The Authentic Moral Self: Dynamic Interplay between Perceived Authenticity and Moral Behaviors in the Workplace

Hong Zhang*, Kaiyuan Chen†, Rebecca Schlegel‡, Joshua Hicks‡ and Changkai Chen*

Authentic experiences are deeply tied to human existential concerns and have implications for psychological well-being and optimal functioning. Importantly, previous studies suggest a mutually reinforcing relationship between authenticity and moral behaviors. The current research aims to extend this line of research to work-specific contexts. We found, among two U.S. samples that (a) perceiving oneself as having behaved morally prompted feelings of authenticity at work (Study 1), (b) people who tried to be authentic (vs. be realistic or rational) were less willing to engage in immoral behaviors at workplace (Study 2), and among a Chinese sample that (c) daily fluctuations in morality and authenticity covaried with each other, both contributing positively to job satisfaction and meaning in work (Study 3). Together, the findings demonstrate a bidirectional relationship between moral behaviors and authenticity in the workplace.

Keywords: Authenticity at work; moral behaviors; well-being

Being authentic entails knowing who one truly is and behaving in accord with that knowledge. As a recurring theme in existential philosophy, authenticity is widely regarded as a virtue (e.g., Horney, 1950; Kierkegaard, 1983; Rogers, 1959; Sartre, 1943/1956). Empirical psychology has recently demonstrated a link between authenticity and a variety of positive outcomes (e.g., Harter, 2002; Heppner et al., 2008; Sheldon, Ryan, Rawsthorne, & Ilardi, 1997). In organizational settings, for example, authenticity has been studied in terms of functional leadership styles (e.g., Gardner, Avolio, & Walumbwa, 2005; Luthans & Avolio, 2003; Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008), or as a state of subjective experience that occurs within work-specific contexts (Gagné & Deci, 2005; Lopez & Ramos, 2016; Ménard & Brunet, 2011; Metin, Taris, Peeters, van Beek, & van den Bosch, 2016; van den Bosch & Taris, 2014b). In both cases, authenticity remains a robust predictor of positive outcomes in workplace, including psychological well-being of oneself or coworkers (Ménard & Brunet, 2011; Yagil & Medler-Liraz, 2014), work engagement (Metin et al., 2016; 6; Schmader & Sedikides, 2017), and job performance (van den Bosch & Taris, 2014b). The current research followed the latter approach, studying authenticity at work as a sense of being able to live up to and express the “core” attributes of true self in workplaces. This perspective is implicit in various theories of authenticity (e.g., the authentic living and self-alienation dimensions as proposed by Wood et al., 2008; also see van den Bosch & Taris, 2014a).

Noticeably, recent research has linked perceived authenticity to morality. For example, people firmly believe that true selves are in essence, morally good (De Frietas, Cikara, Grossman, & Schlegel, 2017; Newman, Bloom, & Knobe, 2014; Newman, De Freitas, & Knobe, 2015). This lay belief has implications for both feelings of authenticity and moral behaviors. For instance, emerging evidence (Christy, Seto, Schlegel, Vess, & Hicks, 2016; Kim, Christy, Rivera, Schlegel, & Hicks, 2017) suggests a bidirectional causal relationship between moral behaviors and authenticity. That is, individuals feel less authentic to the extent they perceive their behaviors as deviating from being morally good (Christy et al., 2016). They are also less willing to engage in morally questionable behaviors when they are trying to be authentic (i.e., aiming to follow their true selves, Kim et al., 2017).

Research has yet to examine the relationship between experiences of authenticity and moral behaviors within work-specific contexts (except for Knoll, Lord, Petersen & Weigelt, 2016). This gap in knowledge is worth noting, because actions or decisions in work settings can be of complex ethical implications (e.g., Clegg, Kornberger, & Rhodes, 2007; Sorbet, 1955; Vallini, 2007). For instance, a manager may face the tradeoff between maximizing corporate benefit (which is partially implied in his job-specific norms) and protecting the environment (which...
is demanded by broader societal norms). Moral decision-making and moral behavior therefore may reflect the predominately preferences of societal norms over certain job-specific norms, with little say of one’s true self. It is thus important to understand how moral (versus immoral) behaviors and authenticity are related in organizational settings. We conducted three studies (two experimental, and one using daily diary methods) to examine this question. Based on previous research (Christy et al., 2016; Kim, et al., 2017), we hypothesized that authenticity and moral behaviors should reinforce each other in work settings. As long as employees behave in an authentic way, they would be more likely to behave morally, and vice versa.

The Morally Good True Self
Regardless of whether true selves are ontologically real, there is a widespread belief in true selves that appears to derive from psychological realism and the idea that people feel accountable for their actions. As self, true self operates as an inner compass, directing people away from immoral behaviors.

