

LIGHT TRIAD PERSONALITY TRAITS AND COPING STRATEGIES IN TEACHERS

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Abstract

Studies show that work-related stress among teachers is high. Job satisfaction and interactions with students are influenced by teachers' coping skills with stressful situations and differences in response to stressful events can be explained by personality traits. The present study uses the Light Triad model of personality to examine whether prosocial traits such as empathy, compassion and altruism are associated with cognitive-emotional coping strategies in teachers. The prosocial orientation was measured using the Light Triad Scale (Johnson, 2018) and The Cognitive-Emotional Regulation Questionnaire (Garnefski et al., 2007) was used to identify teachers' cognitive-emotional coping strategies, in relation to negative events or situations. The participants in this study included 120 Romanian teachers from different levels of preuniversitary education. The results revealed that empathy and altruism have small negative correlations with catastrophizing; all three prosocial traits are associated with the positive reappraisal, empathy positively correlates with accepting negative events and refocusing on planning and altruism positively correlates with accepting negative events and putting into perspective. We also found a positive correlation between empathy and rumination. Our findings extend the current understanding of the relationship between teachers' prosocial personality traits and the coping strategies they use following negative life events.

Keywords: altruism, compassion, coping mechanism, empathy, light triad

1. INTRODUCTION

Teaching is considered a very rewarding activity, given that teachers can make real differences in students' lives. However, studies show that the large number of demands in this profession leads to increased stress levels. Pressures from dealing with a greater diversity of students (some of them having psychological difficulties), from parents, from the school itself (organizational expectations are high, but the financial resources are very limited in many Romanian schools) and from nowadays social life (small salaries compared to living costs) could be stressors teachers have to manage. Teachers report more mental and psychosomatic complaints and a high level of burnout compared to other professional groups (Scheuch et al., 2015). Effective teaching and teacher-student interactions are influenced by teachers' emotion regulation skills in stressful situations. In this study we investigate whether personality traits that reflect prosocial orientation are linked to coping strategies teachers are using.

The Light Triad of personality

In the last two decades, theoretical models that describe personality in terms of the dark triad have gained popularity. Dark triad refers to a series of negative personality traits that describe people

who are manipulative, duplicitous, interested in self-promotion, emotionally cold and aggressive: Narcissism, Machiavellianism, Psychopathy (Paulhus and Williams, 2002). In recent years, interest has turned to personality attributes that reflect prosocial aspects such as empathy, compassion and altruism. These traits have been defined and intensively studied separately in relation to pro-social behavior.

Empathy is the ability to understand and experience the emotions of others, definitions of empathy emphasizing two components: affective (the ability to experience the emotion of the other) and cognitive (the ability to understand the other person's experience). Most studies highlight the important role of empathy in engaging in pro-social behaviors. However, recent studies have concluded that too high a level of affective empathy causes high distress and consequently can be detrimental for pro-social behavior. In such situations, individuals are no longer motivated to help others, preferring to tend to their own feelings. In addition, cognitive empathy has been shown to be exhausting for the brain (Stevens and Taber, 2021). An answer to this problem is given by the inclusion of a third element in the definition of empathy. Decety and Jackson (2004, p. 75) describe three functional components of empathy: "affective sharing between the self and the other, self-other awareness (there is no confusion between self and other) and mental flexibility to adopt the subjective perspective of the other and also regulatory processes". Weisz and Zaki (2018) highlight three sub-processes of empathy: experience sharing (affective empathy), mentalizing (cognitive empathy), and empathic concern (compassion and care for others). Thus, an optimal level of affective empathy, together with an emotional regulation mechanism such as compassion, can favor engagement in pro-social behaviors (Stevens and Taber, 2021).

