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Original Article

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Abstract: The present research addresses the unique role of locomotion and assessment regulatory-mode orientations on self-forgiveness, by controlling for personality traits and by excluding possible effects of variables linked to strategies that underestimate one's culpability. In three studies (Total $N = 471$) we found that assessment obstructs, while locomotion promotes, self-forgiveness both at an explicit (Studies 1 and 2) and at an implicit level (Study 3), and by controlling for acceptance of responsibility (Studies 1 and 3), the Big-Five dimensions, moral disengagement strategies (Study 1), self-blame and justifications (Study 2), transgression severity, and time passed since the episode occurred (Study 3). The implications of the results are also discussed with reference to self-forgiveness.

Keywords: self-forgiveness, regulatory mode, Big-Five, self-exoneration strategies

Self-forgiveness can have a significant impact on individuals' self-concept and well-being. People may both hurt another person or feel bad because of a wrong action (or inaction) of their past which causes harm to themselves. In fact, it has been consistently demonstrated that the lack of self-forgiveness following transgressions and/or offences to others may lead to deleterious outcomes for one's well-being (Hall & Fincham, 2005; Tangney et al., 2005; Wenzel et al., 2012; Wohl et al., 2008). Thus, identifying factors involved in the self-forgiveness process and investigating why and how they can promote or inhibit the people's propensity to self-forgive is critical for theory and for professionals seeking reconciliation in therapy.

In this vein, previous theory and research has focused on individual differences mainly related to the aim of protecting the self from self-condemnation, which is an undeniable part of the self-forgiveness concept (Hall & Fincham, 2005; McConnell, 2015; Tangney et al., 2005; Wenzel et al., 2012; Wohl et al., 2008). Only recently other individual differences have been identified that, we believe, are also essential for self-forgiveness: (1) a strong desire for (psychological) motion (i.e., desire for movement from state to state); and (2) a strong desire to evaluate one's actions (see, Pierro, Pica, et al., 2018).

Specifically, it has been shown that psychological motion (captured by the regulatory mode orientation of

locomotion; Higgins et al., 2003; Kruglanski et al., 2000) focuses the individual toward the future, helping to put to rest past misdeeds (Pierro et al., 2018). By contrast, the evaluative and the comparative tendencies (captured by the regulatory mode orientation of assessment, Higgins et al., 2003; Kruglanski et al., 2000) present obstacles to self-forgiveness because they focus the individual toward the past, and thus keeping the transgression in mind.

The above findings, however, leave open the possibility that the relationships between regulatory mode orientations and self-forgiveness may be in part explained by the effects of other personality variables and by self-exoneration strategies. In fact, it can be possible that high locomotors successfully overcome past misdeeds and reach self-forgiveness by simply minimizing culpability whereas high assessors do so less and, because of their evaluative tendencies, remain stuck on these misdeeds, thus impeding self-forgiveness.

The present research aims to exclude the above possibilities and address the unique role of regulatory mode orientations on self-forgiveness, and suggests that whereas the individuals' tendencies toward psychological motion (i.e., locomotion regulatory mode) encourage self-forgiveness by stimulating the wish to overcome (however, still admitting one's) culpability and move on, the tendencies toward comparative thinking (i.e., assessment regulatory mode)

should prevent self-forgiveness by making offenders stuck on their misdeeds. In what follows, we first introduce the theoretical background of the present research and then we will more thoroughly present our hypotheses.

Self-Forgiveness

Self-forgiveness has been described as "a willingness to abandon self-resentment in the face of one's own acknowledged objective wrong, while fostering compassion, generosity, and love toward oneself" (Enright & The Human Development Study Group, 1996, p. 116). It can be intended both as a specific conduct, aimed at specific offences in which the person has hurt others or oneself (specific self-forgiveness), and as an individual difference variable, a tendency to forgive oneself in different situations and over time (dispositional self-forgiveness).

In achieving self-forgiveness, offenders not only work toward achieving emotional relief (i.e., to overcome the toxic effects of self-conscious thoughts and emotions such as guilt, shame, and regret), but also may try to repair the impaired relationship (if the offence was directed toward another person) by making amends and modifying their future behaviors. This process, in turn, leads to the person's value reaffirmation, self-acceptance, and well-being (Fisher & Exline, 2010; Hall & Fincham, 2005; McConnell, 2015; Tangney et al., 2005; Wenzel et al., 2012; Wohl et al., 2008). Consistent with this reasoning, Worthington and colleagues (2007) wrote that "self-condemnation may impair self-care, produce depression and anxiety, and demotivate coping" (p. 293).

Previous research has shown that self-forgiveness is indeed positively associated with cognitive flexibility (Thompson et al., 2005), emotional stability (or low neuroticism), and extraversion (Ross et al., 2004). On the other hand, self-forgiveness has been shown to negatively correlate with depression, anxiety (Thompson et al., 2005), and low self-esteem (Ross et al., 2004). In addition, perfectionism and rumination have been found to be negatively related to self-forgiveness (Dixon et al., 2014), suggesting that self-forgiveness is undermined by overthinking about transgressions. Interestingly, self-forgiveness has been found to reduce procrastination among university students (Wohl et al., 2010), suggesting that self-forgiveness serves to adaptively move on in order to accomplish other goals.

In light of the theorizing and findings described above, we suggest that self-forgiveness not only serves an overall function of self-acceptance, but also serve psychological motion toward future goals. In fact, self-condemning thoughts and feelings not only risk one's self-image as a moral person worth of value, but also disrupt the need to overcome resentment and move forward. Framed

differently, resentment may block psychological motion, which is however, a strong need of human beings. Therefore, a strong need for (psychological) movement may help overcome resentment, re-establishing self-worth, and prepare people to move forward in order to achieve their goals. Such tendencies are well captured by regulatory mode orientations described in the next section.

Regulatory Mode Theory

Regulatory mode theory (Higgins et al., 2003; Kruglanski et al., 2000, 2013) describes two orthogonal functions of self-regulation: locomotion and assessment. Locomotion "constitutes the aspect of self-regulation concerned with movement from state to state and with committing the psychological resources that will initiate and maintain goal-related movement in a straightforward and direct manner, without undue distractions or delays" (Kruglanski et al., 2000, p. 794). By contrast, assessment "constitutes the comparative aspect of self-regulation concerned with critically evaluating entities or states, such as goals or means, in relation to alternatives in order to judge relative quality" (Kruglanski et al., 2000, p. 794). While locomotion is intended as the aspect of self-regulation related to managing action, motion and change (i.e., locomotion concerned with moving from a current state to a changed end-state), assessment is conceptualized as the aspect of self-regulation related to evaluation, deliberation, and comparisons of various means to best proceed. The two regulatory modes can be measured as dispositional variables (see Kruglanski et al., 2000).

High locomotion leads individuals to act faster and sooner, avoiding delays, interruptions to action, and procrastination (Pica, Amato, Pierro, et al., 2015; Pierro et al., 2011). By contrast, high assessment leads individuals to a greater fear of making wrong choices or mistakes during goal pursuit, and to have higher standards for personal performance (Kruglanski et al., 2000).

Overall, recent empirical evidence suggests that the two regulatory mode orientations not only correlate with factors involved in the self-forgiveness process, but also motivate individuals to focus on their past versus their future, thus thereby inhibiting or promoting the self-forgiveness process, respectively (Higgins et al., 2003; Kruglanski et al., 2000, 2016). For instance, whereas locomotion positively correlates with extraversion, emotional stability, and conscientiousness, assessment positively correlates with depression, anxiety, low self-esteem, and neuroticism (Kruglanski et al., 2000).

Similarly, while assessment tendencies positively correlate with variables having to do with the past, such as rumination, unwanted thought intrusion, obsession toward

passionate activities, nostalgia, and regret, locomotion tendencies are negatively related (or unrelated) to such factors, being instead focused on the future, preferring to move forward and leave the past behind (Kruglanski et al., 2016; Lucidi et al., 2016; Pica, Amato, Mauro, et al., 2015; Pierro et al., 2008, 2013). Consistent with this reasoning, Pierro et al. (2018) recently demonstrated that locomotion tendencies make people focus on the future and thus promotes self-forgiveness, while assessment tendencies make people focus on the past and thus obstructs self-forgiveness.

