

The Transformative Potential of Religious, Spiritual, and Mystical Experiences

Michael Barros¹, Lola Schultz²

¹Department of Psychology, Northcentral University

²Department of Humanities, Boise Classical Academy

Abstract

Religious, spiritual, and mystical experiences (RSMEs) hold the potential to bring about transformative changes in individuals, according to studies in the field of neuroscience. This essay explores the psychological and social effects of RSMEs, including the promotion of positive attitudes such as compassion, empathy, and altruism, and the modification of beliefs. Despite ongoing debates about their nature, whether they are *sui generis* or attributional phenomena or a combination of both, this essay adopts an integrated model. The transformative potential of RSMEs cannot be overlooked, and the recognition of their utility in this context is well warranted.

Keywords:

Religious experience, mystical experience, spiritual experience, mysticism, spirituality, neuroscience, neurotheology, RSME

Introduction

There have been multiple terms associated with different aspects of the novel, seemingly transcendent, meaningful experiences that are often associated with but not limited to religion and spirituality. Some studies have named them “Self-Transcendent Experiences” (Newberg et al. 2017), others designate them as just “Religious Experiences” (Francis & Village 2017; Apud & Czaschcz 2019; Azari et al. 2001), and so on. “Religious, Spiritual, Mystical Experiences” is a designation that was used in a study of their noetic qualities (Yaden et al. 2017), and being the broadest,

is most suitable for capturing the diversity of experiences. The use of this designation herein is also part of an effort to normalize the idea that such experiences need not be mediated by religious schemas, as will be argued.

This essay explores the transformative potential of religious, spiritual, and mystical experiences (RSMEs), and argues that some of these experiences are culturally transcendent. Utilizing an integrated model which reconciles the seemingly opposing perspectives of *sui generis* and attribution

models, these experiences can be significant enough to cause lasting changes in temperament, perspective, and brain connectivity, regardless of the religious schemas of the experiencer.

***Sui Generis* vs. Attribution**

There is a dichotomy of beliefs among researchers about the origin of these experiences. Some researchers believe that these experiences are *sui generis*, meaning “unique” or “in a category of their own,” while others believe that they are attribution phenomena, a thought which feels like something (Apud & Czachesz, 2019), while still others suggest that they may be understood as existing on a spectrum of intensity, proposing an integrated model.

To understand RSMEs to be *sui generis* is to assert that such experiences are something irreducible (Pyysiäinen, 2004, p.80). Under this model, the experiences are innately meaningful, despite the experiencer’s background. This is to say that a true RSME could be achieved by and would be meaningful to both a Buddhist as much as a Muslim. This could perhaps be contrasted with culturally significant practices. For example, a Catholic family may eat pork and beef without much thought, but if Muslims and Hindus observed them, they might be repulsed. In the *sui generis* model, though RSMEs may share features with other cultural experiences, they are themselves set apart and comparison ought to be avoided (Taves, 2008, p.127). A proper framework might be to think of *sui generis* as asserting that RSMEs can transcend culture in a way that

other experiences do not. Were this model to be correct, it could indicate a possible route to a unity of spiritual experience which transcends culture.

However, the attribution model shifts from “religious experience” to “experiences deemed religious” (Taves, 2008, p.127). These experiences are not innately religious or inherently unique but occur as thoughts that, when processed, are deemed to be religious and have the religious meaning attributed to them. An individual’s religious schema acts as a mediator of experience (Azari et al., 2001). This would mean that religious experience could be reduced from “genuine religious experience” to “complex cultural practice which is like other complex cultural practices” (Apud & Czachesz, 2019, p.345). The proponents of this model would say that RSMEs are only meaningful to someone who has learned to think of them as meaningful. Without this conditioning, they would be just like the beef and pork example – meaningful to some, meaningless to others.