Compassion is a concept from Buddhist philosophy, defined as feeling of concern for another person's suffering and the motivation to help (Goetz et al., 2010; Lee and Gibbons, 2017). In addition to the affective and behavioral components, compassion also involves a cognitive component, namely being aware and responsive to other people's emotions (Kanov et al., 2004; Gilbert, 2010). It includes the nonjudgmental understanding of the negative actions of others, in the context of shared human fallibility (Neff, 2003). Compassion is associated with positive affect, personal resources, well-being, and increased helping behavior (Singer and Klimecki, 2014).

Altruism is defined as acting for the benefit of others. Altruistic behavior is "behavior that promotes the welfare of others without conscious regard for one's own self interests" (Hoffman, 1978, p. 326). Altruism was first defined by the French philosopher and sociologist August Comte (1798 - 1857). Comte defined altruism as "an unselfish regard for the welfare of others" (Ojha and Mishra, 2014).

It is an important concept in social psychology. It is an attitude promoting pro-social behavior. Altruism means providing appropriate care, showing sympathy, compassion and concern for others' welfare, doing things for others (even without compensation or regard). Altruism comprises two aspects: an attitudinal-motivational one (empathy, kindness) and a behavioral one (prosocial, helping behavior).

Studies show that altruism correlates with empathy, compassion and responsibility to alleviate suffering and to increase the well-being of others (Arman, 2023). Previous studies (Schwartz, Meisenhelder, Ma and Reed, 2003) have shown that such an attitude has positive effects on both physical and psychological well-being: better physical health and longevity, happiness, social adaptation, low aggression behavior, positive mood and positive emotions, absence of mental health problems.

Johnson (2018) attempts to unify these three characteristics in a model of the pro-social personality. In this sense, she developed a Light Triad Scale (Light-3) to incorporate the three personality traits and to evaluate individual differences in prosocial orientation. In the cited study, the prosocial orientation factor is composed of "understanding and responding emotionally to the affective states of others (empathy – perspective-taking and empathy – emotional contagion), concern and motivation to comfort and help people in distress (compassion – concern and compassion – desire to help), feeling good after helping others and believing that helping others is the right thing to do (altruism – warm glow and altruism – principle of care)" (Johnson, 2018, p. 36).

Coping strategies

Coping with stress means the way in which a person deals with agitating, challenging events and the feelings evoked by these events, either mentally and/or through action, using continuously altering methods (Lazarus and Folkman, 1984). Coping is an integral feature of the emotion process (Lazarus, 2006) and is a form of emotional regulation.

Emotion regulation "consists of the extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions, especially their intensive and temporal features, to accomplish one's goals" (Thompson, 1994, p. 28). With reference to this definition, Garnefski et al. (2001) underline the multiple processes involved in emotion regulation, such as biological, social, behavioral, cognitive processes (conscious and unconscious) and the difficulty of empirically focusing on all aspects. That's why, in their effort to build an emotion regulation assessment tool, they limit themselves to the cognitive, conscious component, namely the cognitive processes that help us manage our emotions in the face of negative event. They describe nine cognitive emotion regulation strategies, referring to how individuals cognitively relate to experienced stressful events: self-blame (thoughts of putting the responsibility of the negative event on yourself), other-blame (thoughts of putting the blame of the negative event on the environment or another person), acceptance (thoughts of accepting the event and resigning yourself to what has happened), refocus on planning (thinking of a plan to deal with the situation), positive refocusing (thinking about pleasant issues instead of thinking about the negative situation), rumination (excessive thinking about feelings and thoughts associated with the negative situation), positive reappraisal (giving a positive meaning to a negative event in the sense of personal development), putting into perspective (thoughts that reduce the seriousness of an event, emphasizing more serious things), catastrophizing (thoughts about how terrible the experienced event was) (Garnefski and Kraaij, 2007). Studies show that strategies such as self-blame, catastrophizing, and refocus on planning consistently predict depressive symptoms and strategies such as rumination and catastrophizing consistently predict anxiety symptoms (Potthoff et al., 2016).