Taken together, these studies show that high locomotors face past errors efficiently because they are motivated to overcome them and move forward, while assessors remain stuck on them because of their evaluative tendencies. However, one might question whether locomotion tendencies are not really conducive to self-forgiveness. In fact, it might be hypothesized that seeking motion may drive high locomotors to simply leave their past errors behind them, and thus engaging in strategies, such as moral disengagement (Bandura, 1991), find justifications for the misdeed, and external attribution (Weiner et al., 1991; see also Tangney & Dearing, 2002), that are aimed at downplaying their wrongdoing. The present research is aimed at giving an answer to the above point by investigating the unique effects of regulatory mode orientations on self-forgiveness, as described below.

The Present Research

In three studies, we investigated the unique effects of regulatory mode orientations on self-forgiveness, using three diverse measures of self-forgiveness (both explicit and implicit), and by controlling for Big-Five personality traits and excluding possible effects of several self-exoneration strategies (i.e., moral disengagement, attribution style, justifications). Overall, the aim of the three studies was twofold: (1) to replicate and expand the previous finding (Pierro et al., 2018) on the relationship between regulatory mode and self-forgiveness with different samples and using different measures of self-forgiveness, including a new implicit measure of self forgiveness; (2) to investigate the unique effects of regulatory mode orientations on self-forgiveness, beyond the effects of personality traits and of several self-exoneration strategies.

In the first study, we tested the effects of regulatory mode orientations on dispositional self-forgiveness by controlling for the Big-Five dimensions, attribution style (i.e., how typically they attribute to the self the responsibility of their actions), and moral disengagement strategies. The idea was the following: to the extent that the relationship between regulatory mode orientations and self-forgiveness is found even after controlling for Big-Five, attribution style, and moral disengagement, we should not only detect the unique effects of locomotion and assessment in predicting self-forgiveness – and thus exclude that the hypothesized relations are explained by other personality variables – but we should also have evidence that locomotion and assessment influence self-forgiveness, independently from possible strategies of self-exoneration, such as external attribution of responsibility and moral disengagement.

In the second study, we tested the effects of locomotion and assessment on self-forgiveness, measured by means of four different conflict scenarios whereby participants had to identify with the offender, and by controlling for probability of using justifications and attribution style strategies. Moreover, if the relationship between regulatory modes and self-forgiveness (controlling for the justifications and self-blame) was confirmed as hypothesized, then we should acquire further evidence (by using a different measure of self-forgiveness) of their unique effects on self-forgiveness.

In the third study, we implemented an implicit measure of self-forgiveness and we assessed its relationship with the two regulatory mode orientations. More specifically, after asking participants to recall a specific episode whereby they hurt and/or offended another person they care about, we tested whether the regulatory mode orientations predicted implicit self-forgiveness, by also controlling for the effects of taking responsibility of the wrongdoing, transgression severity, and time passed since the incident occurred. Also in this study, if the relationship between regulatory modes and implicit self-forgiveness (controlling for the variables described above) was confirmed as hypothesized, then we should further be confident that regulatory modes uniquely predict self-forgiveness.

For all studies, we report how we determined our sample size, all data exclusions (if any), and all manipulations and measures in the study.

Our sample sizes (177 in Study 1, 159 in Study 2, and 135 in Study 3) were determined by a combination of power analyses, sample sizes used in previous similar studies (Pierro et al., 2018), and decision rules implemented at the time of data collection. For our power analyses, we focused on our two main effects of interest, namely the potential associations between locomotion and self-forgiveness and between assessment and self-forgiveness. Findings from Pierro et al. (2018), using samples ranging between 85 and 189 participants, suggest that the associations between the two regulatory mode orientations and self-forgiveness are low to moderate in magnitude (i.e., Pearson's r ranging between .19 and .30 for locomotion; and Pearson's r ranging between .24 and .28 for assessment). To estimate the adequate sample size needed to test our hypotheses for the three studies, we used an a priori power analysis (F-tests; Linear multiple regression: Fixed

model, R^2 deviation from zero) with the G*Power calculator (Faul et al., 2007). Assuming relatively small ($f^2 = .08$) to moderate ($f^2 = .15$) effect sizes both for locomotion and assessment and setting α error probability at .05 and power at .80, we would need data (1) from 127 to 228 participants to detect effects ranging between these magnitudes in Study 1 (number of predictors = 12); (2) from 98 to 177 participants to detect effects ranging between these magnitudes in Study 2 (number of predictors = 6); and, (3) from 103 to 187 participants to detect effects ranging between these magnitudes in Study 3 (number of predictors = 7). For Study 1, we instituted an a priori stop rule, such that we terminated data collection within the pre-established period (approximately 2 months). In Studies 2 and 3, our sample sizes were limited by the number of participants (university students) that (1) gave availability for answering the survey (Studies 2 and 3), and (2) were contemporarily scheduled for a laboratory visit over the course of the data collection period (which comprised 3 weeks; Study 3).

Study 1

Our first study examined the basic relationships between chronic locomotion and assessment orientations and trait self-forgiveness controlling for the Big-Five dimensions, moral disengagement strategies, and attribution style. As previous studies have shown that cognitive flexibility, emotional stability (or low neuroticism) and extraversion positively correlate with self-forgiveness (Ross et al., 2004; Thompson et al., 2005), all of which also correlate with the assessment (negatively) and locomotion (positively) constructs (Kruglanski et al., 2000), we decided to control for possible effects of the above variables in the relationship between regulatory mode orientations and self-forgiveness. Furthermore, in order to also exclude the possible effects of strategies involved in self-exoneration (which have been found to reduce the need for self-forgiveness, Fisher & Exline, 2006; Hall & Fincham, 2005), we also controlled for moral disengagement and attribution style. In such a way, we may detect the unique effects of regulatory mode orientations on self-forgiveness and, more specifically, whether the hypothesized relations last controlling for factors involved in self-exoneration (Tangney & Dearing, 2002). We hypothesized that, regardless of the effects of the Big-Five dimensions, and of moral disengagement strategies and attribution style, people with a strong locomotion orientation would be more inclined to self-forgive their past misdeeds because of their intrinsic need to move on; whereas people with a strong assessment orientation would be more resistant to self-forgive their own wrongs because of their intrinsic need for evaluation leads them to inaction by remaining stuck on these misdeeds.

Method

Participants

One hundred seventy-seven participants (92 women; M_{age} = 33.91, SD_{age} = 11.07) took part in the study on a voluntary basis. Participants were recruited from graduate classes in psychology, community volunteers who were participating to other studies, and from students' acquaintances. Most of our sample was employees (46.9%) or students (27.27%); the rest of the sample was either workers (9%), professionals (4.5%), housewives (2.3%), or retirees (0.6%), and 4.5% declared to belong of none of the previous groups. Most of them had high school graduation (48%) or bachelor and master degrees (39.5%); the rest of sample had either a primary/secondary school diploma (8.5%) or doctorate/other higher order education (4%).

Procedure and Materials

All participants filled out the Locomotion and Assessment scales. They then completed a measure of Big-Five, attribution style, moral disengagement, and, finally, a measure designed to assess dispositional self-forgiveness tendency.