The idea that the self directs judgments and behaviors is prevalent in both classical theories (e.g., Higgins, 1987; see also Giesler & Schlegel, 2011). The way people think about “true selves” seems to mirror the ways that people conceive of the “essences” of other object categories such as “lions” or “trees”. Specifically, people believe both true selves and the essences to be composed of a set of immutable attributes that give rise to observable features (Christy, Schlegel, & Cimpian, 2017; De Freitas et al., 2017; Strohminger, Krohe & Newman, 2017). Importantly, when the essence of an object changes, people no longer perceived it as the same thing it once was. For example, if a lion loses its essence, it is no longer a lion.

Efforts to be authentic (i.e., follow one’s true selves) are to refrain from engaging in morally questionable behaviors. For instance, Kim and his colleagues (2017) manipulated the perceived moral level of an ethical conduct (e.g., on one’s career, or social relationship). While these efforts may help people to behave less morally, they may also lead people to feel less authentic, which in turn may lead people to engage in even more immoral behaviors.

In sum, previous research suggests a bidirectional relationship between moral behaviors and authenticity. The current study thereby examines whether moral behaviors and authenticity are bidirectionally related among samples of people with full-time jobs. Our focus is on the generalizability of this relationship in work-related contexts. Therefore, we did not examine or compare to non-work-related contexts where the relationship between moral behaviors and authenticity has been established (Christy et al., 2016; Kim et al., 2017). We examine both sides of this potentially bidirectional relationship. On the one side, the belief in morally good true selves implies that people should experience lower levels of authenticity at work (i.e., they believe that they are not behaving as deviating from being morally good. Unlike Knoll and colleagues (2016), our focus here is on authenticity as a state of subjective experience (van den Bosch & Taris, 2014a, 2014b) as opposed to authenticity as dispositional trait. On the other side, if following the true self is to be morally good, then people trying to be authentic should avoid behaving immorally at workplace.

We conducted three studies to examine the proposed bidirectional relationship between moral behaviors and authenticity at work. All studies were conducted with IRB approval (Studies 1 and 2 from Texas A&M University, Study 3 from both Texas A&M and people were enrolled at the University). We have also obtained informed consent from all the participants. The first two studies made use of online samples from North America. Study 1 employed a between-subjects design, whereas Study 2 and Study 3 employed a within-subject experimental design. Consistent with previous research (Christy et al., 2016), we manipulated the perceived moral level at work to the extent they perceived their workplace behaviors as moral. We also varied the perceived moral level at work to the extent they perceived their workplace behaviors as moral. We also varied the perceived moral level at work to the extent they perceived their workplace behaviors as moral.

Method
Participants
Two hundred and thirteen participants from the U.S. and Canada participated in the online survey on Amazon’s Mechanical Turk platform. Among them, one hundred and twenty-eight (51 women, 75 men) 25 years and younger (25 years and younger) and twenty-eight (51 women, 75 men) 45 years and older participated in the study. The mean age of the sample was 35.6 years (SD = 9.69). The highest level of education they received ranged from

Participants were asked to (a) report their daily (im)moral behaviors for five consecutive days (Study 1), (b) recall past (im)moral behaviors (Studies 2 and 3), or (c) engage in hypothetical moral behaviors (Study 3). To guide their decisions, we hypothetically described stimuli that they were generous (versus selfish, Study 4). Across the studies, thinking about behaving immorally negatively affected perceptions of their true selves.

Authenticity as a Moral Compass
While research has provided support that perceived (im)moral behaviors engender feelings of (in)authenticity, there is evidence showing that the relationship between moral behaviors and authenticity may be mediated by people’s tendency to engage in moral transgression (Kim et al., 2017). We contend that the belief in true selves, as a lay theory, may function as a moral compass, directing people away from immoral behaviors.

The expression of true self, in particular, the important role of self-concepts has been well-articulated (Jennings, Mitchell & Hannah, 2015). Research on moral identity, for instance, suggests that to the extent individuals’ self-concepts are defined by moral traits, they are more likely to engage in moral behaviors (Aquino & Reed, 2002; Reed & Aquino, 2003; Shao, Aquino, & Freeman, 2008; Winterich, Aquino, Mittal & Swartz, 2013). Similarly, under the belief that the true selves are morally good, individuals should be less likely to engage in morally questionable behaviors.

Indeed, researchers of Authentic Leadership Theory (Wilmoturn, et al., 2008) had argued that people cannot be “authentic”, without “complying with high standards of ethical conduct” (p. 94). Recent research (Kim, et al., 2017; Knoll et al., 2016) provided more empirical evidence that efforts to be authentic (i.e., follow one’s true selves) would reduce people’s tendency to commit immoral acts (Newman et al., 2014; Newman et al., 2015; Strohminger, 2017). Similar to the findings of previous research (Kim et al., 2017), we manipulated the perceived moral level at work to the extent they perceived their workplace behaviors as moral. We also varied the perceived moral level at work to the extent they perceived their workplace behaviors as moral.