Prosocial orientation and coping strategies

Several studies found positive relationships between empathy and positive coping strategies, highlighting that empathy is a coping resource. People with greater cognitive empathy experience fewer difficulties with emotion regulation (Thompson, van Reekum and Chakrabarti, 2022). Empathy can act as a coping mechanism by providing emotional support and fostering social connections. Individuals who are more empathetic tend to have better coping skills and higher levels of social support, which can help them manage stress more effectively. Noda, Takahashi and Murai (2018) found that low empathy is associated with high psychological distress. This association is mediated by the cognitive reappraisal of approach coping and by the abandonment and responsibility-shifting of avoidance coping. Their findings show how empathic capacity impacts perceived psychological distress.

Most studies address the role of self-compassion (giving compassion to oneself, being kind and understanding with personal failings) in emotional regulation. Studies show that adaptive cognitive emotion regulation strategies correlate with a high level of self-compassion (Sint et al., 2020). Smith (2018) found such a correlation between self-compassion and positive refocusing, acceptance, refocus on planning, positive reappraisal, putting into perspective. Neff (2003) emphasizes the fact that self-compassion enhances the level of compassion for others, through the fact that one becomes aware of the intrinsic suffering of the human condition.

There are few studies investigating the relationship between compassion for others and emotional regulation strategies. Preckel et al. (2018) consider compassion to be an emotional regulation strategy in itself that works by diminishing negative emotions and generating positive ones. Compassion therapy increases the capacity for emotional regulation, because it promotes an attitude of understanding and acceptance of negative emotions, in a kind way, without judging them (Torbati et al., 2022). Intervention programs containing compassion practices addressed to teachers increase the level of adaptive emotion regulation (Jennings et al., 2017).

Altruism is an important trait in the teaching profession, as teachers are supposed to pay attention first of all to other's (their students, their families, schools) needs and well-being, and only secondly (and internally motivated) to their personal needs and well-being.

2. MATERIALS AND METHODS

The main objective of this study is to explore relationships between teachers' positive personality traits included in the light triad and the coping strategies they use.

Our general hypothesis were:

1. Teachers tend to use predominantly positive coping strategies.
2. There is a relationship between the light Triad traits and the use of certain coping strategies.

Participants

156 teachers took part in this study. 20 (12.8%) participants are males and 136 (87.2%) are females. Their ages vary from 22 to 64 (M=46.42, SD =8.11). Their tenure period in the education system ranges from 1 to 44 years (M=19.66, SD =9.46). As shown in Table 1, almost half of the participants are high school teachers.

Table 1. Participants' distribution according to school level

	Frequency	Percent
Kindergarten	7	4.5
Primary school	25	16.0
Middle school	48	30.8
Highschool	68	43.6
Other (special education teacher, university teacher, school counsellor, etc.)	8	5.1
Total	156	100.0

The participants filled in the measures online. They received online the invitation to take part in this study and their participation was voluntary. The invitation link was sent through various online teachers' groups.

Measures

Cognitive Emotion Regulation Questionnaire (CERQ) (Garnefski, Kraaij and Spinhoven, 2001) measures nine coping strategies people use after having experiencing negative life events. The measure has 36 items with a 5 point Likert-type response scale (1- (Almost) never, 5 – (Almost) always). The nine dimensions are:

- Self-blame refers to thoughts of blaming yourself for what you have experienced.
- Blaming others refers to thoughts of putting the blame of what you have experienced on others.
- Acceptance refers to thoughts of accepting what you have experienced and resigning yourself to what has happened.
- Refocus on planning refers to thinking about what steps to take and how to handle the negative event.
- Positive refocusing refers to thinking about joyful and pleasant issues instead of thinking about the actual event.
- Rumination or focus on thought refers to thinking about the feelings and thoughts associated with the negative event.
- Positive reappraisal refers to thoughts of attaching a positive meaning to the event in terms of personal growth.
- Putting into perspective refers to thoughts of playing down the seriousness of the event or emphasizing its relativity when compared to other events
- Catastrophizing refers to thoughts of explicitly emphasizing the terror of an experience.