Locomotion and Assessment Orientations

The Italian versions of the Locomotion and Assessment Scales (Kruglanski et al., 2000) constitute two separate 12-item self-report measures designed to tap individual differences in these tendencies. Specifically, respondents rated the extent to which they agree with self-descriptive statements reflecting locomotion (e.g., "By the time I accomplish a task, I already have the next one in mind") and assessment (e.g., "I spend a great deal of time taking inventory of my positive and negative characteristics"). Ratings were made on a 6-point Likert type scale with the response alternatives anchored at the ends with 1 (= *strongly disagree*) to 6 (= *strongly agree*). We computed two composite scores (one for Locomotion and one for Assessment) by averaging across responses to each item. In a comprehensive series of studies, including Italian samples Kruglanski et al. (2000), demonstrated the mono-dimensionality, internal consistency, and temporal stability of each scale, as well as their considerable convergent and discriminant validity. Notably, the Italian version of the locomotion and assessment scales were accurately translated (and back translated) and showed comparable psychometric properties of the original English version of the scales (Kruglanski et al., 2000). Of relevance for the present study, the relationship between locomotion and assessment and various outcomes still holds even when controlling for other constructs such as the Big-Five, and models that include both Big-Five dimensions and regulatory mode as separate factors are statistically superior to alternative models (Kruglanski et al., 2000), thus further attesting their discriminant validity. For the present sample the Cronbach's α for the locomotion

scale was .76 and the α for the assessment scale was .73. In this sample, the two scales were not correlated ($r = -.03$), consistent with previous studies (Kruglanski et al., 2000).

Assessing Big-Five

We used Big-Five markers developed by Goldberg (1992), previously translated (and back translated) and used in Italian by Kruglanski and colleagues (2000, Study 6). It is an easily administrable measure that consists of 100 unipolar rating scales (trait adjectives). Participants read each of the 100 items and rated how well they believed it described them using a 7-point scale ranging from 1 (= *very inaccurate*) to 7 (= *very accurate*). This instrument is often considered a major alternative to scales in the NEO-PI, the average correlation between the two being 0.60 (Goldberg, 1992). In the present research, we used the Italian translation (with back translation) of Goldberg's (1992) instrument assessing: Extraversion (α = .87), Agreeableness (α = .86), Conscientiousness (α = .89), Neuroticism (α = .88), and Openness (α = .82).

Moral Disengagement

We used a 16-item version of the Moral Disengagement Scale (MDS) developed by Caprara et al. (2009). The 16 items, 2 for each dimension, were mainly selected based on their conceptual implications for self-forgiveness, as well as on factor loadings to their respective dimensions. It measured the inclination to use the following mechanisms of moral disengagement: advantageous comparison ("Given the widespread corruption in society, one cannot disapprove of those who pay for favors"; " Citizens who litter the streets should not be severely persecuted since industry produces much more serious pollution"); dehumanization of victim ("In order to force some people to work, they have to be treated like beasts of burden"; " Rivals deserve being humiliated and maltreated"); attribution of blame ("If people leave their things lying about it's their fault if someone steals them"; "Victims generally have trouble staying out of harm's way"); diffusion of responsibility ("There is no sense in blaming individuals who evade a rule when everybody else does the same thing"; "There is no sense feeling guilty for damages we have contributed to a problem if our contribution is a small part of the problem"); distortion of consequences ("Evading taxes cannot be considered reprehensible considering the squandering of public money"; " Thefts in large department stores are irrelevant compared to the stores' earnings"); displacement of responsibility ("When there are no efficient refuse disposal services, there is no sense reproaching citizens who leave trash on the street"; "It is not the fault of drivers if they exceed the speed limit since cars are made to go at high speeds"); moral justification ("For the advance of science, it is lawful to use humans as 'guinea pigs' even in high risk experiments"; "Loyalty involves not denouncing the transgressions committed by one's friends"); euphemistic labeling ("Fraud in economic transactions is simply a 'strategic distortion'"; "Gambling is a passtime just like any other one"). Ratings were made on a 5-points Likert scale (from 1 = *strongly disagree* to 5 = *strongly agree*). The 16 items were averaged to create a composite score of moral disengagement (α = .87).

Attribution Style

Participants were asked to respond to the following four items reflecting a tendency to take personal responsibility for the negative things that may occur because of our own actions. To the point, participants were asked to rate on a 7-point scale (1 = *not at all*; 7 = *completely*) the extent to which the following four items *describe* them: (1) When things go wrong for the things I do I'm convinced it's really my fault; (2) I always feel responsible for the negative consequences of my actions; (3) After making a mistake I feel really responsible for it; (4) I cannot really feel responsible for all the negative things I've done or that I do (reversed, R). The four items were averaged to create a composite score (α = .63). Higher scores reflect a tendency to taking personal responsibility.

Assessing Dispositional Self-Forgiveness

All participants responded to the six items derived from the dispositional Self-Forgiveness subscale of the Heartland Forgiveness Scale (HFS) developed by Thompson et al. (2005), previously translated (and back translated) and used in Italian by Pierro et al. (2018, Study 4). Specifically, following the Thompson et al. (2005) procedure, participants were told that "In the course of our lives negative things may occur because of our own actions. For some time after these events, we may have negative thoughts or feelings about ourselves." To the point, participants were asked to think about how they *typically* respond to such negative events and, then, to complete the following six items: "Although I feel bad at first when I mess up, over time I can give myself some slack"; "I hold grudges against myself for negative things I've done" (R); "Learning from bad things that I've done helps me get over them"; "It is really hard for me to accept myself once I've messed up" (R); "With time I am understanding of myself for mistakes I've made"; "I don't stop criticizing myself for negative things I've felt, thought, said, or done" (R).

Ratings were made on a 7-point scale with the response alternatives anchored at the ends with 1 (= *almost always false of me*) to 7 (= *almost always true of me*). The six items were averaged to create a composite score (α = .66). Higher scores reflect greater dispositional self-forgiveness tendency.

Table 1. Descriptive and correlations between variables (Study 1)

	M	SD	1	2	3	4	5	6	7	8	9	10
							N = 177					
1. Dispositional self-forgiveness	4.49	0.98	(.66)									
2. Locomotion	4.51	0.62	.21**	(.76)								
3. Assessment	3.33	0.73	−.31***	−.03	(.73)							
4. Extraversion	4.54	0.84	.23**	.37***	−.06	(.87)						
5. Agreeableness	5.26	0.70	.18	.26***	−.18*	.46***	(.86)					
6. Conscientiousness	5.26	0.81	.08	.37***	−.16*	.10	.19**	(.89)				
7. Neuroticism	3.56	0.92	−.41***	−.27***	.45***	−.26***	−.30***	−.45***	(.88)			
8. Openness	4.90	0.73	.03	.22**	.17*	.32***	.24***	.03	.01	(.82)		
9. Moral disengagement	1.57	0.51	−.01	−.11	.11	.07	−.08	−.06	.17	−.07	(.87)	
10. Attribution style	4.63	1.06	−.33***	.13	.26***	−.11	.05	.09	.24***	−.02	.02	(.63)

Note. Values in parentheses are Cronbach's α. ***$p < .001$; **$p < .01$; *$p < .05$.

Results

Descriptive statistics and correlations among variables are reported in Table 1. Note that the self-forgiveness measure was positively and significantly related to locomotion, but negatively and significantly related to assessment. As in previous studies, self-forgiveness was positively correlated with extraversion, and negatively correlated with neuroticism (Ross et al., 2004). Furthermore, attribution style of the wrongs was negatively and significantly related to self-forgiveness, indicating that the more participants attribute to the self the responsibility of their actions the less self-forgiveness tendencies. Neither the other Big-Five dimensions (i.e., agreeableness, conscientiousness, openness), nor moral disengagement, and participants' gender and age were significantly related to self-forgiveness.

Moreover, consistent with previous research (Kruglanski et al., 2000), locomotion was positively correlated with extraversion, agreeableness, conscientiousness, and negatively related to neuroticism, whereas assessment was positively correlated with neuroticism, and negatively correlated with agreeableness and conscientiousness.

Predictions regarding the differential and unique effects of locomotion and assessment orientations on self-forgiveness were tested by means of a multiple regression analysis. In this analysis, we regressed the self-forgiveness scores on both the locomotion and assessment indices as predictors. Gender (dummy coded; Male = 0; Female = 1), age, educational level, Big-Five, moral disengagement, and attribution style were entered as control variables. Summary of results of this analysis are reported in Table 2.

