

PROSOCIALNESS AND SOLITUDE

Ileana-Loredana Vitalia ^{1*}

¹ The National University of Science and Technology POLITEHNICA Bucharest, Faculty of Educational Sciences, Social Sciences and Psychology, Pitesti University Centre, Pitesti, Romania



Abstract

The current study investigates the relationship between prosocialness and solitude with a particular focus on the negative and positive sides of solitude. Prosocialness and solitude are seen as essential elements in the dynamic process of individual self-regulation process that integrates the need to belong and the necessity to renew or to conserve energy for future pro social interactions. The main purposes were: 1. to test the correlation between prosocialness and solitude; 2. to design and to implement a creative meditation group metaphor (the magic garden) to increase the prosocialness dimension and to attenuate the negative experiences of solitude. Multiple methods were used in this study: experimental design, observation, psychodiagnostic instruments, and statistical methods (Correlation and Paired-Samples T Test). Results suggest that if someone prefers to involve in proactive actions such as sharing, helping, taking care of, feeling emphatic with others, it is more likely to prefer less time spent in negative solitude. The creative meditation group metaphor enhanced feelings of connection and allowed the participants to explore the self-transformative and restorative effects of solitude (the positive side of solitude) in the form of self-reflection, creative insights and relaxation. It is the balance between prosocialness and solitude that can better support and contribute to a healthy and meaningful life.

Keywords: psychological needs, expressive-creative techniques, time alone.

1. INTRODUCTION

The Covid pandemic clarified the fundamental importance of prosociality due to its mental and physical benefits in coping with adversity. Several authors (Kulzansky, Epel & Davidson, 2023) even considered the urge to consider prosociality as a public health priority while others (Trachtenberg, 2024) included social support (one of the aspects of prosociality) among the basic psychological needs next to the need to belong and to be affiliated. New terms, such as social psychoneuroimmunology (PNI), were developed to describe the profound and dynamic connections between the social environment, the brain and the immune system. For example, Lavin et al. (2023) described the neurological mechanisms activated in the process of prosocial decisions and demonstrated that the presence of someone in need increased prosocial decisions correlated with frontal theta activity. Across 32 countries, prosociality (in the form of volunteering activities) was strongly associated with individual happiness, despite the cultural factors (Chen, 2023) and it generated an increased positive affect and feelings of relatedness (Mann et al., 2022). Different aspects of prosociality (prosocial behavior, giving and receiving social support, kindness and volunteering activities) were associated with lower inflammation levels, reduced biological markers of sympathetic related responses, a more adapted immune response as well as increased oxytocin

and dopamine levels (Trachtenberg, 2024). The negative aspects of social environment influence such as loneliness (transient or chronic loneliness) and social isolation were widely reported to impact health and well-being. Loneliness and social isolation are risk factors for earlier death, for getting Alzheimer's disease, dementia or Parkinson's (Subramanian, Holt-Lunstad, 2024; Wilson, 2022) as well as for malignancy and systemic chronic inflammation (Trachtenberg, 2024). The common features of loneliness were rejection, depression (overthinking, sadness, pain and hopelessness), being alone, poverty (Akhter-Khan et al, 2024) and fear of evaluation (Lee et al, 2022).

However, to be alone is not always harmful and it could be an opportunity for the person to renew energy, to concentrate on self-discovery and spiritual growth. The positive solitude also named self-determined solitude (Ost Mor, Palgi, Seger-Karpas, 2021), voluntary solitude (Manusov, 2020) or inner-directed solitude (Weinstein et al, 2023) to be differentiated from loneliness, could be beneficial for the person who is prepared and wishes to spend time alone, being capable of enjoying this and taking psychological advantages from this. Personality characteristics such as capacity for introspection and self-reflection, optimism, self-compassion, perspective thinking, present focus were associated with enjoying moments or periods of solitude (Weinstein et al, 2023). Both solitude and social interactions could be considered as important phases of the homeostatic, self-regulatory process of satisfying the need to belong and to conserve energy. After fulfilling the need to belong through social interactions, the person needs to regain energy for future social connections (Luo et al, 2022).

The aim of the present study was to investigate the relationship between prosocialness and solitude with a particular focus on the negative and positive sides of solitude. The first purpose of the study was to test the association between prosocialness and the preference for solitude. The second purpose was to design and to implement a creative meditation group metaphor (The magic garden) to increase the prosocialness dimension and to attenuate the negative experiences of solitude.

2. MATERIALS AND METHODS

Experimental design, psychometrical methods, expressive-creative methods, observation, and statistical methods (Pearson Correlation and Paired-Samples T Test) were used to test the hypothesis of the research.