The questionnaire is adapted to Romanian population and the alpha Cronbach's coefficients computed on a sample of 1071 adults range from .69 to .83 (Perțe, 2010).

Light triad scale (Johnson, 2018) measures three prosocial personality traits: Empathy, Compassion, and Altruism. Empathy describes individual differences in understanding how others feel (empathy - perspective-taking) and in responding emotionally to other's affective states (empathy - emotional contagion), Compassion refers to experiencing concern for others in distress (compassion - concern) and being motivated to comfort and help others in distress (compassion - desire to help), and Altruism means feeling good after helping others (altruism - warm glow) and believing that helping others is the right thing to do (altruism - principle of care).

Each trait is assessed by 8 items with a 5 point Likert-type scale (1- Completely disagree to 5 – Completely agree). The alpha Cronbach coefficients reported by the author are .67 for Empathy, .80 for Compassion and .79 for Altruism.

The scale was translated to Romanian by this study authors, then back to English by linguistic experts. The two English versions were compared and the resulting scale format was pretested on a sample of 20 Psychology students, who were asked to give feedback on the item content.

The alpha Cronbach coefficients for the present study are: .60 for Empathy, .72 for Compassion, and .71 for Altruism. The initial reliability analysis generated an alpha Cronbach of .51 for Empathy, so we decided to eliminate an item (People I am with have a strong influence on my mood), in order to increase alpha's value.

3. RESULTS AND DISCUSSIONS

Results

As we can observe from the descriptive statistics analysis (table 2), the scales distributions are approximately normal, except for Catastrophizing and Other-blame – where we have found positive and moderate asymmetry, indicating that most of the scores were low. Teachers tend to use different coping strategies when confronted with problematical situations.

Table 2. Descriptive statistics for coping strategies and personality traits

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Self-blame	156	4.00	20.00	9.8269	2.64249	.891	.194	1.717	.386
Acceptance	156	4.00	20.00	11.3013	3.17332	.453	.194	.148	.386
Rumination	156	5.00	20.00	12.3333	3.61954	.300	.194	-.642	.386
Positive refocusing	156	4.00	20.00	11.6090	3.43713	.255	.194	-.185	.386
Refocus on planning	156	8.00	20.00	14.9872	3.05432	-.065	.194	-.698	.386
Positive reappraisal	156	7.00	20.00	15.0769	3.02791	-.262	.194	-.428	.386
Putting into perspective	156	4.00	20.00	12.1731	3.34310	.224	.194	-.232	.386
Catastrophizing	156	4.00	20.00	7.3654	2.51470	1.840	.194	6.370	.386
Other blame	156	4.00	16.00	7.2628	2.30599	1.039	.194	2.568	.386
Empathy	156	2.71	5.00	3.8297	.42351	.050	.194	-.029	.386
Compassion	156	3.13	5.00	3.9920	.37879	.416	.194	.446	.386
Altruism	156	3.13	5.00	4.1891	.38403	-.009	.194	-.306	.386
Valid N (listwise)	156								

Correlational analysis

The correlations between teachers’ coping strategies and light triad personality traits (table 3) were computed using Pearson and Spearman tests. Nonparametric tests were used for Catastrophizing and Blaming others, because of the asymmetry of their distributions.

