

AFFECTIVITY AND SELF-FORGIVENESS. THE ROLE OF CONTROL OF NEGATIVE EMOTIONS: SHORT REPORT

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Self-forgiveness is a process in which emotions, thoughts, and behaviours towards oneself are changed from negative to neutral or positive. In this study, we examined affectivity and emotional control (of anger, depression, anxiety) as emotional factors promoting or discouraging self-forgiveness. We examined self-forgiveness among Polish adults ($N = 380$, $M_{\text{age}} = 36.26$). Respondents completed the Polish version of the Positive Affect Negative Affect Scale, the Courtauld Emotional Control Scale (CECS), and the self-forgiveness subscale of Touissant's Forgiveness Scale. In our cross-sectional study, we tested the moderating role of emotional control in the relationship between affectivity and self-forgiveness. Our results showed that positive affect was positively correlated with self-forgiveness, whereas negative affect was inversely correlated with self-forgiveness. Additionally, emotional control (anger, depression) was negatively correlated with self-forgiveness. Finally, total control of emotions and control of anger were found to be buffers between negative affect and self-forgiveness, the effect of negative affect on self-forgiveness being weaker among individuals who were more anger-controlling. The obtained results are a prelude to further research into the relationship between affectivity and self-forgiveness.

Keywords: positive affect; negative affect; self-forgiveness; control of emotions; anger control.

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Researchers defining self-forgiveness emphasize that true self-forgiveness can take place when the offender acknowledges the wrongdoing and accepts responsibility for it (Hall & Fincham, 2005). However, they focus on various aspects, such as motivation to change (Hall & Fincham, 2005), emotion-focused coping involving reducing negative and increasing positive motivations, behaviours, thoughts, and emotions regarding oneself (Davis et al., 2015), acts of generosity and kindness towards oneself (Wohl et al., 2008), or release of self-blame and negative affect in relation to past wrongdoings, mistakes, or regrets (Toussaint et al., 2001).

Previous studies have shown various predictors of self-forgiveness: situational, such as responsibility (Pierro et al., 2021), cognitive, such as rumination (Ascioglu Onal & Yalcin, 2017), personality-related, such as the five-factor model (Pierro et al., 2021), and emotional or affectivity (Mróz & Sornat, 2022). All factors appear to be significant for self-forgiveness, as they have an enhancing or suppressing effect. In our study, we focused on emotional determinants of self-forgiveness referring to factors promoting or discouraging self-forgiveness proposed by Toussaint et al. (2001). In our study, the variables were used as traits.

The affectivity (positive affect PA and negative affect NA) and emotion regulation skills are important for establishing coping styles in different situations. Since individuals very often regulate their emotional responses following a wrongdoing, the presented study included emotion regulation skills applied in self-forgiveness contexts (i.e., McCullough et al., 2007; Witvliet et al., 2011). Previous studies have shown that individuals displaying high levels of anxiety, depression (Thompson et al., 2005), guilt (Mróz & Sornat, 2022), or shame (Mróz & Sornat, 2022) were less likely to forgive themselves. We analyzed response-focused regulation (as opposed to antecedent-focused regulation) (Gross, 1988).

Emotional control is understood as a tendency to inhibit and bottle up emotional states (Gross 1998). Emotional suppression reduces a person's capacity for emotional flexibility and favours rigid patterns of emotional behaviour (Brans et al., 2013), undermining social functioning and relationship quality (Bahl & Ouimet, 2022). However, researchers have suggested that emotional suppression may be beneficial in some circumstances (Witvliet et al., 2011), as it restrains aggressive behaviours (Gross, 1998). In addition, Bonanno et al. (2004) showed that the ability to suppress emotions may be adaptive in conjunction with the context and it may enhance emotional expression. Furthermore, experimental studies have indicated that emotional suppression is beneficial as it reduces negative emotions—provided that people have experienced negative emotions (Dalgleish et al., 2009). Gross' model (1998), though, suggests that emotional suppression may reduce the subjective experience of emotions. Suppression, as an emotion regulation strategy, has been shown to reduce negative feelings associated with an offence (Witvliet

et al., 2011). Thus, emotional suppression might, seemingly, promote self-forgiveness by reducing negative emotions.

