensitive to normative and social context, disappearing in contexts that promote self-enhancement inspired social practices, supports work by Maio, Pakizeh, Cheung and Rees (2009) that shows that priming certain sets of values causes a decrease in motivationally incompatible values and associated attitudes. More generally, it goes with the claims of Bandura (2002) and Berman (1997) that moral decisions are the result of an interactive process between the individual and their social context. In direct relation to this, our third finding also provides evidence of another potential cost of a neo-liberal societal ideology on individual motivational functioning (see Kasser et al. 2007) and may go some way to explaining the high rates of cheating (see Perez-Peña 2012) that characterize today’s educational arena.

At this point, it is interesting to note that the social context evoked was directly linked to the students' future careers not their present situation at school. This fits well with research on cheating in higher education (Davy et al. 2007; Harding et al. 2004; Newstead et al. 1996) that shows that cheating is viewed in a future-oriented, instrumental light by students, in that they tend to justify it by the perceived need to obtain professional and material success later in their professional life.

On an applied level, the results of both studies provide generalized and quantitative support for qualitative research on honor code institutions (McCabe et al. 1999, 2001, 2002), showing firstly that adherence to self-transcendence values, values that can be argued to underpin honor codes, do indeed negatively predict the condoning of cheating and acceptance of specific acts of academic dishonesty, and secondly that social context cues do count, interacting with core values held by students to maintain or erode their rejection of cheating in school.

Inevitably, these studies present some limitations. As the manipulation of societal context as well as the measurement of social responsibility revolve around the link between the individual and macro-level society, we have stayed with a studies-level analysis of cheating attitudes, not including a measure of cheating behavior on a specific task; as such a specifically micro-level measurement of cheating is likely to be confounded by numerous other proximal individual and contextual factors. Furthermore, our control condition in Study 2 was not absolutely parallel to the experimental conditions, as participants did not read any text. The control questions following the societal descriptions in the two experimental conditions guaranteed that attention was paid to the texts and that certain values were likely to be activated, but did not measure an individual value transformation. In addition, we have measured individuals' value priorities and attitudes towards cheating. Although Whitley (1998) has shown reliable links between cheating attitudes and behavior, future research could profitably manipulate individual value-salience and/or social responsibility in a range of contexts in relation to a range of unethical attitudes and behaviors.

Related to this point, we must note again the small effect sizes. However, turning this point around, we may be struck by the fact that with such relatively minimal interventions, effects are still obtained. This is indeed promising for future research, which could profitably address how the communication of self-enhancing values and the presence of self-enhancing practices in a classroom context impact the core negative self-transcendence–cheating relationship. Developmental, longitudinal studies might be particularly important in this domain as research by Doering (2008) has shown that young children's primary values tend to be those of self-transcendence. How does this base-line orientation evolve in

the presence of academic environments that promote self-enhancing values via practices and structures? Such research would also extend this work out from the population of management students into other academic arenas. In addition, more research on social responsibility motivation to study is warranted as, whilst value transformation is a more long-term process (Schwartz 1992), motivational forces are more malleable and subject to contextual variation (Elliot and Moller 2003).

However, at a time when politicians (Glassman et al. 2011), economists (Flassbeck 2012; Skidelsky and Skidelsky 2012; Stiglitz 2012; Zingales 2012), political scientists (Wade 2011) and even bankers (Hester 2012) are looking to core values as the mainspring of fundamental systemic change and cultural renewal of social mores, we believe that a unified values and motivational approach to understanding why students *don't* cheat has something to offer. Education creates the citizens of the future. As such, following in the footsteps of the business practices adopted by more enlightened organizations, it would do well to address questions not just of academic excellence but of moral integrity too.

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Compliance with ethical standards

Conflict of interest The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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