As Table 2 shows, the effects of extraversion, agreeableness, conscientiousness, openness, moral disengagement, and participants' educational level, age, or gender were not significantly related to self-forgiveness. As expected, self-forgiveness was negatively related to attribution style and to neuroticism, consistent with the findings of Ross

and colleagues (2004). More importantly, the relation between self-forgiveness and the two regulatory mode orientations remains significant after controlling for all the above variables: self-forgiveness was positively related to locomotion and negatively related to assessment.

Study 2

In Study 1, we found that assessment was negatively related and locomotion positively related to self-forgiveness, controlling for possible overlapping effects of the Big-Five dimensions, and for the moral disengagement strategies and attribution style. A possible limitation of the first study is that self-forgiveness was exclusively measured as a dispositional tendency, thus not capturing its dependence from, and its specificity with regard to, the transgressions. In fact, specific transgressions may be differently perceived depending of the person's construal of them and their outcomes. In order to best capture this transgression-specificity aspect of self-forgiveness, in Study 2 we used four different conflict scenarios in which participants had to identify with the offender and image what they would feel and experience in that specific occasion.

Method

Participants

One hundred fifty-nine psychology students (113 women; $M_{age} = 23.81$ years; $SD_{age} = 2.63$) from the University of Rome "La Sapienza" participated in the study for course credits.

Procedure

Participants first completed the same locomotion and the assessment scales used in Study 1, and then they were presented with different conflict scenarios, wherein an

Table 2. Summary of multiple regression analyses (Study 1)

	Dispositional self-forgiveness			
	β	t	SE	95% CI
Locomotion	.20**	2.59	.12	.08 to .56
Assessment	−.18*	−2.29	.10	−.44 to −.03
Extraversion	.10	1.22	.10	−.07 to .31
Agreeableness	−.09	−1.09	.28	−.34 to .10
Conscientiousness	−.13	−1.61	.10	−.34 to .04
Neuroticism	−.29**	−3.13	.10	−.50 to −.11
Openness	−.02	−0.19	.10	−.22 to .18
Moral disengagement	.04	0.51	.14	−.20 to .34
Attribution style	−.22**	−0.22	.07	−.34 to −.07
Educational level	.01	0.15	.11	−.19 to .22
Gender	−.13	−1.90	.14	−.54 to .01
Age	−.04	−0.53	.01	−.02 to .01

Note. Gender: Male = 0; Female = 1. **p < .01; *p < .05.

offender caused harms to a victim. The conflict events were based upon Gonzales et al.'s (1992) scenarios. Participants were asked to identify with the offender and after reading each scenario they were asked to answer questions about the likelihood to engage in the following behaviors: (1) forgive the self (i.e., the offender); (2) blame the self; and (3) find justifications for the misdeed. The four conflict scenarios are listed in Appendix A. At the end of this task, they were debriefed, thanked, and dismissed.

Measure
Locomotion and Assessment Orientations
Participants' locomotion and assessment orientations were measured with the same Italian version of the regulatory mode scale (Kruglanski et al., 2000) used in Study 1. The Cronbach's α for the locomotion scale was .80 and the α for the assessment scale was .77. Consistent with previous studies (Kruglanski et al., 2000), the two scales were not correlated ($r = .08$; $p = .33$).

Assessing Self-Forgiveness
Participants were asked to rate using a seven-point scale (1 = not at all; 7 = completely) the likelihood of forgiving the self after reading each of the four conflict scenarios. The four items were averaged to create a composite score for self-forgiveness (α = .75). Higher scores reflect greater self-forgiveness.

Assessing Self-Blame
Participants were asked to rate using a 7-point scale (1 = not at all; 7 = completely) the likelihood of blaming the self for the misdeed after reading each of the four conflict scenarios. The four items were averaged to create a composite score for self-blame (α = .61). Higher scores reflect greater self-blame.

Table 3. Descriptive and correlations between variables (Study 2)

	M	SD	1	2	3	4	5
			N = 159				
1. Self-forgiveness	3.82	1.26	(.75)				
2. Locomotion	4.34	0.59	.18*	(.80)			
3. Assessment	3.59	0.68	−.18*	.08	(.77)		
4. Self-Blame	5.74	0.90	−.40***	.01	.08	(.61)	
5. Justifications	3.93	1.38	−.001	.04	.15+	.18*	(.77)

Note. Values in parentheses are Cronbach's α. ***p < .001; *p < .05; +p < .07.

Assessing Justification
Participants were asked to rate using a seven-point scale (1 = not at all; 7 = completely) the likelihood of finding justifications for the misdeed after reading each of the four conflict scenarios. The four items were averaged to create a composite score for justification (α = .77). Higher scores reflect greater justification.

Results

Descriptive statistics and correlations among variables are reported in Table 3. Note that the self-forgiveness measure was positively and significantly related to locomotion, but negatively and significantly related to assessment. Furthermore, while self-blame was negatively and significantly related to self-forgiveness, justifications were not.

Predictions regarding the differential and unique effects of locomotion and assessment orientations on the probability of self-forgiveness were tested by means of a multiple regression analysis. In this analysis, we regressed the self-forgiveness scores on both the locomotion and assessment indices as predictors. Gender (dummy coded; Men = 0; Women = 1), age, self-blame, and justifications were entered as control variables. While self-blame was negatively and significantly related to self-forgiveness, justifications, age, and gender were not. Most importantly, as expected, and in line with Study 1 and previous studies (Pierro et al., 2018), self-forgiveness referred to specific scenarios was positively and significantly related to locomotion and negatively and significantly related to assessment (Table 4).

Study 3

The first two studies give evidence of our hypothesized relationship between regulatory mode and self-forgiveness, beyond the effect of self-exoneration strategies. Notwithstanding, in these studies self-forgiveness was exclusively

Table 4. Summary of multiple regression analyses (Study 2)

	Self-forgiveness			
	β	t	SE	95% CI
Locomotion	.20**	2.76	.15	.12 to .72
Assessment	−.21**	−2.79	.14	−.67 to −.12
Self-blame	−.39***	−5.23	.10	−.74 to −.33
Justifications	.11	1.49	.07	−.03 to .23
Gender	−.13	−1.63	.21	−.76 to .07
Age	.02	0.32	.03	−.06 to .08

Note. Gender: Male = 0; Female = 1. ***$p < .001$; **$p < .01$.

measured through a self-report scale, only capturing explicit evaluations pertaining to this construct. However, consistent with the implicit social cognition perspective (Gawronski & Payne, 2010), self-forgiveness (as each evaluation toward the self and/or toward social entities) also depends on automatic evaluations that cannot be captured by traditional self-report scales.

From a theoretical point of view, implicit evaluations can be translated into declarative judgments using introspection, and then captured by self-report scales. However, two main factors can obstruct this meta-cognitive translation process, such as (1) impression management concerns and (2) introspective limits (see Nisbett & Wilson, 1977).

First, given that forgiveness is always appropriate and desirable from a moral point of view (Holmgren, 1993), participants may declare to forgive themselves even when it is not actually true, in order to show to themselves and others that they are a good person worth of forgiveness for their misdeeds. Second, the complex nature of the self-forgiveness construct may lead to a difficult assessment of it at an explicit level due to introspection limits. In fact, self-forgiveness may refer to several social situations, which, in turn, may activate, moment by moment, different (mental) representations that are difficult to introspectively capture and then translate into an explicit format (Hofmann et al., 2005).

With the aim of excluding the above concerns, and to further investigate the relationship between regulatory modes and self-forgiveness, we tested our hypotheses this time using an implicit measure of self-forgiveness, by means of adapting a relational responding task (RRT; De Houwer et al., 2015).