In light of the current research on affectivity and self-forgiveness, we put forward a hypothesis that PA (tendency) is positively correlated with self-forgiveness (trait), whereas NA (tendency) is negatively correlated with self-forgiveness (trait) (H1).

Further, given the aforementioned considerations, we put forward another hypothesis that controlling emotions (anger, anxiety, and depression) moderates the relationship between affectivity and self-forgiveness (H2). More specifically, NA is expected to be less inversely correlated with self-forgiveness among individuals controlling their emotions effectively. In contrast, NA is expected to be significantly more negatively correlated with self-forgiveness among individuals with poor control of emotions. In the case of PA, it is expected to be more positively related to self-forgiveness among individuals with poor control of emotions (general, anger, anxiety, and depression).

METHOD

Participants

Data were collected from 395 respondents, 14 of whom were excluded as they failed to provide complete sets. Consequently, the analysed sample comprised 381 respondents (274 female, 104 male, 3 unreported) with a mean age of 36.26 years ($SD = 11.84$, range 20–67). All respondents were Polish. University students were asked to recruit a number of adults. The respondents were invited to participate in the study for free. They were to do paper-and-pencil questionnaires, answer all the questions in private, and return the completed questionnaires. The participants completed the Polish versions of the measures as anonymous self-report questionnaires.

Measures

Self-forgiveness was measured with the Polish version of the forgiveness scale proposed by Toussaint et al. (2001). The items are rated on a 5-point Likert scale. The higher the score, the higher the level of the tendency to forgive oneself. Cronbach's alpha for Self-Forgiveness in the Polish adaptation was .65.

Affectivity was measured using the Polish version of PANAS (Brzozowski, 2010). The scale consists of 30 items, with 15 items for positive affectivity (PA) (from 15 to 75 points) and 15 items for negative affectivity (NA) (from 15 to 75 points). The respondents were asked to rate the degree to which they usually experience each emotion on a 5-point scale. The higher the score, the higher the level of particular affectivity. Cronbach's alpha for PANAS/SUPIN ranged from .73 to .95.

Control of emotions was measured using the Polish version of the Courtauld Emotional Control Scale (CECS) (Juczyński, 2009). This scale measures how much a person expresses or suppresses anger, depression, and anxiety with 7 items for each emotion. Participants are presented with statements regarding certain behaviours pertaining to emotional suppression, and they have to rate on a 4-point scale how often they behave in a particular way. The total emotional control index is established by summing up the results of the three subscales. The higher the result, the more enhanced the suppression of negative emotions. Reliability of the Polish version (Cronbach's alpha) ranged from .78 to .87.

RESULTS

All correlations between the examined variables are presented in Table 1. Self-forgiveness was found to be significantly and positively correlated with PA, and negatively with NA, control of anger, depression, and the general score. Moreover, depression control was negatively correlated with PA, whereas anger control and depression control were positively correlated with NA.

Table 1

Means, Standard Deviations, and Intercorrelations of All Variables (N = 395)

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1 Positive affect	49.61	9.16	–						
2 Negative affect	31.84	10.65	–.31**	–					
3 Control of emotions	50.20	9.82	–.09	.08	–				
4 Control of anger	15.39	4.42	–.10	.11*	.81**	–			
5 Control of depression	16.93	3.80	–.18**	.16**	.80**	.50**	–		
6 Control of anxiety	17.88	4.19	.04	–.06	.77**	.39**	.43**	–	
7 Self-Forgiveness	3.02	.90	.33**	–.32**	–.22**	–.17**	–.27**	–.09	–

* $p < .05$, ** $p < .01$.