For instance, Kim and his colleagues (2017) manipulated people’s decision-making strategies (i.e., trying to be authentic vs. thinking rationally or realistically) and found that efforts to be authentic (i.e., following one’s true selves) were less likely to commit immoral acts when they are acting authentic. However, she may think this is done merely to conform to social norms or to protect the firm’s interests in the long run. It is thus an empirical question whether the link between moral behaviors and authenticity hold true in workplace.

The current work thereby examines whether moral behaviors and authenticity are bidirectionally related among samples of people with full-time jobs. Our focus is on the generalizability of this relationship in work-related contexts. Therefore, we did not examine or compare to non-work-related contexts where the relationship between moral behaviors and authenticity has been established (Christy et al., 2016; Kim et al., 2017). We examine both sides of this potentially bidirectional relationship. On the one side, the belief in morally good true selves implies that people should experience lower levels of authenticity at work (i.e., they believe that they are not behaving as deviating from being morally good. Unlike Knoll and colleagues (2016), our focus here is on authenticity as a state of subjective experience (van den Bosch & Taris, 2014a, 2014b) as opposed to authenticity as dispositional trait. On the other side, if following the true self is to be morally good, then people trying to be authentic should avoid behaving immorally at workplace.

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high school graduate diploma or the equivalent (e.g., GED, 8.6%) to doctorate degree (16%, mean fell between associate degree and bachelor's degree). The sample size was determined by power analysis based on pre-specified analytical plans following the recommendations of Pocock (1977) and Lakens (2014). Specifically, we had originally planned to collect 256 participants. To save the labor and resources of the laboratory, we had planned to conduct a sequential interim analysis when half of the planned sample was collected. The results of interim analysis reached preset critical value so that we terminated data collection with the current sample. More detailed information on the analytical plans, materials, exclusion criteria and rules for terminating data collection are pre-registered and can be found at https://osf.io/bzxj/. A sensitivity analysis revealed that a sample size of 128 would be able to detect an effect size of $\eta^2 = .059$ or similar (with $\alpha = .05$, power = .80).

Procedure and Materials

The whole procedure was delivered via Qualtrics software. Participants were randomly assigned to one of the four conditions, and were asked to describe three ways they engaged in (a) “morally good behaviors at work (e.g., being honest with your supervisor or clients)” (the high-moral-behavior condition), (b) “morally questionable behaviors at work (e.g., being somewhat dishonest with your supervisors or clients)” (the low-moral-behavior condition), (c) “behaviors at work that contribute to the greater good (e.g., promoting the welfare of the greater community/contribution condition)”, or (d) “behaviors at work that do not contribute to the greater good (e.g., not promoting the welfare of society)” (the low-moral-contribution condition). All participants then completed a measure of perceived authenticity at work. At the end of the survey, participants completed a seriousness check item.

Measures

Authenticity at work

We assessed authenticity at work with the 12-item authenticity measure developed by van den Bosch and Taris (2014a). Three subscales: authentic living subscale assesses feelings of being authentic (e.g., “At work, I always stand by what I believe in”), self-alienation subscale assesses feelings of inauthenticity at workplace (e.g., “At work, I feel alienated”), and accepting external influence subscale measures the extent to which individuals feel that their behaviors are influenced by others (e.g., “At work, I feel the need to do what others expect me to”).

Discussions

Study 1 indicated that employees who recalled highly moral aspects of their behaviors at the workplace reported to be more authentic than those recalled less moral aspects of their behaviors. There was also a main effect of perceived moral type on perceived authenticity. However, this main effect was not of interest and appeared to be driven by the fact that the lack-of-good impact condition was more neutral than the low-moral-behavior condition. The interaction effect was non-significant. However, this null effect should be interpreted with caution given that the sample size was likely underpowered for detecting an interaction effect (Giner-Sorolla, 2013).

Studying 1 thereby established the causal role of perceived moral behaviors in feelings of authenticity at work. We then proceeded to test the reverse relationship in Study 2.

Results

We conducted a two-way ANOVA to examine the effects of perceived moral level and moral type on authenticity at work (Figure 1). As predicted, the analysis revealed a significant main effect of moral type, $F(1, 124) = 10.77$, $p < .001$, $\eta^2 = .080$. People who were instructed to recall highly moral aspects of their job reported a higher level of authenticity at work ($M = 5.57$, $SD = 1.04$) than those recalled aspects of their job that lower in morality ($M = 5.00$, $SD = 1.01$). In addition, there was also a significant main effect of moral type, $F(1, 124) = 9.44$, $p = .021$, $\eta^2 = .070$. People who were instructed to recall contributions to society reported a higher level of authenticity at work ($M = 5.49$, $SD = .92$) than those who recalled specific behaviors ($M = 5.09$, $SD = 1.15$). The two-way interaction between moral type and perceived moral level was not significant, $F(1, 124) = .020$, $p = .89$, $\eta^2 < .001$. It should be noted that the analyses we present here deviated from our preregistration because we dropped the accepting external influence subscale of van den Bosch and Taris’ (2014a) measure due to low reliability.