It is worth noting that, although commonly used associative implicit tasks (e.g., the Implicit Association Test, Greenwald et al., 1998; and/or its variants, e.g., the Single Category Implicit Association Test, Karpinski & Steinman, 2006) could have been adapted to measure self-forgiveness, we decided not to use them as they may create relevant ambiguity in the interpretation of participants'

scores. For instance, if a participant shows a strong "self-forgiveness" association on the IAT, this result may be interpreted both as "I tend to forgive other people" and as "I tend to forgive myself." Similarly, if a participant shows a strong "other-forgiveness" association on the IAT, it may be interpreted both as "I tend to forgive other people" and as "Other people tend to forgive." As illustrated in these examples measuring mere associations between self/other and forgive/guilt categories, it is difficult to distinguish between the subject and the object of the evaluation. To overcome the interpretative ambiguity derived from the application of an associative task like the IAT to measure self-forgiveness, we decided to use the RRT, an instrument that includes entire statements as stimuli (e.g., "I absolve myself" vs. "I condemn myself"), avoiding the interpretative ambiguity described above. In the RRT a series of sentences are presented on the screen, and participants are invited to categorize them (as fast and accurately as possible) "as if" they are true, or "as if" they are false.

Similarly, to the IAT, the RRT was formed by three practice blocks (1–2 and 5) and four test blocks (3–4 and 6–7). Instructions in the first pair of test blocks (called compatible test blocks) indicate that the "true" button ("I" key) should be pressed when statements indicating self-forgiveness (e.g., "I absolve myself") were presented, while the "false" button ("E" key) has to be pressed when self-condemning statements (e.g., "I condemn myself") were shown. Conversely, instructions of a second pair of test blocks (called not compatible test blocks) indicate that the "true" button ("I" key) should be pressed for statements indicating self-condemning (e.g., "I condemn myself"), and "false" button ("E" key) for statements indicating self-forgiveness (e.g., "I absolve myself"). A total score of the RRT is obtained by calculating, for each participant, the difference between the mean latencies of compatible and not compatible test blocks divided by their pooled standard deviations. The order of compatible and not compatible test blocks was randomized between subjects to avoid possible confounding effects on the RRT mean scores.

It is worth noting that, with these instructions, participants may perform the task using positional information (i.e., self-forgiveness statements should be categorized on the right side in the compatible test blocks and on the left side in the not compatible test blocks, and vice versa for the self-condemning statements) rather than meaning information, decreasing the construct validity of the measure. The risk of "positional" recoding strategies are minimized alternating, during each test block, forgive/condemning trials (using the statements exemplified above) and inducer trials presenting words (e.g., correct, real, true vs. incorrect, unreal, false, etc.) that should be categorized necessarily as "true" or "false" on the base of their actual meaning.

We tested this new implicit measure both in terms of reliability with a split-half estimation, and convergent validity with respect to an explicit measure of self-forgiveness.

Method

Participants
One hundred thirty-five psychology students (86 women; M_{age} = 24.12 years; SD_{age} = 3.01) from the University of Rome "La Sapienza" participated in the study for extra credits.

Procedure
The study proceeded in two phases. During the first phase, participants completed in class the same locomotion and assessment scales used in Study 1, and the dispositional Self-Forgiveness subscale of the HFS developed by Thompson et al. (2005). In the second phase, approximately 1–3 weeks later (depending on the availability of the participants and the laboratory), participants were asked to think back to an episode where they had offended or hurt someone and to briefly describe it. The instructions were as follows: "Every now and then, most or all people have hurt somebody else. We ask you to think about an episode where you offended or hurt someone." After receiving these instructions, participants were asked to write a paragraph about the offense. The writing part served to induce participants to bring to mind the episode and their feelings about it. The written descriptions of offenses reflected a wide variety of ordinary interpersonal situations of low to moderate severity (e.g., hurt a partner, a family member, a friend). After describing the offense, participants were then instructed to practice the RRT task adapted to measure implicit self-forgiveness.

Afterward participants answered items assessing the transgression severity, the time passed since the episode occurred and the acceptance of responsibility for the wrong recalled. At the end of this task, they were debriefed, thanked and dismissed.

Measure

Locomotion and Assessment Orientations
Participants' locomotion and assessment orientations were measured with the same Italian version of the regulatory mode scale (Kruglanski et al., 2000) used in Study 1. Cronbach's α for the locomotion scale was .81 and the α for the assessment scale was .81. Consistent with previous studies (Kruglanski et al., 2000), the two scales were not correlated (r = .08; p = .36).

Assessing Dispositional Self-Forgiveness
All participants responded to the same dispositional Self-Forgiveness subscale of the HFS used in Study 1. The six items were averaged to create a composite score (α = .77). Higher scores reflect greater dispositional self-forgiveness tendency.

Assessing Implicit Self-Forgiveness
A RRT was developed to measure implicit beliefs about self-forgiveness versus self-condemnation dimensions (FG-RRT). The FG-RRT included seven blocks of categorization tasks, and participants were invited to respond as fast and accurately as possible to each trial. In the first single-categorization block (20 trials), subjects were invited to categorize 10 randomly presented inducer-words synonymous of "True" (5 items, e.g., "Correct") or "False" (5 items, e.g., "Incorrect"). In the second single-categorization block (20 trials), 10 statements concerning self-forgiveness versus self-condemnation dimensions were randomly presented (see Appendix B for all the statements). Half of the statements reflected self-forgiveness (e.g., "I forgive myself"), and the remaining reflected self-condemnation (e.g., "I condemn myself"). Participants were instructed to perform these categorization trials as if they were individuals with a self-forgiveness tendency (i.e., using true response key ["I"] for self-forgiveness sentences and false response key ["E"] for self-guilt sentences). The third and fourth were compatible combined test blocks of 40 trials that included both randomly presented inducer words and target sentences. Participants were invited to categorize inducer words (i.e., synonymous of true and false) following their correct meaning, and target sentences as if they are individuals with a forgiveness tendency. The fifth block was a single-categorization block of 20 trials that included target sentences randomly presented with an inversion of the categorization key. In fact, participants were instructed to categorize sentences as if they are individuals with a self-condemnation tendency (i.e., using true response key ["I"] for self-condemnation sentences and false response key ["E"] for self-forgiveness sentences). Finally, the sixth and seventh were not compatible combined test blocks of 40 trials, including both randomly presented inducer words and target sentences. Participants were instructed to categorize inducer words in accordance with their correct meaning, and target sentences as if they were individuals with a self-condemnation tendency. The order of compatible and not compatible combined blocks was randomized between subjects in order to avoid possible confounding effects on the RRT mean scores.

During the entire task response labels "FALSE" and "TRUE" were shown at the top left and top right corner of the monitor, respectively. All sentences appeared in the middle of the monitor until a response was performed. A red cross appeared under the stimulus when subjects responded incorrectly and remained on the screen until they provided the right response. Inter-trial interval was

Table 5. Descriptive and correlations between variables (Study 3)

	M	SD	1	2	3	4	5	6	7
					(N = 135)				
1. Implicit self-forgiveness	0.64	0.32	(.56)						
2. Explicit self-forgiveness	4.62	0.94	.20*	(.77)					
3. Locomotion	4.38	0.59	.16+	.19*	(.81)				
4. Assessment	3.65	0.72	−.18*	−.41***	.08	(.81)			
5. Transgression severity	6.87	1.72	−.11	−.14	.07	.01	(.80)		
6. Acceptance of responsibility	7.37	1.86	−.14	−.08	.11	.08	.48***	(.82)	
7. Time passed (months)	34.87	39.65	.10	.03	.06	.12	.07	.16+	–

Note. Values in parentheses are *r* (Spearman-Brown corrected) for Implicit self-forgiveness and Transgression Severity, and Cronbach's α for all the other variables. ***$p < .001$; *$p < .05$; +$p < .07$.

fixed to 750 ms. A total score for the RRT is obtained calculating, for each participant, the difference between the mean latencies of compatible and not compatible combined test blocks, pondered by their pooled standard deviations. More specifically, as recommended by De Houwer et al. (2015), to compute a final score of the FG-RRT was used a D algorithm similar to that used in scoring the classical Implicit Association Test (Greenwald et al., 2003). In computing the D measure, both practice trials and inducer trials were excluded (see De Houwer et al., 2015). Moreover, latencies exceeding the cutoff of 10,000 ms were excluded, and participants with more than 10% of latencies faster than 300 ms are deleted. RRT scores were computed so that higher scores reflected a self-forgiveness tendency. Two test-halves were calculated applying the D algorithm to blocks 3–6 and 4–7 separately.