Table 2

Regression Analysis for Control of Emotions as a Moderator Between Negative Affect and Self-Forgiveness

Step 1	<i>B</i>	<i>SE</i>	<i>b</i>	<i>t</i>	ΔR^2	<i>F</i>	Low CI	High CI
Negative affect	-.272	.041	-.302	-6.302	.134	(378, 2) 30.321	-.358	-.195
Control of emotions	-.174	.047	-.193	-4.031			-.267	-.082
Step 2								
Negative affect	-.293	.041	-.325	-6.682	.144	(377, 3) 22.258	-.379	-.215
Control of emotions	-.178	.046	-.197	-4.136			-.270	-.089
Negative affect × Control of emotions	.088	.036	.113	2.328			.018	.162

To examine the hypothesized moderating role of controlling emotions between affectivity and forgiveness of self, hierarchical regression analyses were conducted. First, we standardized the predictors and moderators to check for possible multicollinearity among these variables. The interaction condition (e.g., NA × control of anger) was created by multiplying the predictors (i.e., PA and NA) and the moderators (i.e., control of emotions, anger, depression, anxiety).

In step 1, the predictor and moderator were included and they were significant in predicting self-forgiveness, but only NA served as a predictor; PA and control of emotions proved to be non-significant. In step 2, interaction conditions were added to the regression analysis and accounted for self-forgiveness in various ways. We did so using a modification of the SPSS procedure to handle dichotomous outcomes (PROCESS; Hayes, 2012), and using 5,000 bootstrap estimates for the construction of 95% bias-corrected CIs for the conditional indirect effects.

Specifically, the interaction conditions of NA × control of emotions ($p < .02$) were significant in the second step (see Table 2). The model exhibited a good fit ($F[377,3] = 22.258$), enhancing this interaction by 1.2% of the variance in accounting for self-forgiveness. To further understand the nature of this moderation, conditional effects (“simple slopes”) of NA on self-forgiveness were estimated using the “pick-a-point” approach with the sample mean, plus and minus one standard deviation from the mean representing “moderate”, “high”, and “low” control of emotions. NA was significantly and negatively correlated with self-forgiveness at all three points, with the effect approaching zero as emotional control increased (conditional effects were $-.036$, $-.028$, $-.019$ at low, moderate, and high emotional control, respectively).

Table 3*Regression Analysis for Control of Anger as a Moderator Between Negative Affect and Self-Forgiveness*

Step 1	<i>B</i>	<i>SE</i>	<i>b</i>	<i>t</i>	ΔR^2	<i>F</i>	Low CI	High CI
Negative affect	-.274	.044	-.304	-6.260	.114	(378, 2) 25.514	-.033	-.018
Control of anger	-.121	.044	-.134	-2.758			-.049	-.005
Step 2								
Negative affect	-.301	.044	-.334	-6.762	.129	(377, 3) 19.791	-.036	-.020
Control of anger	-.135	.044	-.150	-3.098			-.052	-.009
Negative affect × Control of anger	.104	.038	.136	2.733			.029	.174

An analogous analysis was conducted for anger, depression, and anxiety control. However, this analysis revealed that the effect of NA on self-forgiveness was dependent only on the control of anger (see Table 3). The model exhibited a good fit ($F[377,3] = 19.791$) enhancing the interaction by 1.6% of the variance in accounting for self-forgiveness. Negative affect was significantly ($p < .001$) and inversely correlated with self-forgiveness at all three points, with the effect approaching zero as the control of anger increased (conditional effects were $-.038$, $-.028$, $-.019$ at low, moderate, and high control of anger). The moderation analysis shows that the effect of NA on self-forgiveness was weaker among individuals who were more anger-controlling.

DISCUSSION

The aim of our study was to examine any possible relationships between affectivity, self-forgiveness, and control of emotions. We expected that higher emotional control will diminish the link between negative affect and self-forgiveness, but enhance the link between positive affect and self-forgiveness.

The results supported the first hypothesis that PA is positively correlated whereas NA is negatively correlated with self-forgiveness. Thus, when people experience more positive emotions, they are more self-forgiving, whereas when they experience more negative emotions, they are less forgiving towards themselves. These outcomes are partially supported by a hedonic path to self-forgiveness (Woodyatt et al., 2017), where increasing PA and reducing NA lead to self-forgiveness. Furthermore, previ-

ous studies confirm our finding that positive emotions favour a tendency to forgive oneself, and negative emotions impair self-forgiveness (Wohl et al., 2008).