Proponents of the *sui generis* model have been accused of not being careful in their definitions of religious experience, defining it on their own rather than letting the experiencer define it (Taves, 2008, pp.130-131). They have, perhaps hastily, stated that they suspected that they had “uncovered solid evidence that the mystical experiences of our subjects – the altered states of mind they described as the absorption of the self into something larger – were associated... with a series of observable neurological events.” (Newberg et al., 2001, pp.4-5) This led them to wonder if they had “found the common biological

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root of all religious experiences” (p.9). Their opponents would say that they have not found evidence of commonality between RSMEs outside of religious schemas but have merely found that there are common areas of activation with experiences that involve “absorption of the self into something larger”, which may or may not be understood to be RSMEs by their experiencers (Taves, 2008, p.131). A Buddhist or a Christian might deem such an experience to be religious in nature, but a staunch atheist might not.

Integrated Model

Although *sui generis* and attribution models seem to be at stark odds, some have proposed that they can be reconciled. Rather than suggesting that the *sui generis* model is simply a naïve *a priori* assumption, Apud & Czachesz (2019) believe that it is specifically seeking to explain great experiences, while the attribution model is most useful for the more moderate experiences (pp.344-345). The implication is that sufficiently powerful RSMEs do share a common biological root that transcends the individual’s religious beliefs. Wildman & McNamara (2010) believe that to limit RSMEs to being attribution phenomena is to abandon the search for a common matrix of religious experiences.

While it is possible that the *sui generis* proponents may have deemed experiences to be RSMEs instead of letting their participants make that distinction for themselves, other studies seem to have corroborated their notion of commonality and had participants self-identify that the

experiences were mystical and held spiritual significance. For example, Griffiths et al. (2006) administered psilocybin to 30 volunteers over 2-3 sessions separated by 2-month intervals. The volunteers had varied religious backgrounds and experience with religious practices. The study found that the participants had experiences (p.13) that “had marked similarities to classic mystical experiences and which were rated by volunteers as having substantial personal meaning and spiritual significance.” They were assessed before and after using both the Mysticism Scale (Hood, Jr. et al., 2001) and the Spiritual Transcendence Scale (Piedmont, 1999) and showed meaningful increases in both areas. This study demonstrates that psilocybin can elicit an RSME which has been identified as such by the participants. This means that there is at least one common method of obtaining RSMEs that transcends even religious schemas. Moreover, the results were also common, with participants reporting “positive changes in attitudes and behavior” and a perceived “substantial personal meaning and spiritual significance” associated with the experience which, for most participants, ranked in the top 5 most significant experiences in their life (Griffiths et al., 2006, pp.12-13).

While it is hard to deny that moderate experiences seem to be mediated phenomena that are subject to particularity, it does seem that the great experiences – the particularly intense – do have commonalities that transcend religious schemas. Unfortunately, however, there is a lack of cross-cultural studies that have identified practices outside of the consumption of

hallucinogens that can consistently elicit RSMEs that can be identified using common measurements such as the Mysticism Scale (Hood, Jr. et al., 2001) and the Spiritual Transcendence Scale (Piedmont, 1999). Despite this limitation, some researchers still concluded that an integrated model would be most appropriate. Czachesz (2013) asserts that RSMEs take place on a continuum ranging from mundane or moderate experiences to great experiences. On this continuum, as the significance of the experience increases, so does its synchronicity with other great experiences. Stated another way: the more mild an experience is, the more culturally specific it is. Most religious practitioners will have a moderate RSME at some point in their life, even if they never have a great experience (Czachesz, 2017). For example, a churchgoer might feel some level of oneness with God during worship music, but their lives are probably not transformed in a serious way every Sunday. The rarity of these great experiences explains the seeming particularity of RSMEs in general – most are so particular because they are moderate. The integrated model (Czachesz, 2015) places stimulation as the central element since the method of stimulation will determine the type of experience produced. Something like psilocybin will stimulate an experience that is consistently reported as mystical and spiritual, modifying neuroanatomy, and sometimes modifying beliefs. Something like reciting one of the Psalms will be mediated by the person's beliefs and neuroanatomy and may or may not be reported as mystical and/or spiritual.

This integrated model addresses the weaknesses of both and therefore seems to be the most appropriate. It is not unexpected that reading the religious text of a religion you do not subscribe to would feel insignificant, for most believers, it's only mildly significant anyway. However, an intense experience like the usage of psilocybin which is considered by the experiencers to be both mystical and significant (Hirschfeld & Schmidt, 2020) is clearly *sui generis* to the experiencer when compared to other cultural practices.