Discussion

Studying 2 was to test whether intending to be authentic would attenuate the tendency for people to engage in immoral behaviors. Following Kim and colleagues’ paradigm (2017), we manipulated decision-making strategies (i.e., trying to be authentic versus thinking rationally and thinking realistically) within participants and had them engage in hypothetical decision-making scenarios involving unethical behaviors at workplace (e.g., wasting, mismanaging, or abusing organizational resources). Rational thinking and realistic thinking were selected for comparison because these two strategies are two of the most common decision-making strategies people use and have been employed in previous studies (e.g., Schlegel et al., 2013). We predicted that people trying to be authentic (relative to thinking rationally or realistically) should be less willing to engage in morally questionable behaviors at work in the hypothetical scenarios.

Method

Participants

One hundred and thirty-three participants from the U.S. and Canada participated in an online survey posted on Amazon’s Mechanical Turk platform. Among them, one hundred and five (46 women, 59 men) were self-identified as current full-time employee or running full-time business and were allowed to complete the rest of the survey; the remaining participants were again automatically directed to the end of the study where they were informed that they were not eligible. Eligible participants received $2.50 in exchange for their participation. Most of them were White (70.5%). Their ages ranged from 18 to 59 years ($M = 35$, $SD = 9.64$). The highest level of education participants received ranged from high school graduate diploma or the equivalent (e.g., GED, 12.4%) to doctorate degree (19%, mean fell between trade/technical/vocational training and associate degree). A power analysis through G-power (Ferdinander, Fall, & Buchner, 1996) suggested that for an adequately powered (i.e., of 90) within-subject experiment, a minimum sample size of 105 participants were needed to detect an effect of $\eta^2 = .02$, at $p = .05$ (two-tailed). Therefore, we aimed to recruit 105 participants. A sensitivity analysis revealed that with a sample size of 106 we had 80% power to detect an effect size of $\eta^2 = .015$ or similar (with $\alpha$ set at .50 and $\beta$). We included the same seriousness check item as used in Study 1. One participant indicated that he or she had just clicked through and were removed from data analysis. This resulted in a final sample of 104 participants.

Procedure and materials

The whole procedure was delivered via Qualtrics software. All participants completed a monetary decision task and a business decision task in random order. Both tasks contained a number of decision situations that could potentially occur in workplace. Within each task, participants made each decision three different times once for each of the three decision-making strategies (i.e., being authentic vs. being rational vs. being realistic). Full script, materials, and data are available upon request or online at https://osf.io/47eyb/.

Monetary decision task

The basic structure of this task was adapted from the Moral Foundations Sacredness Scale (Graham, Haidt, & Nosek, 2009) which asks participants how much money
it would take for them to violate the principles of various moral foundations violations with 17 items describing unethical behaviors relevant to the workplace. The behaviors were selected from Kaptein (2008). Examples include “falsifying or manipulating financial reporting information” and “Wasting, mismanaging, or abusing organizational resources”. Participants indicated how much money they thought it would take for them to engage in each unethical behavior on a scale from 1 to 8 (1 = $0 (I’d do it for free), 2 = $0, 3 = $100, 4 = $1,000, 5 = $10,000, 6 = $100,000, 7 = $1,000,000, 8 = never for any amount of money). This served as a measure for the unwillingness to engage in unethical behaviors.

Business decision task
Participants were presented with 6 scenarios from Ashton and Lee (2008). Each scenario placed participants in a hypothetical business setting and presented them with an unethical behavior (e.g., “voting for profitable mining operations that cause serious long-term pollution of water and soil”). Participants indicated whether they would engage in that behavior on 4-point Likert scales (e.g., “Would you invest your pension fund’s money in the company that runs this sport?”, 1 = Definitely Not, 2 = Probably Not, 3 = Probably Yes, 4 = Definitely Yes). We reversely coded all the items so that a higher score indicated a lower tendency to engage in the unethical behaviors.