Assessing Subjective Transgression Severity

Participants were asked to rate, using a 10-point scale (1 = *not at all*; 10 = *completely*), the extent to which they saw the described offense as: (a) serious and (b) harmful or damaging to the other person (Fisher & Exline, 2006). The two items were highly correlated, $r = .67$, $p < .001$, and were averaged to assess *subjective* transgression severity.

Responsibility and the Time Passed Since the Incident Occurred

Five items (Fisher & Exline, 2006), rated from 1 (= *completely disagree*) to 10 (= *completely agree*), assessed the degree to which participants felt responsible for the offense (α = .82). Statements included: "I feel I was responsible for what happened"; "I wasn't really to blame for this" (R); "I was in the wrong in the situation"; "This was clearly my fault"; and "I did not really do anything wrong" (R). They also reported how long ago the incident occurred (i.e., in months).

Results

Descriptive statistics and correlations among variables are reported in Table 5. Note that both the explicit and implicit self-forgiveness measure was positively and significantly related to locomotion, but negatively and significantly related to assessment. Neither transgression severity, acceptance of responsibility, nor time passed since the transgression was related to implicit self-forgiveness. Importantly, the dispositional measure (i.e., the self-forgiveness subscale of the HFS) and the RRT adapted to assess implicit self-forgiveness were, weakly but positively and significantly correlated ($r = .20$; $p < .05$), supporting the convergent validity of the new measure.

Predictions regarding the differential and unique effects of locomotion and assessment orientations on explicit and implicit self-forgiveness were tested by means of two multiple regression analyses (see for a summary Table 6).

In the first analysis, we regressed the explicit self-forgiveness scores on both the locomotion and assessment indices as predictors. Gender (dummy coded; Men = 0; Women = 1) and age were entered as control variables. The effects of age and gender were not significant. As expected, and in line with Study 1 and previous studies (Pierro et al., 2018, Study 4), explicit self-forgiveness was positively and significantly related to locomotion and negatively and significantly related to assessment.

In the second analysis, we regressed the implicit self-forgiveness scores on both the locomotion and assessment indices as predictors. Gender (dummy coded; Men = 0; Women = 1), age, transgression severity, acceptance of responsibility, and time passed since the transgression were entered as control variables. Neither the effects of transgression severity, the time passed since the episode occurred, acceptance of responsibility, gender, nor age were significant. As expected, self-forgiveness was positively and significantly related to locomotion and negatively and significantly related to assessment.

General Discussion

The present research addressed the unique effects of regulatory mode orientations on explicit and implicit

Table 6. Summary of multiple regression analyses (Study 3)

	β	t	SE	95% CI
Explicit self-forgiveness				
Locomotion	.23**	2.94	.13	.12 to .62
Assessment	−.43***	−5.56	.10	−.75 to −.36
Gender	−.12	−1.60	.15	−.54 to .06
Age	.00	0.01	.03	−.05 to .05
Implicit self-forgiveness				
Locomotion	.19*	2.16	.05	.01 to 1.37
Assessment	−.20*	−2.42	.04	−.17 to −.02
Gender	−.12	−1.33	.06	−.19 to .04
Age	.07	0.84	.01	−.01 to .03
Transgression severity	−.10	−1.03	.02	−.06 to .02
Acceptance of responsibility	−.14	−1.46	.02	−.06 to .01
Time passed (months)	.12	1.45	.001	.00 to .002

Note. Gender: Male = 0; Female = 1. ***$p < .001$; **$p < .01$; *$p < .05$.

self-forgiveness, by controlling for the Big-five personality dimensions and by excluding possible effects of several self-exoneration strategies (i.e., moral disengagement, attribution style, justification). Given that previous findings (Pierro et al., 2018) showed a positive relationship between locomotion and self-forgiveness because it focuses the person toward the future (this helping her to overcome past errors), and the negative relationship between assessment and self-forgiveness because it focuses the person toward the past (this causing her to remain stuck on past errors), the aim of the present research was to further explore these relationships by controlling for other personality variables, and by excluding the possible effects of self-exoneration strategies (i.e., moral disengagement, external attribution or a low tendency to take responsibility, and a higher tendency to find justifications for the misdeed). In fact, the tendency toward (psychological) movement may lead individuals with high locomotion tendencies to simply leave past transgressions behind their shoulders to allow for movement forward. The opposite may be true for high assessors, given their evaluative tendencies leading them to keep transgressions in mind.

In the first study, we demonstrated that locomotion and assessment predict, in the hypothesized directions, self-forgiveness, even by controlling for the Big-Five dimensions, moral disengagement strategies, and attribution style. This study provides evidence about the hypothesized unique effects of regulatory modes on dispositional self-forgiveness, by excluding possible overlapping effects of other relevant personality characteristics, such as neuroticism, extraversion, and conscientiousness, related to both regulatory mode orientations (Kruglanski et al., 2000) and to self-forgiveness (Ross et al., 2004). Furthermore, the findings of Study 1 exclude that high locomotors use

strategies and/or make external attributions that help exonerate the self from the committed wrongs.

In the second study, we tested our hypotheses by using a scenario's measure of self-forgiveness allowing to address the transgression-specificity aspect of self-forgiveness. In fact, one's self-forgiveness tendencies may strictly depend upon how one person perceives the specific transgression and its outcomes. Importantly, also using these four different specific conflict scenarios, the hypothesized relationships between regulatory mode orientations and self-forgiveness were confirmed by excluding possible effects of lacking of self-blame for the misdeeds and of the probability of using justifications.

In the third study, we addressed the problem of self-forgiveness more closely by first measuring regulatory mode orientations and dispositional self-forgiveness approximately 1–3 weeks before (1) asking them to recall a transgression they were to blame, (2) measuring self-forgiveness implicitly through an adapted relational responding task, and (3) measuring personal responsibility for the recalled transgression, transgression severity, and the time since the episode occurred. The results of this study also confirm the hypothesized relationships with the implicit measure of self-forgiveness, and by controlling for the above described variables. Taken together, the present findings offer important theoretical and methodological advancement in the study of self-forgiveness.

Theoretically speaking, self-forgiveness has previously been intended as an intra-psychic phenomenon aimed at changing one's attitudes and emotions toward the self to restore the impaired image of the transgressors as worth persons (Hall & Fincham, 2005; McConnell, 2015; Tangney et al., 2005; Wenzel et al., 2012). With the present research, we further advance this view by arguing that (psychological) motion is also involved in the self-forgiveness process; that is, not only is the goal of self-restoration essential, but also the goal of (psychological) movement (i.e., the feature captured by the locomotion orientation) because this motivates people to overcome past errors efficiently and to move forward, and that this aspect of the self-forgiveness process is impeded by individuals' tendencies to evaluate one's actions (i.e., the feature captured by the assessment orientation). It is important to note that the above aspects of self-regulation are related to self-forgiveness, independently from big-five personality traits, and several self-exoneration strategies (moral disengagement, find justifications for the misdeed, and external attribution). This suggests that there are unique effects of locomotion and assessment in explaining self-forgiveness.

Empirically speaking, we advance the field by adapting an implicit measure (i.e., relational responding task; De Houwer et al., 2015) to assess the self-forgiveness concept. This implicit task allowed us (1) to better investigate

self-forgiveness by possibly supplementing and "limiting inherent biases observed in self-report measures" (as advised by McConnell, 2015, p. 157), and (2) to test whether the relationships between the implicit self-forgiveness task and the two regulatory mode orientations were similar than those we found with the dispositional measure of it. Furthermore, we also tested the convergent validity of the RRT adapted to self-forgiveness, by correlating participants' scores in the implicit measure with that of the dispositional self-forgiveness scale. The findings consistently showed a slight but significant correlation between the two measures (implicit and explicit), thus giving us confidence in our findings. Furthermore, we (a) demonstrated the hypothesized relationships between regulatory mode orientations and self-forgiveness by using three different measures (i.e., by a dispositional self-report scale, by using four conflict scenarios in which participants had to identify with the offender, and by means of an implicit measure); (b) excluded the possible effects of other personality variables (linked to both regulatory mode orientations and self-forgiveness), and the effects of several strategies of self-exoneration.