Table 3. Correlations between The light triad and CERQ (N = 156)

		Self-blame	Acceptance	Rumination	Positive refocusing	Refocus on Planning	Positive reappraisal	Putting into perspective	Catastrophizing	Blaming others
Empathy	Correlation coeff.	.003	.163*	.260**	-.017	.226**	.218**	.048	-.215**	-.022
	p	.972	.042	.001	.831	.005	.006	.551	.007	.786
Compassion	Correlation coeff.	.000	.111	.131	.019	.061	.172*	.155	-.147	-.110
	p	.998	.169	.102	.817	.453	.032	.054	.067	.172
Altruism	Correlation coeff.	.037	.118	.102	.012	.110	.266**	.180*	-.180*	-.141
	p	.645	.141	.204	.884	.172	.001	.024	.025	.079

Hypothesis testing

Regarding our first hypothesis, the results indicate its validation. The most developed coping strategy teachers are using is Positive reappraisal (with a mean above average), followed by

Rumination, Positive refocusing, Refocus on planning and Self blame (average levels of intensity). Acceptance, Putting into perspective, Catastrophizing, and Other-Blame are less developed as coping strategies (with means below average).

Regarding the second hypothesis, it is also confirmed. The correlation analysis indicates several significant, small to moderate correlations:

- Empathy is positively correlated to Acceptance ($r=.16$, $p<.05$), Rumination ($r=.26$, $p<.01$), Refocus on planning ($r=.22$, $p<.01$), Positive reappraisal ($r=.21$, $p<.01$), and negatively correlated to Catastrophizing ($r=-.21$, $p<.01$);
- Compassion is positively correlated to Positive reappraisal ($r=.17$, $p<.05$);
- Altruism positively correlates with Positive reappraisal ($r=.26$, $p<.01$) and Putting into perspective ($r=.18$, $p<.05$) and negatively correlates with Catastrophizing ($r=-.18$, $p<.05$)

Discussion

Coping strategies

Our results show that teachers use many coping strategies when confronted with negative events, but the most used is Positive Reappraisal. This is a positive coping strategy, helping the person to give the stressful event a positive meaning in terms of personal growth. Teachers face many stressors they cannot change (many students in a classroom, diverse students in terms of personal characteristics and teaching needs, limited teaching resources etc.), so that changing the meaning of the stressful situations can contribute to their work adaptation and to their relationships with the students.

Cognitive reappraisal is a healthy coping strategy, being associated with positive affect. People using cognitive reappraisal in stressful situations experience less negative emotion and emotional distress, show less behavioral expressions of such emotions and increased use of cognitive reappraisal is a predictor of positive well-being outcomes (Haga, Kraft and Corby, 2009).

Empathy and coping strategies

In line with previous research, our results show that Empathy is positively correlated to positive coping mechanisms (Acceptance, Refocus on Planning, and Positive Reappraisal) and negatively associated to Catastrophizing, which can be considered a maladaptive coping strategy.

Teachers with higher levels of Empathy are more likely to accept and resign to what happened and cannot be changed (Acceptance), to think about what can be done to change the stressful situation (Refocus on planning), to repeatedly think about the stressful situation (Rumination) and to emphasize the terror of an experience (Catastrophizing). These results are consistent with finding from other research, Sun, Vuillier, Hui and Kogan (2019) found that higher levels of empathic concern were associated with the use of more adaptive coping techniques (measured by active coping, positive reframing, planning, and acceptance) and social support (instrumental and emotional support), as well as using fewer maladaptive coping techniques like denial, substance use, behavioral disengagement, and self-blame.

The positive and small relationship between Empathy and Rumination means that teachers with higher levels of empathy are more likely to thinking repeatedly about the feelings and thoughts associated with the negative event. Empathy and anxiety (rumination is associated with anxiety) may share a common predisposition to continue processing emotional information through thought and rumination, in addition to a sensitivity to social and emotional information. Reflective rumination is most strongly related to empathy. According to research, perspective-taking and

empathic care are both positively connected with self-reflection (Knight, Stoica, Fogleman and Depue, 2019).

Empathy is positively correlated to Positive Reappraisal, meaning that teachers high in empathy tend to give a positive meaning to a stressful event. When confronted with emotionally charged situations, a person who is more skilled at the mentally demanding task of adopting others' perspectives (cognitive empathy) may be better able to adopt a more detached self-perspective, which may make it easier to use more adaptive regulation strategies like reappraisal (Wallace-Hadrill and Kamboj, 2016).