Decision making strategies
For each item in the two decision tasks, we asked participants to indicate their decision three times, each time using a different decision-making strategy. One strategy was to be as authentic as possible (i.e., “think about who you are ‘deep inside’, and make your decision based on how they align with your ‘real self’”). Another strategy was to think rationally (i.e., “being logical and objectively considering the pros and cons of the available options”). The third strategy was to think realistically (i.e., “select the option that best reflects how you would actually respond if you faced these decisions in real life”). Since participants’ responses were highly inter-correlated across the 17 unethical behaviors in the monetary decision task (α = .91), in both the authentic and the realistic conditions, we used this structure but replaced it with a measure MANOVA test to examine the effect of decision strategies on people’s willingness to engage in the hypothetical unethical behavior at work in the two tasks. The analysis revealed a significant overall effect of decision-making strategies, Wilks’ λ = .60, F (4, 100) = 16.68, p < .001, η² = .45, 95% CI [.09, .31], and for rational decision making strategies, though trending towards our predicted direction, was not significant, t(103) = 1.99, p = .091, d = .22, 95% CI [.02, .42]. Compared to rational thinking, thinking realistically prompt significantly more willingness to make an immoral decision in the hypothetical scenarios, t(103) = 2.81, p = .02, d = .28, 95% CI [.03, .37]. For the business decision task, the analyses revealed significant differences in the hypothesized direction between authenticity and the other two strategies (for realistic thinking, t(103) = 4.34, p < .001, d = .45, 95% CI [.19, .61]). Relative to rational thinking, thinking realistically prompt less willingness to engage in the hypothetical moral transgressions, t(103) = 2.43, p = .05, d = .24, 95% CI [.12, .56]. Overall, the results of Study 2 supported our prediction; people who tried to be authentic (compared to be rational or realistic) were less willing to engage in hypothetical immoral working behaviors.

Table 1: Means (SDs) and correlations among the dependent variables in Study 2.

<table>
<thead>
<tr>
<th></th>
<th>Mean (SD)</th>
<th>A1</th>
<th>A2</th>
<th>A3</th>
<th>B1</th>
<th>B2</th>
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<tbody>
<tr>
<td>A. Monetary decision task</td>
<td></td>
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<tr>
<td>1. Authentic condition</td>
<td>6.78 (.43)</td>
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<tr>
<td>2. Rational thinking condition</td>
<td>6.57 (.29)</td>
<td>78***</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. Realistic thinking condition</td>
<td>6.38 (.41)</td>
<td>88***</td>
<td>86***</td>
<td></td>
<td></td>
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<tr>
<td>B. Business decision task</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Authentic condition</td>
<td>3.10 (.68)</td>
<td>50***</td>
<td>25***</td>
<td>41***</td>
<td></td>
<td></td>
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<tr>
<td>2. Rational thinking condition</td>
<td>2.77 (.67)</td>
<td>09***</td>
<td>21***</td>
<td>16***</td>
<td>52***</td>
<td></td>
</tr>
<tr>
<td>3. Realistic thinking condition</td>
<td>2.91 (.72)</td>
<td>33***</td>
<td>21***</td>
<td>43***</td>
<td>78***</td>
<td>61***</td>
</tr>
</tbody>
</table>

Notes: *p < .05; **p < .01; ***p < .001.

Discussion
Study 2 demonstrated that trying to be authentic undermined the tendency to behave unethically when facing hypothetical moral transgression scenarios at the workplace. Taken Studies 1 and 2 together, our data provided support for the bidirectional relationship between moral behaviors and authenticity at workplace. On the one hand, perceiving oneself as behaving in a moral way engenders feelings of authenticity at work. On the other hand, trying to be authentic reduces people’s tendency to engage in morally questionable behaviors in hypothetical scenarios.

Although Studies 1 and 2 provided experimental evidences for our hypothesis, both studies are controlled experiments and could suffer from low external validity. Our reliance on instructed recall in Study 1 and the hypothetical nature of the unethical behaviors in Study 2 might produce artificial findings not generalizable to real work settings. In addition, samples of Studies 1 and 2 were all from relatively Westernized cultural backgrounds. It is important to examine the generalizability of these findings to other cultures. To address these issues, in Study 3, we used a daily diary method to examine the covariation between authenticity and ethical behaviors at work.

Study 3
The aim of Study 3 was to examine the external validity of our findings by studying the relationship between morality and authenticity in real-life working settings. In addition,
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The unconditional model revealed that meaning in work was related to authenticity at work (β = -0.36, p < .001) and moral behaviors (β = 0.56, p < .001), job performance (β = 0.25, SD = 1.21), and relationships with coworkers (β = 0.59, SD = 1.06). Workload (β = 0.40, SD = 1.84) was each measured by one face-valid item.

Daily job satisfaction and meaning in work

Daily job satisfaction was measured with one item: “In general, I am satisfied with my job today.” Meaning in work was measured with our established indices of meaning in work and self-reported (im)moral behaviors would have been more strongly related to morality and authenticity at work held independent of other factors, we also measured several variables that may influence judgments of morality or authenticity (i.e., emotional status, job involvement, job performance, relationships with coworkers, and workload). All scales originally in English were translated into Chinese using the standardized back-translation procedure (Brittin, 1970).

Method

Participants

A total of 189 employees (50 men, 119 women, 20 did not indicate gender, ages ranged from 20–54 years, M = 30.29, SD = 6.22) voluntarily participated in this study. We determined this sample size via the software Pint (Snijders, Bosker, & Guldemond, 2007). Parameters were estimated based on previous findings about the association between morality and authenticity (i.e., around 70% of the variance was at Level 2; Christy et al., 2016). The analysis suggested that with 5 data points for each individual, a minimum of 150 participants should be included to detect a small effect (r = 0.10, with α = 0.05, power = 0.80, residual variance = 50, and 70% of the variance locating at level 2). Expecting attrition, we attempted to recruit about 200 participants.