Furthermore, the relationship between affectivity and self-forgiveness may be assessed from the pseudo-self-forgiving perspective (Woodyatt & Wenzel, 2013). Self-forgiveness is a demanding process involving considerable time and effort (Pierro et al., 2021), as people, after they do something wrong, activate defence mechanisms to reduce the cognitive dissonance and protect themselves against negative self-perception and the feeling of failure. Consequently, experiencing positive emotions and minimizing negative emotions lead to (pseudo)self-forgiveness (Woodyatt & Wenzel, 2013).

Our results only partially support the second hypothesis that control of emotions is a moderator between affectivity and self-forgiveness. Our findings suggested that emotional control serves as a buffer between negative emotions and self-forgiveness. Although emotional control (especially control of anger) does not encourage self-forgiveness, we found an indirect effect of NA through self-forgiveness that was weaker in people with high to moderate control of emotions and control of anger. In individuals with low to moderate emotional (anger) control, NA appeared to reduce self-forgiveness to a greater extent than it did for people who controlled their emotions more effectively. In other words, when individuals tend to experience NA, they are less likely to forgive themselves. However, if these individuals can control their negative emotions, especially anger, NA also entails unforgiveness of self, however, the power of this relationship is reduced.

The obtained results are consistent with the model proposed by Gross (1998) who claimed that suppressing emotions may reduce the outward expression of emotions and possibly the subjective experience of emotions. Additionally, Gross (1998) indicated that it does not favour a long-term reduction of emotions or physiological arousal. Also, the results of the current study converge with those of Bonanno et al. (2004), who indicated that the ability to enhance or suppress expressing emotions in a flexible manner contributes to reduced distress. Moreover, suppression of emotions did not influence the subjective experience of emotions but it attenuated the overt expression of emotions and reduced the memory of the emotional stimuli among students in NYC in the aftermath of 9/11 (2001).

As regards anger control, literature suggests that expressing anger is the best way to deal with this emotion (Germain & Kangas, 2015), at the same time indicating that anger evokes the urge for revenge and diminishes the desire to forgive (Fitzgibbons, 1986). Therefore, suppression of anger appears to encourage self-forgiveness more than expression of anger; however, as our results suggest, only when people experience negative emotions (see Dalgleish et al., 2009).

What is more, our results showed that only general emotional control and anger control are buffers between NA and self-forgiveness. The moderating/buffering role was reported neither for depression nor anxiety control. One possible interpretation of this result is that anger is associated with revenge, and anxiety with avoidance (McCullough et al., 2007). Thus, attenuation of negative emotions through anger control may aggravate the vengeful attitude toward oneself. However, avoidance of oneself seems impossible, just like denial or rationalisation. Moreover, anger control, as a self-control process, protects one against vengeful behaviours. People with high control of anger have more resources for the cognitive reappraisal processes required to increase negative affect (Pond et al., 2012), and consequently decreasing self-forgiveness.

With regard to PA and control of emotions, we found the results surprising. Control of emotions is neither a moderator nor a buffer between positive affect and self-forgiveness. One possible explanation of this outcome is that PA fails to employ extra mental resources (just like low NA) and emotions are controlled in an appropriate manner. Secondly, PA is enough to raise self-forgiveness, and control of negative emotions is not necessary.

LIMITATIONS

Our study has some limitations. First, we focused on self-forgiveness only as a trait-like characteristic, instead of measuring event-specific self-forgiveness. In addition, the self-forgiveness survey tool used here has weak psychometric value. Future studies should explore episodic self-forgiveness including different types of wrongdoing or different individuals who suffered from the act. Since our extra calculations suggested that with age, the moderating role of emotional control becomes stronger, age and gender differences in forgiveness should also be considered (Toussaint et al., 2001). Another limitation of our study is that the majority of participants were female. Our study is also limited by the self-report methodology; an experimental study could shed more light on the relationship between emotions, their regulation and self-forgiveness. Moreover, this study assumes that the origin of affectivity and emotional control affects forgiveness of oneself. However, greater self-forgiveness modifies affectivity and is connected to increased positive affect and decreased negative affect. Therefore, the level of positive affect may increase with self-forgiveness, and the level of negative affect may decrease with self-forgiveness, which suggests a reciprocal relationship. This will need to be studied in greater detail in the future. Longitudinal studies, which could expand the structural models,