Effects of Moderate RSMEs

The debate between *sui generis* and attribution models extends to the effects of RSMEs as well. Moderate, particular experiences achieve certain positive results, while great experiences achieve those and more. An example of a moderate experience can be seen in a 7-day spiritual retreat that used Catholic spiritual exercises (Newberg et al., 2017). This yielded decreases in tension, fatigue, depression, and anxiety, with increases in religious and spiritual beliefs, increases in self-awareness, positive self-image, and overall positive outlook. Similarly, a 9-day *Shamatha* Buddhist retreat (Kozasa et al., 2015) yielded decreases in stress, tension, and anxiety, with increases in attention, perception, mindfulness, and self-compassion. Other Buddhist retreats (Jacobs et al., 2013) have yielded similar results as well. So, despite religious affiliation, a spiritual retreat seems to result in greater relaxation, self-image, and thoughtfulness. These studies would not be categorized as “great experiences” and

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would therefore, in the integrated model, be more particular – a Catholic who did the *Shamatha* retreat would not be expected to have the same results as the Buddhists. However, it is still interesting to note that despite the different paths, the destinations are (mostly) the same.

There was one study (Boczkowska & Zięba, 2016) that investigated the RSMEs of people from Poland to compare the narrative structures of the experiences with those of people from the United States and the United Kingdom. While all three are Western and primarily Christian, there are certainly significant enough cultural differences between them that it might be expected that different themes would emerge during RSMEs, especially since Poland, unlike the United States and the United Kingdom, is mostly Catholic. However, 4 consistent themes emerged, all of which were shared with both the United States and the United Kingdom: awareness of God's presence/protection, peak experience (a fullness of existence or an ecstasy), awareness of oneness with nature/the world, and feeling of closeness/contact with someone deceased (pp.171-173). These results imply that certain significant cultural differences, at least those of language, social structure, and denomination do not impact the narrative themes of RSMEs (p.174).

Great RSMEs

Regarding the great experiences, those which are psilocybin-induced are great examples of non-culturally dependent, yet still extremely meaningful RSMEs. The

attainment of RSMEs was found by one study (Hirschfeld and Schmidt 2020) to be predicated on self-reported positively experienced ego dissolution and perceptual alterations, intensifying almost all characteristics of altered states of consciousness. This “ego dissolution,” being a voluntary exploration of the unknown, likely contributes to the feelings of meaning and significance associated with the experience (Peterson 2013; Barros 2021).

Significantly, a study conducted on rats demonstrated that psilocybin rapidly induces gene expression related to neuroplasticity, especially in the prefrontal cortex (Jefsen et al. 2020). There do not seem to be any studies showing similar evidence with moderate & mundane experiences, so it is possible that only a sufficiently intense RSME can affect the brain so dramatically. There are also multiple studies that show that psilocybin is useful in the treatment of depression, anxiety, and addiction, with long-lasting positive effects and long-lasting changes in brain connectivity (483). This suggests that great experiences can include the positive effects of moderate experiences, with additional benefits added, such as the promotion of neuroplasticity.

A study measuring the noetic quality of (what the integrated model would categorize as great) RSMEs (Yaden et al. 2017) found that they had a quality of feeling “realer than real” (61). This was despite there being a higher-than-average number of atheist participants, which seems to lend support to the idea of an integrated model, since such noetic qualities were also, evidently, independent of religious schemas.

These great experiences “appear capable of generating positive effects on well-being and altruistic behavior that can last for many months” (Yaden et al. 2017, 11; Griffiths et al. 2006).

Common Effects of RSMEs

As has been argued, although the method of eliciting RSMEs, at the moderate level, varies by religious schemas, the effects appear to be common – at least those which resulted from spiritual retreats. These effects can be summarized as increases in relaxation, self-image, and thoughtfulness. Additionally, the general narratives of moderate RSMEs, including awareness of God’s presence/protection, peak experience, awareness of oneness with nature/the world, and feeling of closeness/contact with someone deceased are not impacted by certain significant cultural differences, at least those of language, social structure, and denomination, though these results may or may not be generalizable to a non-Christian population.