Participants were recruited through a web course in an introductory psychology. As in studies 1 and 2, participants were eligible only if they had a full-time job. The majority of participants (58%) had a bachelor’s degree, and their mean monthly income was around CNY8000 (US$1200). Their jobs ranged from secretaries, engineers, managers to physicians, and job tenures ranged from 0.3 to 36 years (M = 7.24, SD = 6.47).

Procedure

Participants completed the daily surveys right after work over 5 consecutive working days. Before taking part in this study, participants were given information about the structure and content of the survey, as well as the exact time of kilometre. Each day at 4:00 pm, the questionnaire was activated and a reminder including a link to the survey was sent to each participant through their smartphone. Participants were asked to complete the questionnaire right before or after leaving their workplace. Considering that participants sent a second reminder at 8:00 pm every day and closed each survey the next morning at 8:00 am. In total, participants provided 780 valid data entries. A summary of this study was preregistered online (https://osf.io/hzhuq/). A sensitivity analysis revealed that a sample size of 189 with 4 data points for each participant on average would be able to detect an effect size of r = 0.096 or current power = 0.80, residual variance = 50, and 70% of the variance locating at level 2).

We measured the same three dimensions of authenticity at work as in Study 1 (i.e., authentic living, self-alienation and accepting external influence), but each with two items this time, so as to keep the daily survey short. Again, the two items on accepting external influence showed low correlations with each other (r = -0.38), and with other constructs. Therefore, we removed the items from further analysis. An authenticity index was formed by combining the four items (with the two self-alienation items reversed), M = 5.19, SD = 1.24, α = .85.

Authenticity at work

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Table 2:

<table>
<thead>
<tr>
<th>Predictors</th>
<th>r (SD)</th>
<th>t</th>
<th>p</th>
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<tbody>
<tr>
<td>Mortal behaviors</td>
<td>.25 (.09)</td>
<td>2.66</td>
<td>.009</td>
</tr>
<tr>
<td>Immoral behaviors</td>
<td>-.41 (.06)</td>
<td>-.53</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Prosocial impact</td>
<td>.27 (.06)</td>
<td>4.31</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Within individual</td>
<td>Mortal behaviors</td>
<td>.18 (.058)</td>
<td>3.20</td>
</tr>
<tr>
<td>Immoral behaviors</td>
<td>-.28 (.058)</td>
<td>-4.74</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Prosocial impact</td>
<td>.32 (.038)</td>
<td>8.33</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

Notes: *** p < .001
and authenticity at work did not vary significantly across individuals. When we included the covariates in the model (i.e., emotional status, relationships with coworkers, job involvement, workload, and job performance), all the main effects remained significant except the effect of moral behaviors at the between-subjects level (β = .072, SE = .049, t = 1.48, p = .14).

To explore how morality and authenticity were associated with job satisfaction and meaning in work, we built a multilevel structural equation model (MSEM) with moral immoral behaviors, prosocial impacts and authenticity at work serving as predictors, and job satisfaction and meaning in work as outcomes (Figure 3). We found that, except immoral behaviors at the between-subjects level, all the four predictors were significantly associated with job satisfaction, both between and within-subjects (β ranged from −.081 to .54, ps ranged from .048 to <.001). At the within-subjects level, moral behaviors, prosocial impacts and authenticity significantly predicted meaning in work (all β > .18, ps < .001). At the between-subjects level, prosocial impacts (β = .60, SE = .066, t = 9.18, p < .001) and authenticity (β = .41, SE = .061, t = 6.65, p < .001) also significantly predicted meaning in work. The association between moral behaviors and meaning in work was marginally significant (β = .16, SE = .085, t = 1.90, p = .058). However, a positive association emerged between immoral behaviors and meaning in work (β = −.21, SE = .058, t = 3.53, p < .001). It should be noted that the analyses were deviated from our preregistration because we dropped the accepting external influence subscale due to low reliability. The pre-registered analyses using the full composite were largely consistent with the ones reported here. While we are hesitant to make many conclusions based on the pre-registered analyses given unexpected psychometric concerns, these analyses as exploratory analyses investigating accepting external influence separately from the other dimensions, are presented in the supplemental materials.