should be considered. Last but not least, we have used only one emotion-regulation strategy—control of emotions. Emotion regulation addresses increasing and decreasing both positive and negative emotions (Gross, 1998), therefore future studies should consider other emotion regulation strategies both positive, such as cognitive reappraisal, and negative, such as rumination or catastrophizing. Furthermore, a limitation of the study is the low reliability of the Self-Forgiveness scale. In future studies, it is worth including other tools to assess this variable.

Despite these concerns, this study is valuable as it suggests mechanisms of self-forgiveness through identification of emotional correlates. The results obtained here can be a prelude to further deepening the knowledge related to emotion regulation and self-forgiveness. Undoubtedly, experimental and longitudinal studies will ensure a deeper understanding of these relationships.

CRedit Author Statement

JUSTYNA MRÓZ (60%): conceptualization, methodology, validation, formal analysis, resources, writing (original draft), supervision, writing (review and editing).

KINGA KALETA (40%): conceptualization, methodology, resources, writing (original draft), writing (reviewing and editing).

REFERENCES

- Ascioglu Onal, A., & Yalcin, I. (2017). Forgiveness of others and self-forgiveness: The predictive role of cognitive distortions, empathy, and rumination. *Eurasian Journal of Educational Research*, *17*(68), 97–120. <https://doi.org/10.14689/ejer.2017.68.6>
- Bahl, N., & Ouimet, A. J. (2022). Smiling won't make you feel better, but it might make people like you more: Interpersonal and intrapersonal consequences of response-focused emotion regulation strategies. *Journal of Social and Personal Relationships*, *39*(7), 2262–2284. <https://doi.org/10.1177/02654075221077233>
- Bonanno, G. A., Papa, A., Lalande, K., Westphal, M., & Coifman, K. (2004). The importance of being flexible: The ability to both enhance and suppress emotional expression predicts long-term adjustment. *Psychological Science*, *15*(7), 482–487. <https://doi.org/10.1111/j.0956-7976.2004.00705.x>
- Brans, K., Koval, P., Verduyn, P., Lim, Y. L., & Kuppens, P. (2013). The regulation of negative and positive affect in daily life. *Emotion*, *13*(5), 926–939. <https://doi.org/10.1037/a0032400>
- Bryan, A. O., Theriault, J. L., & Bryan, C. J. (2015). Self-forgiveness, posttraumatic stress, and suicide attempts among military personnel and veterans. *Traumatology*, *21*(1), 40–46. <https://doi.org/10.1037/trm0000017>
- Dalgleish, T., Yiend, J., Schweizer, S., & Dunn, B. D. (2009). Ironic effects of emotion suppression when recounting distressing memories. *Emotion*, *9*(5), 744–749. <https://doi.org/10.1037/a0017290>