Variables: dependent variables were: prosocialness (proactive actions: sharing, helping, taking care of, feeling empathic with others) and preference for solitude; independent variable: the participation in the creative meditation group metaphor (The magic garden).

Psychometrical instruments:

Adult's Prosocialness Scale is a self-report 16 item scale developed by Caprara et al (2005) to measure individual differences in adult prosocialness (sharing, helping, taking care of and empathy – as major components of the prosocialness factor). To complete the report, a five-point Lickert scale is used with answers from 1 – never/almost never to 5 – almost always/always true. The instrument has good psychometric properties.

Preference for Solitude Scale (PSS) was developed by Burger (1995) and it measures individual differences in preference for solitude. The scale contains 12 pairs of statements. The individual score varies from 0 to 12, a higher score indicates a higher preference for solitude. The scale has demonstrated adequate consistency and split-half reliability.

Participants: 60 Students participated in this research, 46 in the psychology conversion program and 14 in the final psychology year, with an average age of 35. They all filled out the two online

questionnaires in Google forms. 14 Students participated in the experiment during a psychotherapy seminar. Expressive-creative techniques (music, painting, metaphor) were used.

Procedure: The participants were invited to imagine that they are in a magical garden, where all sorts of plants are located, of all sizes and colors and that they live in this magical garden being themselves a plant, too. They were invited to choose what kind of plant they are and to visualize themselves in all the details of their being: how they look (what height they have, what color, what are the elements that make up their being, if there is any particularity or feature that makes them different, how the parts harmonize), and, if they have any fragrance or flavor (how strong or delicate it is) and any other details they can get. As they discovered themselves, the participants were supported to pay attention to what they were feeling, to the thoughts and needs they have right now and then, to extend their attention to the environment and to explore the space they live in: where they live, how they got there (there were seeds brought by the wind, they were planted by someone, etc.), if there are other plants around them, what kind of plants, what is their relationship with them, and, how they feel there and what seems to be their role there. At some point, the atmosphere changes, the wind begins to blow, the sky is covered by clouds and a storm begins. The participants were guided to explore their experience (their emotions, thoughts and needs), what resources do they use to deal with the storm? If they received support from those around them? Could they offer support? After a while, the storm calms down and the sky becomes clear. They were guided to become aware of how they were feeling, to explore the surroundings and to observe any changes brought by the storm.

After the creative meditation, participants were invited to paint their experience and then to share the experience with the group. Connections were made with personal experience regarding prosocial behaviors and moments of solitude from their lives. Participants completed the two psychological instruments before and after the creative meditation.

3. RESULTS AND DISCUSSIONS

Statistical results - Pearson Correlations ($r=-0.310$; $p<0.05$) suggested that if someone prefers to involve in proactive actions such as sharing, helping, taking care of, feeling emphatic with others, it is more likely to prefer less time spent in solitude. The results are in line with those from other studies that associate high preference for solitude with social isolation (Sakurai et al., 2024) and loneliness (Malon et al., 2024), generating negative effects on health and well-being. The obtained media for prosociality ($m=65.75$) and solitude ($m=4.63$) at the level of the studied sample clearly expressed the tendency towards valuing and appreciating interactions with others along with a lower, but present, preference for solitude. In this context, preference for solitude can be interpreted as having self-transforming and energy generating properties, with effects on increasing interpersonal communication and the quality of relationships with others.

Statistical analyses (Paired Samples T Test) for the experimental group confirmed the efficiency of the creative meditation group metaphor regarding the prosocialness variable (an increased level of prosocialness after the experiment) ($t=-2.476$; $p<0.05$; mean prosocialness test=62.28; mean prosocialness retest=70.21). There were no significant differences for the solitude factor.

The creative meditation exercise (The magic garden) facilitated the creation of a common space for all participants, they experienced a challenging experience (the storm) that was associated with the effects of increasing prosocial behaviors of support, reciprocity, compassion, and empathy. Even if not significant (mean solitude test=5.85; mean solitude retest=4.92), the decrease in preference for solitude can be explained in the sense of the creative meditation scenario: from connecting with

oneself and finding that psychological space of sensory, emotional and cognitive exploration, clarification and restructuring to the external environment, to reconnecting with others and with nature.

4. CONCLUSIONS

The creative meditation group metaphor enhanced feelings of connection and allowed the participants to explore the self-transformative and restorative effects of solitude (the positive side of solitude) in the form of self-reflection, creative insights and relaxation. It is the balance between prosocialness and solitude that can better support and contribute to a healthy and meaningful life.