**Discussion**

Results of Study 3 extended the experimental findings in Studies 1 and 2 to real-life workplace among a Chinese sample. The relationship between authenticity and morality was observed both between- and within-individuals. Moreover, authenticity and morality further predicted meaning in work and job satisfaction. These findings corroborated the importance of both authenticity and morality at workplace. The only result that went contrary to our hypothesis is that, after controlling for authenticity and prosocial impacts, immoral behaviors indicated a positive association with meaning in work across participants. This result may not be very surprising, however, given the very high correlations of both prosocial impacts and authenticity with meaning in work. (van den Bosch & Taris, 2014a; Schmader & Sedikides, 2017). We believe that immoral behaviors may be one reason people experience lack of fit and authenticity at workplace at the first place. Work settings encouraging moral transgressions may inevitably generate a mismatch among employees between their moral beliefs and environments. To combat immoral behaviors, we tentatively propose an alternative approach, that is, to encourage employees to adopt their own internal moral compass, their true selves, to behave morally regardless of the perceived consequences, as the true self is so deeply tied that following true selves will be perceived as integral to authentic experiences in the workplace (van den Bosch & Taris, 2014a; Schmader & Sedikides, 2017). Our findings could also inform research on the role of self in the context of moral transgressions. Indeed, how the self is related to moral behaviors remains a controversial question. While the self as seen is a key component of moral agency (Jennings et al., 2015), it is also sometimes criticized in organizational settings, as people are expected to act prosocially and be seen as a barrier to act prosocially. In addition, within the literature positioning the self as an antecedent of moral behaviors, the degree to which one possesses moral self-concepts or moral identity is often conceptualized as a matter of individual differences (e.g., Aquino & Reed, 2002). Our studies, on the other hand, demonstrated that acting morally at workplace may be a natural consequence of people’s attempts to be authentic and to follow what they believe to be their true selves. Moral behaviors and the true self are so deeply tied that following true selves should foster the tendency to behave morally regardless of the individual differences in moral identity.

Given the role of authenticity in moral behaviors, our findings further shed light on how to develop interventions against immoral behaviors in work settings. Unethical behaviors in the workplace can bring about devastating consequences to employees, corporations, and even the society as a whole (e.g., Bakir & Vittell, 2010; Orliketz, Schmitt, & Bynes, 2003). To manage these behaviors, governments and organizations often rely on the imposition of laws and related legislation. Yet, overly relying on rules and restrictions may sometimes backfire and undermine people’s tendency to adhere to, or even resist, such rules (Deci, Koestner, & Ryan, 1999). From our perspective, those external forces (e.g. rewards and punishments) may inhibit workers’ spontaneous tendency to refrain from moral transgressions. To combat immoral behaviors, we tentatively propose an alternative approach, that is, to encourage employees to adopt their own internal moral compass, their true selves. Doing so may enhance not only the tendency to behave morally but also the tendency to embrace the moral behaviors wholeheartedly. Given the increasing interests in fostering benevolence (Arieli, Grant & Sapi, 2014), our findings call for attention to be dedicated to understanding the role of true self beliefs in guiding moral behaviors in organizational settings.

** Origins of moral transgressions despite the morally good true self**

Still, if peoples’ true selves are directed to moral behaviors, one may wonder why immoral behaviors (e.g., fabricate false accounts) could occasionally occur in organizational...
settings. One possibility based on our findings is that in times of threat, people may be driven by pragmatic and realistic thinking. As the results of Study 2 suggested, relative to people trying to be authentic, those whose moral orientations were not more likely to commit moral transgressions at workplace. It is thus likely that transgressors in real-world settings do not wish harm out of their true selves, but simply pursue whatever “good” (e.g., money) that will allow them to fulfill their job duties, at times lacking in consensus even among experienced philosophers (see Moriarty, 2017). It is thus not surprising that people may engage in unethical behaviors under the belief that their job context supports immoral ways. In fact, recent research found that among managers high in Machiavellianism, the relationship between self-reported authentic leadership and observed moral actions is somehow reversed—the more authentic they believe they are, the less moral they are seen from the perspective of an observer (Sendjaya, Pekerti, Härtel, Hirst, & Butarbutar, 2016). Machiavellianism is a set of values espousing that ends can justify means (Den Hartog & Bolschak, 2012). Therefore, provided that people hold deviant values, they may consider it justified to commit transgressions even when they are aware of the negative consequences. Future research should therefore examine individual differences in moral values as a potential boundary condition for the effect we observed. Last, immoral behaviors could also originate from organizations. Unethical corporations (e.g., a firm that illegally logs forests for profits) may have the power to institutionalize and reinforce their members into behaving in morally questionable ways (Ashforth & Anand, 2003; Jackall, 1988; Vaughan, 1992). Employees in unethical corporations could experience pressure and be forced to deviate from what they truly want to do (otherwise, they would be punished). Or, employees may engage in rationalization processes, attending only to aspects of their work that seem moral. For instance, it is likely for employees in unethical organizations to maintain a sense of morality—and thereby authentic feelings—by focusing only on the specific behaviors to fulfill their job duties rather than on their work’s impact over society (e.g., claiming that “it is my job” even when fully aware that their work may be bad for the society). Future research could extend our findings by examining these possibilities within specific types of organizations (e.g., tobacco industry).