Compassion and coping strategies

In our study, Compassion is significantly associated with Positive Reappraisal. The correlation is a positive, small one. Individuals who show a higher level of concern and motivation to comfort and help others are more likely to use positive reappraisal as a coping strategy, namely to give a positive meaning to a negative event, in terms of personal development. Studies show that compassion training increases positive affect and is associated with activation of neural networks in brain regions involved in reward, love and affiliation. In stressful situations, people trained in compassion respond with positive, other-oriented affect, experiencing feelings of warmth and care toward oneself and others (Klimecki et al., 2012; Preckel et al., 2018). This tendency of highly compassionate individuals explains the association with adaptive coping strategies such as positive reappraisal, which involves finding meaning or positive aspects in challenging situations. By adopting a compassionate perspective, individuals may be more inclined to search for positive aspects and opportunities for growth in stressful situations. For teachers, compassion and adaptive coping strategies such as positive reappraisal are essential dimensions of both personal wellbeing and the quality of relationships with students.

Altruism and coping strategies

Putting into Perspective was found to be directly associated with Altruism; this was also the case for Positive Reappraisal. It seems that altruistic people tend to downgrade the importance of a negative event and even give that event a positive meaning, seeing it an opportunity for personal growth.

Other coping strategies, Catastrophizing and Other-blame, were negatively associated with Altruism. Altruistic people do not tend to emphasize a negative event or blame others for what happened. This is explained by the negative correlations that Altruism has with negative mood and negative affect (anger, anxiety, fear, stress and depressive symptoms).

The altruistic trait is important for teachers, as they not only have to teach others, but to manage a large variety of conducts in the school context. Some pupils have conduct problems, show manipulative or oppositional, defiant behavior etc. To cope with such behaviors some teachers use negative coping strategies (avoidance, anger), which are dysfunctional both on the moment and on the long term. It seems as kindness, the essence of altruism, benefits not only the pupils, but also the teachers showing this trait.

4. CONCLUSIONS

Our study has investigated the relationship between light triad personality traits (empathy, compassion and altruism) and coping mechanisms in a sample of 156 pre-university teachers. The results indicated significant, rather small and both positive and negative associations between all three personality traits and different coping strategies:

- Empathy is positively correlated to positive coping mechanisms (acceptance, planning, positive reappraisal) and negatively associated to catastrophizing, which can be considered a maladaptive coping strategy.
- Compassion is associated with positive reappraisal, although the correlation is small.
- Altruism is positively correlated to positive reappraisal and putting into perspective and negatively associated to catastrophizing.

The main conclusion is that teachers with a more pro-social orientation (assessed by personality traits) are more likely to use positive coping strategies. This finding is the main contribution of our study, in a research area which needs more exploration.

Positive reappraisal is the most developed coping strategy teachers are using and this can help them to experience less negative emotions in stressful situations, which can be very useful in a more demanding professional life.

The main **limitations** of this study are:

- the small sample size,
- the absence of a desirability measure, which could help control the possible bias in the self report measure of personality,
- small value of alpha Cronbach's for Empathy scale (less than .70).

Future research could focus on the adaptation of the light triad personality measure to Romanian population. Given the relationship of the light triad of personality to adaptive coping strategies future research should consider interventions to foster empathy, compassion and altruism in Romanian teachers.