5. REFERENCES

- Akhter-Khan, S.C., van Es, W., Prina, M., Lawrence, V., Piri, I., Rokach, A., Heu, L.C., Mayston, R. (2024). Experiences of loneliness in lower- and middle-income countries: A systematic review of qualitative studies. *Social Science & Medicine*, 340, 116438. <https://doi.org/10.1016/j.socscimed.2023.116438>
- Archer Lee, Y., Lay, J. C., Pauly, T., Graf, P., & Hoppmann, C. A. (2022). The differential roles of chronic and transient loneliness in daily prosocial behavior. *Psychology and Aging*, 37(5), 614–625. <https://doi.org/10.1037/pag0000681>
- Burger, J. M. (1995). Individual differences in preference for solitude. *Journal of Research in Personality*, 29, 85-108.
- Caprara, G. V., Steca, P., Zelli, A., & Capanna, C. (2005). A New Scale for Measuring Adults' Prosocialness. *European Journal of Psychological Assessment*, 21(2), 77–89. <https://doi.org/10.1027/1015-5759.21.2.77>
- Kubzansky LD, Epel ES, Davidson RJ. (2023). Prosociality should be a public health priority. *Nat Hum Behav.*, 7(12):2051-2053. doi: 10.1038/s41562-023-01717-3. Erratum in: *Nat Hum Behav.* 2023 Dec;7(12):2228. doi: 10.1038/s41562-023-01777-5. PMID: 37857873; PMCID: PMC10840689.
- Lamm, C., Forbes, P.A.G. (2023). *Neurobiology of Prosociality (Chapter 4) - The Cambridge Handbook of Prosociality*. Published online by Cambridge University Press.
- Lavín C, Soto-Icaza P, López V and Billeke P (2023) Another in need enhances prosociality and modulates frontal theta oscillations in young adults. *Front. Psychiatry* 14:1160209. 10.3389/fpsyt.2023.1160209
- Luo, M., Pauly, T., Röcke, C., Hülür, G. (2022). Alternating time spent on social interactions and solitude in healthy older adults. *British Journal of Psychology*, 113:987–1008. DOI:10.1111/bjop.12586. wileyonlinelibrary.com/journal/bjop
- Malon M, Gajos K, Rajchert J, Holt-Lunstad J, Okruszek Ł. (2024). Lonely and Self-Centered? A Meta-Analysis of the Link Between Prosociality and Loneliness. *Personality & Social Psychology Bulletin*. 1461672241295263. DOI: 10.1177/01461672241295263. PMID: 39688189.
- Manusov, V. (2020). In praise of voluntary solitude: the “fertile void” and its role in communication and relationships. *Atlantic Journal of Communication*, 28(1), 68–83. <https://doi.org/10.1080/15456870.2020.1684158>
- Ost Mor, S., Palgi, Y., Segel-Karpas, D. (2021). The Definition and Categories of Positive Solitude: Older and Younger Adults ‘Perspectives on Spending Time by Themselves. *The International Journal of Aging and Human Development*, 93(4) 943–962. DOI: 10.1177/0091415020957379 journals.sagepub.com/home/ahd
- Sakurai, R., Sakurai, M., Suzuki, H., Fujiwara, Y. (2024). Preference for solitude paradox: The psychological influence of social isolation despite preference. *Journal of Affective Disorders*, 365, 15, 466-473. <https://doi.org/10.1016/j.jad.2024.08.020>
- Subramanian, I., Holt-Lunstad, J. (2024). Loneliness: Time for Medicine to Address This Risk Factor. https://www.medscape.com/viewarticle/loneliness-time-medicine-address-this-risk-factor-2024a1000gj4?ecd=mk_mret_240928_mscpmrk_psych_lonely_etid6862168&uac=106205AZ&impID=6862168
- Trachtenberg, E. (2024). The beneficial effects of social support and prosocial behavior on immunity and health: A psychoneuroimmunology perspective. *Brain, Behavior, & Immunity - Health* 37, 100758. <https://doi.org/10.1016/j.bbih.2024.100758>. www.editorialmanager.com/bbih/default.aspx
- Weinstein, N., Hansen, H., Nguyen, T. (2023). Who feels good in solitude? A qualitative analysis of the personality and mindset factors relating to well-being when alone. *Eur J Soc Psychol.*, 53:1443–1457. DOI: 10.1002/ejsp.2983. wileyonlinelibrary.com/journal/ejsp
- Wilson, F.P. (2022). The Surprising Link Between Loneliness and Parkinson's Disease. <https://www.medscape.com/viewarticle/996961>.