- Davis, D. E., Ho, M. Y., Griffin, B. J., Bell, C., Hook, J. N., Van Tongeren, D. R., ... & Westbrook, C. J. (2015). Forgiving the self and physical and mental health correlates: A meta-analytic review. *Journal of Counseling Psychology, 62*(2), 329–335. <https://doi.org/10.1037/cou0000063>
- Fitzgibbons, R. P. (1986). The cognitive and emotive uses of forgiveness in the treatment of anger. *Psychotherapy: Theory, 23*(4), 629–633. <https://doi.org/10.1037/h0085667>
- Germain, C. L., & Kangas, M. (2015). Trait anger symptoms and emotion regulation: The effectiveness of reappraisal, acceptance and suppression strategies in regulating anger. *Behaviour Change, 32*(1), 35–45. <https://doi.org/10.1017/beh.2014.28>
- Green, M., DeCourville, N., & Sadava, S. (2012). Positive affect, negative affect, stress, and social support as mediators of the forgiveness-health relationship. *The Journal of Social Psychology, 152*(3), 288–307. <https://doi.org/10.1080/00224545.2011.603767>
- Gross, J. J. (1998). The emerging field of emotion regulation: an integrative review. *Review of General Psychology, 2*(3), 271–299. <https://doi.org/10.1037/1089-2680.2.3.271>
- Hall, J. H., & Fincham, F. D. (2005). Self-forgiveness: The stepchild of forgiveness research. *Journal of Social and Clinical Psychology, 24*(5), 621–637. <https://doi.org/10.1521/jscp.2005.24.5.621>
- Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper]. Retrieved from <https://www.afhayes.com/public/process2012.pdf>
- Koval, P., Butler, E. A., Hollenstein, T., Lanteigne, D., & Kuppens, P. (2015). Emotion regulation and the temporal dynamics of emotions: Effects of cognitive reappraisal and expressive suppression on emotional inertia. *Cognition and Emotion, 29*(5), 831–851. <https://doi.org/10.1080/02699931.2014.948388>
- McCullough, M. E., Bono, G., & Root, L. M. (2007). Rumination, emotion, and forgiveness: Three longitudinal studies. *Journal of Personality and Social Psychology, 92*(3), 490–505. <https://doi.org/10.1037/0022-3514.92.3.490>
- Mróz, J., & Sornat, W. (2022). Shame- and guilt-proneness and self-compassion as predictors of self-forgiveness. *Journal of Beliefs & Values, 1*–15. <https://doi.org/10.1080/13617672.2022.2076455>
- Pierro, A., Pica, G., Dentale, F., Gelfand, M., & Kruglanski, A. W. (2021). The unique role of regulatory mode orientations in implicit and explicit self-forgiveness. *Social Psychology, 52*(1), 36–50. <https://doi.org/10.1027/1864-9335/a000433>
- Pond Jr, R. S., Kashdan, T. B., DeWall, C. N., Savostyanova, A., Lambert, N. M., & Fincham, F. D. (2012). Emotion differentiation moderates aggressive tendencies in angry people: A daily diary analysis. *Emotion, 12*(2), 326–337. <https://doi.org/10.1037/a0025762>
- Toussaint, L. L., Williams, D. R., Musick, M. A., & Everson, S. A. (2001). Forgiveness and health: Age differences in a US probability sample. *Journal of Adult Development, 8*(4), 249–257. <https://doi.org/10.1023/A:1011394629736>
- Webb, J. R., Toussaint, L. L., & Hirsch, J. K. (2017). Self-forgiveness, addiction, and recovery. In L. Woodyatt, M. Wenzel, & B. J. Griffin (Eds.), *Handbook of the Psychology of Self-Forgiveness* (pp. 265–277). Springer International Publishing.
- Witvliet, C. van Oyen, DeYoung, N. J., Hofelich, A. J., & DeYoung, P. A. (2011). Compassionate reappraisal and emotion suppression as alternatives to offense-focused rumination: Implications for forgiveness and psychophysiological well-being. *The Journal of Positive Psychology, 6*(4), 286–299. <https://doi.org/10.1080/17439760.2011.577091>
- Woodyatt, L., & Wenzel, M. (2013). The psychological immune response in the face of transgressions: Pseudo self-forgiveness and threat to belonging. *Journal of Experimental Social Psychology, 49*(6), 951–958. <https://doi.org/10.1016/j.jesp.2013.05.016>

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- Woodyatt, L., Wenzel, M., & Ferber, M. (2017). Two pathways to self-forgiveness: A hedonic path via self-compassion and a eudaimonic path via the reaffirmation of violated values. *British Journal of Social Psychology, 56*(3), 515–536. <https://doi.org/10.1111/bjso.12194>
- Wohl, M. J., DeShea, L., & Wahkinney, R. L. (2008). Looking within: Measuring state self-forgiveness and its relationship to psychological well-being. *Canadian Journal of Behavioural Science/Revue Canadienne des Sciences du Comportement, 40*(1), 1–10. <https://doi.org/10.1037/0008-400x.40.1.1.1>