5. REFERENCES

- Arman, M. (2023). Empathy, sympathy, and altruism-An evident triad based on compassion. A theoretical model for caring. *Scandinavian Journal of Caring Sciences*, 1-10. <https://doi.org/10.1111/scs.13163>
- Decety, J., Jackson, P.L. (2004). The functional architecture of human empathy. *Behavioral and cognitive neuroscience reviews*, 3, 71-100.
- Garnefski, N., Kraaij, V., Spinhoven, P. (2001). Negative life events, cognitive emotion regulation and emotional problems. *Personality and Individual Differences*, 30(8), 1311-1327.
- Garnefski, N., Kraaij, V. (2007). The Cognitive Emotion Regulation Questionnaire - Psychometric features and prospective relationships with depression and anxiety in adults. *European Journal of Psychological Assessment*, 23, 141 – 149.
- Gilbert, P. (2010). *Compassion Focused Therapy*. Abingdon, Oxon: Routledge.
- Goetz, J. L., Keltner, D., Simon-Thomas, E. (2010). Compassion: An Evolutionary Analysis and Empirical Review, *Psychological Bulletin*, 136(3), 351–374. doi: 10.1037/a0018807
- Haga, S.M., Kraft, P., Corby, E.K. (2009). Emotion Regulation: Antecedents and Well-Being Outcomes of Cognitive Reappraisal and Expressive Suppression in Cross-Cultural Samples. *Journal of Happiness Studies*, 10, 271–291. <https://doi.org/10.1007/s10902-007-9080-3>
- Hoffman, M. L. (1978). Psychological and Biological Perspectives on Altruism. *International Journal of Behavioral Development*, 1(4), 323–339.
- Jennings, P. A., Brown, J. L., Frank, J. L., Doyle, S., Oh, Y., Davis, R., Rasheed, D., DeWeese, A., DeMauro, A. A., Cham, H., Greenberg, M. T. (2017). Impacts of the CARE for Teachers Program on Teachers' Social and Emotional Competence and Classroom Interactions. *Journal of Educational Psychology*, 109(7), 1010–1028. <https://doi.org/10.1037/edu0000187>
- Johnson, L., K. D. (2018). The Light Triad Scale: Developing and Validating a Preliminary Measure of Prosocial Orientation. Electronic Thesis and Dissertation Repository. London: The University of Western Ontario.
- Kanov, J. M., Maitlis, S., Worline, M. C., Dutton, J. E., Frost, P. J., Lilius, J. M. (2004). Compassion in Organizational Life. *American Behavioral Scientist*, 47(6), 808–827.