The present work is not without limitations. First, a major limitation of our designs is that they are correlational, thus limiting causal inferences between regulatory modes and self-forgiveness. Nevertheless, two elements support our theory: (1) in Study 3 we first measured regulatory mode orientations and the dispositional self-forgiveness approximately 1–3 weeks before measuring participants' implicit self-forgiveness in the laboratory; and (2) in prior research regulatory mode orientations were manipulated and then self-forgiveness was measured (Pierro et al., 2018, Study 2). Accordingly, the above points make us confident about our hypothesized causal relationship between regulatory mode orientations and self-forgiveness. Second, although the present findings are quite reliable, drawing strong conclusions from them require some cautions as the reliability of some variables were moderate at best (e.g., attribution style and dispositional self-forgiveness in Study 1 and self-blame in Study 2). Future studies are therefore called for to conceptually replicate the present findings, using different measures of the relevant variables. Importantly, the present findings raise some important questions for future research. For example, although our findings confirm the relation between locomotion and self-forgiveness (assessed both at an explicit and an implicit level), by excluding the effects of strategies that may help exonerate the self from taking responsibility of their wrongs, it is still possible that people with stronger locomotion concerns, although more prone to self-forgiveness, could be more susceptible to repeat errors and mistakes in the future, whenever they do not obstruct forward movement. This possibility might be fruitfully investigated by future research. Consistent with the

above point, it is also important to note that there may be conditions under which the relationships between the two regulatory mode orientations and self-forgiveness may be reduced (boundary conditions). For instance, in the present studies participants were always reminded of offences, wrongs or misdeeds of a relatively moderate severity (e.g., missed a meeting with a friend, forgiving one's close other's birthday), but what happens when people have to face episodes with a very strong severity (e.g., causing a death with a car accident)? It is possible to assume that locomotion may help people to move forward their wrongs when they are not too intense, that is when the wrong action is moderately (morally) forgivable. On the contrary, when the misdeed is too strong to be easily forgiven, it is possible that locomotion tendencies alone is not sufficient for self-forgiveness and, in such circumstances, the co-presence of locomotion and self-exoneration strategies are necessary in helping putting to rest past misdeed and, thus avoid self-condemnation. Future studies may also investigate this point.

Answering the above question, together with the results of the present research, advance our knowledge about the self-forgiveness process and might inform not only psychotherapists toward a better rehabilitation of offenders, victims, and their well-being. For instance, patients with strong assessment tendencies should be strongly sustained by therapists with operative and overarching goals, in order to stimulate psychological motion, and to reduce their time to think and evaluate their personal offenses, which may be disruptive for movement toward goal pursuit and their well-being.

In conclusion, self-forgiveness is a complex and fascinating phenomenon that is strictly linked to a wish to repair the wrong in order to reaffirm the person's value. In addition to this goal, we propose that self-forgiveness is also strictly linked to another essential goal of human beings, that is the desire for psychological motion (i.e., to overcome past errors and continue moving forward). We, thus, sustain that self-forgiveness is energized and promoted by individuals' tendencies toward (psychological) motion, and impeded by evaluative and comparative tendencies.

References

Bandura, A. (1991). Social cognitive theory of moral thought and action. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Handbook of moral behavior and development* (pp. 45–103). Erlbaum.

Caprara, G. V., Fida, R., Vecchione, M., Tramontano, C., & Barbaranelli, C. (2009). Assessing civic moral disengagement: Dimensionality and construct validity. *Personality and Individual Differences, 47*, 504–509. https://doi.org/10.1016/j.paid.2009.04.027

De Houwer, J., Heider, N., Spruyt, A., Roets, A., & Hughes, S. (2015). The relational responding task: Toward a new implicit measure of beliefs. *Frontiers in Psychology, 6*, Article 319. https://doi.org/10.3389/fpsyg.2015.00319

Dixon, L. J., Earl, K. A., Lutz-Zois, C. J., Goodnight, J. A., & Peatee, J. J. (2014). Explaining the link between perfectionism and self-forgiveness: The mediating roles of unconditional self-acceptance and rumination. *Individual Differences Research, 12*, 101–111.

Enright, R. D., The Human Development Study Group. (1996). Counseling within the forgiveness triad: On forgiving, receiving, forgiveness, and self-forgiveness. *Counseling and Values, 40*, 107–126. https://doi.org/10.1002/j.2161-007X.1996.tb00844.x

Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods, 39*, 175–191.

Fisher, M. L., & Exline, J. J. (2006). Self-forgiveness versus excusing: The roles of remorse, effort, and acceptance of responsibility. *Self and Identity, 5*, 127–146. https://doi.org/10.1080/15298860600586123

Fisher, M. L., & Exline, J. J. (2010). Moving toward self-forgiveness: Removing barriers related to shame, guilt, and regret. *Social and Personality Psychology Compass, 4*, 548–558. https://doi.org/10.1111/j.1751-9004.2010.00276.x

Gawronski, B., & Payne, B. K. (2010). *Handbook of implicit social cognition: Measurement, theory, and applications*. Guilford Press.

Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological Assessment, 4*, 26–42.

Gonzales, M. H., Manning, D. J., & Haugen, J. A. (1992). Explaining our sins: Factors influencing offender accounts and anticipated victim responses. *Journal of Personality and Social Psychology, 62*, 958–971. https://doi.org/10.1037/0022-3514.62.6.958

Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology, 74*, 1464–1480. https://doi.org/10.1037/0022-3514.74.6.1464

Greenwald, A. G., Nosek, B. A., & Banaji, M. R. (2003). Understanding and using the Implicit Association Test: I. An improved scoring algorithm. *Journal of Personality and Social Psychology, 85*(2), 197–216. https://doi.org/10.1037/0022-3514.85.2.197

Hall, J. H., & Fincham, F. D. (2005). Self-forgiveness: The stepchild of forgiveness research. *Journal of Social and Clinical Psychology, 24*, 621–637. https://doi.org/10.1521/jscp.2005.24.5.621

Higgins, E. T., Kruglanski, A. W., & Pierro, A. (2003). Regulatory mode: Locomotion and assessment as distinct orientations. *Advances in Experimental Social Psychology, 35*, 293–344.

Hofmann, W., Gawronski, B., Gschwendner, T., Le, H., & Schmitt, M. (2005). A meta-analysis on the correlation between the implicit association test and explicit self-report measures. *Personality and Social Psychological Bulletin, 31*, 1369–1385. https://doi.org/10.1177/0146167205275613

Holmgren, M. (1993). Forgiveness and the intrinsic value of persons. *American Philosophical Quarterly, 30*, 341–352. http://www.jstor.org/stable/20014472

Karpinski, A., & Steinman, R. B. (2006). The single category implicit association test as a measure of implicit social cognition. *Journal of Personality and Social Psychology, 91*, 16–32. https://doi.org/10.1037/t01038-000

Kruglanski, A. W., Pierro, A., & Higgins, T. E. (2016). Experience of time by people on the go: A theory of the locomotion–temporality interface. *Personality and Social Psychology Review, 20*, 100–117. https://doi.org/10.1177/1088868315581120

Kruglanski, A. W., Pierro, A., Mannetti, L., & Higgins, T. E. (2013). The distinct psychologies of "looking" and "leaping": Assessment and locomotion as the springs of action. *Social and Personality Psychology Compass, 7*, 79–92.