For the great experiences, the method need not be mediated by religious schemas. If someone does enough psilocybin, they will have a great RSME, regardless of their belief system. These psilocybin experiences have effects of altered states of consciousness, associated noetic qualities, and the promotion of neuroplasticity. They “appear capable of generating positive effects on well-being and altruistic behavior that can last for many months” (Yaden et al., 2017, p.11; Griffiths et al., 2006).

Transformative Potential

Religious, spiritual, and mystical experiences elicit positive, substantial changes in the life of the individual. These changes affect but are not limited to, emotional and mental health, physical condition, and spirituality itself. Herrman (2017) claims that there is “undoubted relevance - in various ways - of religion and spirituality to the health and quality of life of people worldwide.”

One of the simplest ways in which RSMEs can play a significant role in the holistic well-being of the individual is through mental health. A study on the effect of a one-week spiritual retreat on brain functional connectivity revealed that participants “experience[d] reductions in stress, anxiety, and depression” (Wintering et al. 2020). These reductions in stress, anxiety, and depression not only make for a more stable emotional and mental state of the individual, but they help to maintain a positive and optimistic disposition as well.

Individuals become more empathetic, experience more positive emotions, and have more control over their feelings (Wintering et al. 2020). Psychiatrist George Vaillant proposes that spirituality “reflects positive emotions: awe, love (attachment), trust (faith), compassion, gratitude, forgiveness, joy, and hope. These in turn are hardwired in humans and intimately connected with collective life, group survival, and community building” (Vaillant, 2008; 2013). Groups of experiencers are certainly poised to interact with one another in a more unified manner since they would both share common

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experiences and because the RSME itself elicits feelings of unity and altruism (Yaden et al. 2017).

Conclusion

RSMEs have high potential as an agent of transformation. On the individual level, there are reductions in negative psychological phenomena like depression and anxiety, as well as increases in positive emotions, optimism, and emotional stability. Socially, they promote collective understandings, feelings of unity, and the sort of empathy which is useful for maintaining that unity. The potential for RSMEs to be a force for positive transformation is hard to overstate.

RSMEs have the potential to bring about transformative changes in individuals. On the personal level, there are reductions in negative psychological phenomena like depression and anxiety, as well as increases in positive emotions, optimism, and emotional stability. In terms of social effects, RSMEs promote compassion, empathy, and altruism, contributing to collective understanding and a sense of unity. While the nature of RSMEs is still the subject of ongoing debates, their potential as a force for positive change cannot be overlooked and warrants further exploration.

References:

1. Apud, I., & Czachesz, I. (2019). The neuropsychology of religious experience. a review of different

scientific approaches to the phenomenon / neuropsicología de la experiencia religiosa. una revisión de distintas aproximaciones científicas al fenómeno. *Estudios De Psicología*, 40(2), 338–362. <https://doi.org/10.1080/02109395.2019.1596373>

2. Azari, N. P., Nickel, J., Wunderlich, G., Niedeggen, M., Hefter, H., Tellmann, L., Herzog, H., Stoerig, P., Birnbacher, D., & Seitz, R. J. (2001). Neural correlates of religious experience. *European Journal of Neuroscience*, 13(8), 1649–1652. <https://doi.org/10.1046/j.0953-816x.2001.01527.x>
3. Barros, M. (2021). ON THE CLAIMS OF JORDAN PETERSON'S COMPLEXITY MANAGEMENT THEORY. *Social Science and Humanities Journal*, 5(10), 2364-2374. <http://sshj.in/index.php/sshj/article/view/748/275>
4. Boczkowska, M. M., & Zięba, M. (2016). Preliminary study of religious, spiritual and mystical experiences. thematic analysis of Poles Adult's narratives. *Current Issues in Personality Psychology*, 3, 167–176. <https://doi.org/10.5114/cipp.2016.61484>
5. Czachesz István. (2017). *Cognitive science and the New Testament: A new approach to early Christian research*. Oxford University Press.