- Klimecki, O. M., Leiberg, S., Lamm, C., Singer, T. (2012). Functional Neural Plasticity and Associated Changes in Positive Affect After Compassion Training. *Cerebral Cortex*, 23(7), 1552–1561.
- Knight, L.K., Stoica, T., Fogleman, N., Depue, B.E. (2019). Convergent Neural Correlates of Empathy and Anxiety during Socioemotional Processing. *Frontiers in Human Neuroscience*, 13, 94. doi: 10.3389/fnhum.2019.00094
- Lazarus, R. S. (2006). Emotions and Interpersonal Relationships: Toward a Person-Centered Conceptualization of Emotions and Coping. *Journal of Personality*, 74(1), 9–46. doi:10.1111/j.1467-6494.2005.00368.x
- Lazarus, R. S. & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer.
- Lee, S., Gibbons, J. (2017). The Dark Triad and Compassion: Psychopathy and Narcissism's Unique Connections to Observed Suffering. *Personality and Individual Differences*, 116, 336-342. <https://doi.org/10.1016/j.paid.2017.05.010>
- Neff, K. (2003). Self-Compassion: An Alternative Conceptualization of a Healthy Attitude toward Oneself. *Self and Identity*, 2(2), 85-101.
- Noda, T., Takahashi, Y., Murai, T. (2018). Coping mediates the association between empathy and psychological distress among Japanese workers. *Personality and Individual Differences*, 124, 178–183. doi:10.1016/j.paid.2017.12.009
- Ojha, A.K., Mishra, R. (2014). Altruism as a Function of Age and Deprivation: An Interactional Study. *Journal of the Indian Academy of Applied Psychology*, 40(2), 310-314.
- Paulhus, D. L., Williams, K. M. (2002). The Dark Triad of personality: Narcissism, Machiavellianism and psychopathy. *Journal of Research in Personality*, 36(6), 556–563.
- Perțe, A. (coord.) (2010). *CERQ : Manual for using the cognitive-emotional coping questionnaire*. Nadia Garnefski, Vivian Kraaij, Philip Spinhoven. *Adaptation and standardization of the CERQ on the Romanian population Cluj-Napoca*: ASCR.
- Potthoff, S., Garnefski, N., Miklosi, M., Ubbiali, A., Domínguez, J., Martins, E., Witthöft, M., Kraaij, V. (2016). Cognitive emotion regulation and psychopathology across cultures: A comparison between six European countries. *Personality and Individual Differences*, 98, 218-224. <https://doi.org/10.1016/j.paid.2016.04.022>
- Preckel, K., Kanske, P., Singer, T. (2018). On the interaction of social affect and cognition: empathy, compassion and theory of mind. *Current Opinion in Behavioral Sciences*, 19, 1–6. doi:10.1016/j.cobeha.2017.07.010
- Scheuch, K., Haufe, E., Seibt, R. (2015). Teachers' Health. *Deutsches Ärzteblatt International*, 112(20), 347–356.
- Schwartz, C., Meisenhelder, J.B., Ma, Y., Reed, G. (2003). Altruistic social interest behaviors are associated with better mental health. *Psychosomatic Medicine*, 65(5), 778-85. doi: 10.1097/01.psy.0000079378.39062.d4
- Singer, T., Klimecki, O.M. (2014). Empathy and compassion. *Current Biology*, 24(18), 875-878. doi: 10.1016/j.cub.2014.06.054
- Sint, H. H., Nwe, K. H., Aung, A. A. (2020). Self-compassion and emotional regulation of pre-service teachers. *Journal of the Myanmar Academy of Arts and Science*, XVIII(9B), 545-554.
- Smith, R. (2018). The Potential Effectiveness of Self-Compassion, Cognitive Emotion Regulation and Mindfulness-Based Stress Reduction Training as Stress-Management Strategies for Teachers Working in an International Context. Doctoral Thesis. Bath: University of Bath.
- Stevens, F., Taber, K. (2021). The Neuroscience of Empathy and Compassion in Pro-Social Behavior. *Neuropsychologia*, 159, 107925. <https://doi.org/10.1016/j.neuropsychologia.2021.107925>
- Sun, R., Vuillier, L., Hui, B.P.H., Kogan, A. (2019). Caring helps: Trait empathy is related to better coping strategies and differs in the poor versus the rich. *PLoS ONE*, 14(3), e0213142. <https://doi.org/10.1371/journal.pone.0213142>
- Thompson, N.M., van Reekum, C.M., Chakrabarti, B. (2022). Cognitive and Affective Empathy Relate Differentially to Emotion Regulation. *Affective Science*, 3, 118–134. <https://doi.org/10.1007/s42761-021-00062-w>
- Thompson, R. A. (1994). Emotion Regulation: A Theme in Search of Definition. *Monographs of the Society for Research in Child Development*, 59, 25-52.
- Torbati, A. G., Zandi, A., Abbaspour, S. (2022). Effectiveness of educational intervention-based compassion therapy on emotional regulation and self-control after discharge of patients with COVID-19. *Journal of Education and Health Promotion*, 11, 279. DOI: [10.4103/jehp.jehp_66_22](https://doi.org/10.4103/jehp.jehp_66_22)
- Wallace-Hadrill, S.M.A., Kamboj, S.K. (2016). The Impact of Perspective Change as a Cognitive Reappraisal Strategy on Affect: A Systematic Review. *Frontiers in Psychology*, 7, 1715. doi: 10.3389/fpsyg.2016.01715
- Weisz, E., Zaki, J. (2018). Motivated empathy: A social neuroscience perspective. *Current Opinion in Psychology*, 24, 67-71. doi: 10.1016/j.copsyc.2018.05.00