Kruglanski, A. W., Thompson, E. P., Higgins, E. T., Atash, M. N., Pierro, A., Shah, J. Y., & Spiegel, S. (2000). To "do the right thing" or to "just do it": Locomotion and assessment as distinct self-regulatory imperatives. *Journal of Personality and Social Psychology, 79*, 793–815. https://doi.org/10.1037/0022-3514.79.5.793

Lucidi, F., Pica, G., Mallia, L., Castrucci, E., Manganelli, S., Bélanger, J. J., & Pierro, A. (2016). Running away from stress: How regulatory modes prospectively affect athletes' stress through passion. *Scandinavian Journal of Medicine & Science in Sports, 26*, 703–711. https://doi.org/10.1111/sms.12496

McConnell, J. M. (2015). A conceptual-theoretical-empirical framework for self forgiveness: Implications for research and practice. *Basic and Applied Social Psychology, 37*, 143–164. https://doi.org/10.1080/01973533.2015.1016160

Nisbett, R. E., & Wilson, T. D. (1977). Telling more than we can know: Verbal reports on mental processes. *Psychological Review, 84*, 231–259.

Pierro, A., Giacomantonio, M., Pica, G., Kruglanski, A. W., & Higgins, E. T. (2011). On the psychology of time in action: Regulatory mode orientations and procrastination. *Journal of Personality and Social Psychology, 6*, 1317–1331. https://doi.org/10.1037/a0025943

Pierro, A., Leder, S., Mannetti, L., Higgins, E. T., Kruglanski, A. W., & Antonio, A. (2008). Regulatory mode effects on counterfactual thinking and regret. *Journal of Experimental Social Psychology, 44*, 321–329.

Pierro, A., Pica, G., Klein, K., Kruglanski, A. W., & Higgins, E. T. (2013). Looking back or moving on: How regulatory modes affect nostalgia. *Motivation and Emotion, 37*, 653–660. https://doi.org/10.1007/s11031-013-9350-9

Pierro, A., Pica, G., Higgins, E. T., & Kruglanski, A. W. (2018). "Letting myself go forward past wrongs": How regulatory modes affect self-forgiveness. *PLoS One, 13*, Article e0193357. https://doi.org/10.1371/journal.pone.0193357

Pica, G., Amato, C., Mauro, R., & Pierro, A. (2015). Individual differences in preference for thought suppression: Components and correlates of the white bear suppression inventory. *TPM – Testing, Psychometrics, Methodology in Applied Psychology, 22*, 31–42. https://doi.org/10.4473/TPM22.1.3

Pica, G., Amato, C., Pierro, A., & Kruglanski, A. W. (2015). The early bird gets the worm: On locomotors' preference for morningness. *Personality and Individual Differences, 76*, 158–160. https://doi.org/10.1016/j.paid.2014.12.020

Ross, S. R., Kendall, A. C., Matters, K. G., Rye, M. S., & Wrobel, T. A. (2004). A personological examination of self- and other-forgiveness in the five factor model. *Journal of Personality Assessment, 82*, 207–214. https://doi.org/10.1207/s15327752jpa8202_8

Tangney, J., Boone, A. L., & Dearing, R. (2005). Forgiveness of the self: Conceptual issues and empirical findings. In E. L. Worthington (Ed.), *Handbook of forgiveness* (pp. 143–158). Brunner-Routledge.

Tangney, J. P., & Dearing, R. L. (2002). *Shame and guilt*. Guilford Press.

Thompson, L. Y., Snyder, C. R., Hoffman, L., Michael, S. T., Rasmussen, H. N., Billings, L. S., & Roberts, D. E. (2005). Dispositional forgiveness of self, others, and situations. *Journal of Personality, 73*, 313–360. https://doi.org/10.1111/j.1467-6494.2005.00311.x

Weiner, B., Graham, S., Peter, O., & Zmuidinas, M. (1991). Public confession and forgiveness. *Journal of Personality, 59*, 281–312. https://doi.org/10.1111/j.1467-6494.1991.tb00777.x

Wenzel, M., Woodyatt, L., & Hedrick, K. (2012). No genuine self-forgiveness without accepting responsibility: Value reaffirmation as a key to maintaining positive self regard. *European Journal of Social Psychology, 42*, 617–627. https://doi.org/10.1002/ejsp.1873

Wohl, M. J. A., DeShea, L., & Wahkinney, R. L. (2008). Looking within: Measuring state self-forgiveness and its relationship to psychological well-being. *Canadian Journal of Behavioural Science, 40*, 1–10.

Wohl, M. J. A., Pychyl, T. A., & Bennett, S. H. (2010). I forgive myself, now I can study: How self-forgiveness for procrastinating can reduce future procrastination. *Personality and Individual Differences, 48*, 803–808.

Worthington, E. L. Jr., Witvliet, C. V. O., Pietrini, P., & Miller, A. J. (2007). Forgiveness, health, and well-being: A review of evidence for emotional versus decisional forgiveness, dispositional forgiveness, and reduced unforgiveness. *Journal of Behavioral Medicine, 30*, 291–302. https://doi.org/10.1007/s10865-007-9105-8

Conflict of Interest

The authors declare that they have no conflict of interest.

Publication Ethics

The set of studies were approved by the Ethical Committee under protocol 63-11/23, titled: "The influence of Regulatory Mode Orientations on Self-Forgiveness."
All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Authorship

All authors were involved in all parts of the research. Antonio Pierro and Gennaro Pica designed the study and collected. Antonio Pierro, Gennaro Pica and Francesco Dentale analyzed the data. All authors contributed to write and revise the manuscript. Informed consent was obtained from all individual participants included in the study. The authors confirm that they will comply with the journal's policy on data archiving and sharing.

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Appendix A

Conflict Scenarios Derived From Gonzales et al. (1992)

Scenario 1. *You are working on a team project in which each team member has to perform their best. Recently, you were telling stories about a person's incompetency to the other team members. Your friend learned that you were talking about them, and when your friend heard that you and others were laughing at them, your friend felt humiliated. You were just joking and did not realize that it would be embarrassing to them. The other team members bring up the stories over and over again, and tend to leave your friend out of activities and meetings.*

Scenario 2. *When you were working on a project in the library, you asked to borrow your friend's laptop to quickly write up an assignment. Your friend agreed. Later, you reached for a flash disk to save the assignment. You grab the wrong disk. Even though you recognize the disk is wrong, you do not care whether the disk is the correct one since you are in a hurry. It has a virus on it, and when you insert the disk into your friend's laptop, the laptop crashes. The computer is able to be fixed but your friend loses a great deal of information; it will take them two weeks to reenter the contents.*

Scenario 3. *Your friend asked you to deliver their individual-based term paper to a professor's office. You intend to turn in the paper, but encounter an old friend and—caught up reminiscing—forget about the paper until after the deadline. Your friend earns an "F" on the paper and a "C" in the course, even though "A" work had been done prior to the paper.*

Scenario 3. *You share privileged information about your friend with another coworker. While you are sharing this information it is overheard by your friend's boss. You disclose the information to your coworker in the photocopy room. Belatedly realizing the conversation can be overheard, you ask your coworker not to discuss the matter at work. Afterward, you discover that your friend's boss was standing outside the copy room, and overheard the entire conversation. The friend does not get the promotion that they deserved and is in fact demoted within the company.*

Appendix B

Table B1. Stimuli for the self-forgiveness versus self-condemnation RRT (in parentheses, the original items in Italian)

FG sentences	RRT attributes
Self-Forgiveness sentences	True
vs.	vs.
Self-Condemnation sentences	*False*
I absolve myself	True
(Assolvo me stesso)	
I feel a sense of acceptance toward myself	Credible
(Provo un senso di accettazione di me stesso)	
I'm indulgent with myself	Correct
(Sono indulgente con me stesso)	
I forgive myself	Exact
(Perdono me stesso)	
I feel understanding toward myself	Real
(Provo comprensione verso me stesso)	
I feel contempt for myself	*False*
(Provo disprezzo per me stesso)	
I condemn myself	*Fake*
(Condanno me stesso)	
I feel a sense of rejection of myself	*Incorrect*
(Provo un senso di rifiuto di me stesso)	
I feel grudge toward myself	*Inexact*
(Serbo rancore verso me stesso)	
I blame myself	*Unreal*
(Incolpo me stesso)	

Note. Non-italic characters refer to self-forgiveness sentences and to true inducer-words/categories, while Italic characters refer to self-condemnation sentences and to false inducer-words/categories.