Limitations
The current research, though having the merit of rigorously (in terms of pre-registration and adequate power) and diverse sample, is limited in that we failed to control for (m)oral behaviors (e.g., behavioral observation or other-referred measures). Rather, we inferred (m)oral behaviors from hypothetical decision-making (Study 2) and self-reported behaviors in terms of particular moral attributes (Study 3). Though the effects based on these measures are statistically consistent with our predictions, such as operationalization of moral behaviors does not rule out the possibility that what people claim may deviate from what they would actually do. It is therefore possible that the results could be biased, as they may have self-selected when following their true selves, but such a belief does not translate into actual behaviors. It is also worth noting that our evidence in Study 3 regarding the relationship between moral behaviors, meaning in work and job satisfaction are yet correlative. While our interpretation is consistent with the existing literature that enhanced well-being is often a mixed bag of self-determination and moral behaviors (Allan et al., 2017; Ménard & Brunet, 2011; Grant, 2008; Grant & Campbell, 2007; Grant & Sonnentag, 2010), it remains an open possibility that the reverse is true: it is meaning in work and job satisfaction that cause feelings of authenticity and lead to moral behaviors. Future research could explore the opposite direction of this link by manipulating job satisfaction and meaning in work and examining their effects on authenticity and morality. Last, it remains an open question whether the link between moral behaviors and authenticity we found could be generalized to more general positive behaviors (e.g., being considerate). There is some evidence suggesting that feelings of authenticity is associated with positive over negative behaviors in general (Jorgensen Sereno & Leary, 2015). Yet, some studies have argued that lay beliefs about true self are not merely in essence moral, but “by default” positive in valence (p. 553). The implication is that feelings of authenticity is a multidimensional construct that should be examined in relation to positive behaviors that are not explicitly relevant to morality (e.g. competent behaviors). Nevertheless, test of this extension of our hypotheses is beyond the scope of current research. Future research may manipulate behaviors that are less related to morality and see if it influences authenticity judgments. This should help clarify whether our findings are parts of a more general phenomenon.

Conclusion
Being authentic is intertwined with behaving morally—the current research found consistent evidence in support of a bidirectional relationship between authenticity and morality at work. Our findings bring the potential to shed light on the antecedents and consequences of authenticity and ethical behaviors at work. While working ethics can be controversial (Clegg et al., 1985–1995; Vallini, 2007), we recommend trusting the inner voice from what one believes about one’s true self, and acting accordingly—this enhances both morality and well-being at work.

Data Accessibility Statement
Materials for Study 1 can be retrieved from https://osf.io/bczq3/. Materials and data for Study 2 can be retrieved from https://osf.io/47eyb/. Materials and data for Study 3 can be retrieved from https://osf.io/hr9q4/.

Notes
We refrained from asking participants to report behaviors that harm the society, because we were afraid, for most people, it could be hard to come up with their work behaviors that explicitly harm society. These behaviors often incur severe punishment from social institutions. As such, for most people, behaviors that work against welfare of society are exceptions rather than the rule. Hence, we instead asked participants to list aspects of their behaviors that do not contribute to the society. Sample behaviors they wrote include “complaining about coworkers” and “eating snack during work”.

The study also included another daily survey to be completed at bedtime. The survey assessed participants’ feelings about their home life as part of another project (Zhang, Chen, Schlegel, & Chen, 2019). It was not relevant to this study and hence not reported here.

The model is used to illustrate the relationships between the variables as opposed to suggesting a causal direction. Hence, it does not matter which variable we choose to serve as the ‘dependent’ variable. We did not conduct cross lagged analysis to predict feelings of authenticity with moral behaviors on the previous day or the other way around, because we believe that the experience of authenticity and moral behaviors follow each other very closely. That is, individuals will feel authentic immediately after they have behaved in a morally good way, and they will behave morally just when they feel authentic. Hence, it is more appropriate to examine the day-to-day covariation between the two variables, rather than to use one to predict the other.

Acknowledgments
The open access publishing fees for this article have been covered by the Texas A&M University Open Access to Knowledge Fund (OAKfund), supported by the University Libraries and the Office of the Vice President for Research.

Competing Interests
The authors have no competing interests to declare.

Rebecca Schlegel is an editor at Collabra: Psychology. She was not involved in the peer-review of the article.

Author Contributions
• Contributed to conception and design: Rebecca Schlegel, Joshua Hicks, Hong Zhang
• Contributed to analysis and interpretation of data: Changkai Chen, Kaiyuan Chen, Hong Zhang
• Contributed to analysis and interpretation of data: Rebecca Schlegel, Kaiyuan Chen
• Drafted and/or revised the article: Hong Zhang, Kaiyuan Chen, Rebecca Schlegel, Joshua Hicks
• Approved the submitted version for publication: Rebecca Schlegel, Kaiyuan Chen, Hong Zhang, Joshua Hicks, Changkai Chen

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