6. Czachesz, I. (2013). Jesus' religious experience in the gospels: Toward a cognitive neuroscience approach. *Jesus - Gestalt Und Gestaltungen*, 569–596. <https://doi.org/10.13109/9783666593628.569>
7. Czachesz, I. (2015). Religious experience in mediterranean antiquity: Introduction to the special issue. *Journal of Cognitive Historiography*, 2(1), 5–13. <https://doi.org/10.1558/jch.v2i1.30984>
8. Francis, L. J., & Village, A. (2017). Psychological type and REPORTED religious experience: An empirical enquiry among Anglican clergy and laity. *Mental Health, Religion & Culture*, 20(4), 367–383. <https://doi.org/10.1080/13674676.2017.1328404>
9. Griffiths, R. R., Richards, W. A., McCann, U., & Jesse, R. (2006). Psilocybin can occasion mystical-type experiences having substantial and sustained personal meaning and spiritual significance. *Psychopharmacology*, 187(3), 268–283. <https://doi.org/10.1007/s00213-006-0457-5>
10. Hood, Jr., R. W., Ghorbani, N., Watson, P. J., Ghramaleki, A. F., Bing, M. N., Davison, H. K., Morris, R. J., & Williamson, W. P. (2001). Dimensions of the mysticism scale: Confirming the three-factor structure in the United States and Iran. *Journal for the Scientific Study of Religion*, 40(4), 691–705. <https://doi.org/10.1111/0021-8294.00085>
11. Jepsen, O. H., Elfving, B., Wegener, G., & Müller, H. K. (2020). Transcriptional regulation in the rat prefrontal cortex and hippocampus after a single administration of psilocybin. *Journal of Psychopharmacology*, 35(4), 483–493. <https://doi.org/10.1177/0269881120959614>
12. Kozasa, E. H., Lacerda, S. S., Menezes, C., Wallace, B. A., Radvany, J., Mello, L. E., & Sato, J. R. (2015). Effects of a 9-day shamatha buddhist meditation retreat on attention, mindfulness and self-compassion in participants with a broad range of meditation experience. *Mindfulness*, 6(6), 1235–1241. <https://doi.org/10.1007/s12671-015-0385-8>
13. Peterson, J. B. (2013). THREE FORMS OF MEANING AND THE MANAGEMENT OF COMPLEXITY. *The Psychology of Meaning* (pp. 17). American Psychological Association. 10.2307/j.ctv1chrrc4.5
14. Piedmont, R. L. (1999). Does spirituality represent the sixth factor of personality? spiritual transcendence and the five-factor model. *Journal of*

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- Personality*, 67(6), 985–1013.
<https://doi.org/10.1111/1467-6494.00080>
15. Pyysiäinen Ilkka. (2004). *Magic, miracles, and religion: A scientist's perspective*. AltaMira Press.
 16. Taves, A. (2008). Ascription, attribution, and cognition in the study of experiences deemed religious. *Religion*, 38(2), 125–140.
<https://doi.org/10.1016/j.religion.2008.01.005>
 17. Vaillant G. E. (2008). Positive emotions, spirituality and the practice of psychiatry. *Mens sana monographs*, 6(1), 48–62.
<https://doi.org/10.4103/0973-1229.36504>
 18. Vaillant G. E. (2013). Psychiatry, religion, positive emotions and spirituality. *Asian journal of psychiatry*, 6(6), 590–594.
<https://doi.org/10.1016/j.ajp.2013.08.073>
 19. Wildman, W. J., & McNamara, P. (2010). Evaluating reliance on narratives in the psychological study of religious experiences. *International Journal for the Psychology of Religion*, 20(4), 223–254.
<https://doi.org/10.1080/10508619.2010.507666>
 20. Wintering, N.A., Yaden, D.B., Conklin, C.J., Alizadeh, M., Mohamed, F.B., Zhong, L., Bowens, B.K., Monti, D., & Newberg, A.B. (2020). Effect of a One-Week Spiritual Retreat on Brain Functional Connectivity: A Preliminary Study. *Religions*.
 21. Yaden, D. B., Le Nguyen, K. D., Kern, M. L., Wintering, N. A., Eichstaedt, J. C., Schwartz, H. A., Buffone, A. E., Smith, L. K., Waldman, M. R., Hood, R. W., & Newberg, A. B. (2017). The noetic quality: A multimethod exploratory study. *Psychology of Consciousness: Theory, Research, and Practice*, 4(1), 54–62.
<https://doi.org/10.1037/cns0000098>