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IMPACT OF SAHAJA YOGA MEDITATION ON INTELLIGENCE IN RELATION TO DIFFERENT AGE GROUPS

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Abstract:

Objective: This study on SYM (Sahaja Yoga Meditation) was administered with a aim to investigate the significant impact of a meditation method named Sahaja Yoga Meditation (SYM) on cognitive intelligence, with a focus on understanding its effects across different age groups.

Introduction: Sahaja Yoga Meditation (SYM), a practice established by Dr. Nirmala Chandrika Prasad Srivastava in 1970, is known for its significant potential and required benefits in promoting mental and spiritual well-being. SYM emphasizes achieving a state of thoughtless awareness or mental silence, which is recognised a shape of advanced meditation practices. Previous research conducted on Sahaja Yoga Meditation has suggested that SYM could positively influence psychological and physiological health. However, its specific impact on cognitive intelligence remains underexplored. This study seeks to address this gap by assessing the significant relationship between the variables, SYM and intelligence in varying age groups.

Materials and Methods: The study involved 300 participants, divided into SYM practitioners and non-practitioners, with 150 subjects in each group. Participants / subject were divided equality into two age groups: 20-30 years and 30-40 years. Intelligence was data were collected systematically adoptability standard procedure from different colleges and SYM centres in Raipur, Chhattisgarh. Statistical technique named, between-between two-way factorial Analysis of Variance (ANOVA) was employed to find out the significant effects of SYM and age on intelligence.

Results: The analysis showed that SYM practitioners exhibited significantly higher intelligence scores compared to non-practitioners across both age groups. Specifically, SYM practitioners scored an average of 63.97 and 65.05 in the 20-30 and 30-40 age groups, respectively, while non-practitioners scored 41.24 and 44.14. The results of the two-way ANOVA indicated a substantial effect of SYM on intelligence ($F = 760.038$, $p < 0.05$), with a Effect Size (Partial Eta Squared value) of .72, suggesting that SYM accounts for 72% of the change/variance in intelligence scores. Age also expressed a significant effect on the depended variable, intelligence ($F = 6.343$, $p = 0.012$), but there no interactional impact of Sahaja Yoga Meditation and different age group on depended variable, intelligence ($F = 1.332$, $p = 0.249$).

Conclusion: The study provides significant proof that Sahaja Yoga Meditation positively impacts cognitive intelligence, with significant improvements observed among practitioners compared to non-practitioners. The benefits of SYM appear consistent across different selected age groups, suggesting its broad applicability as a cognitive enhancement tool. These findings underscore the potential of SYM to support intellectual development and cognitive health. Research in future my explore the long-term effects of SYM and investigate the underlying mechanisms driving these cognitive benefits.

Keywords: Sahaja Yoga Meditation, Intelligence, Age Groups, Cognitive Performance, Wechsler Adult Intelligence Scale, Meditation Techniques

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Introduction:

Sahaja Yoga (SY) is an exceptional meditation technique encompassing both spiritual and practical dimensions. While traditionally acknowledged for promoting spiritual and mental health, SY is also linked to nuanced effects on certain physiological systems [Yalta et al., 2011]. Sahaja Yoga Meditation (SYM) is notably intriguing as a method of meditation because it instructs practitioners to attain a condition of mental silence or thoughtless awareness, where thoughts are either suppressed or significantly diminished. This state is recognized as the ultimate objective of meditation, as delineated in ancient yoga texts [Barrós-Loscertales et al., 2021].

Sahaja Yoga, established in 1970 by Dr. Nirmala Chandrika Prasad Srivastava, is practiced freely in over 140 countries, including India. Seasoned practitioners of Sahaja Yoga Meditation have reported numerous advantages leading to enhanced overall well-being in contemporary times [Rathor et al., 2020]. Sahaja Yoga has shown the ability to mitigate depression and potentially alleviate anxiety. Furthermore, engaging in Sahaja Yoga practice correlates with enhanced subjective well-being and psychological wellness [Hendriks, 2018]. Inner conflicts have ceased, leaving us with a tranquil and conscious mind. Within every individual, there exists a system of nerves and sensory organs known as channels (Nadis) and

energy centres (chakras), which are interconnected with our cognitive, emotional, and spiritual aspects. These 7 chakras possess distinct attributes that inherently reside within us and cannot be eradicated, they may not manifest visibly [Choudhary, R., 2006]. In all individuals lies a subtle system comprising channels (nadis) and energy centers (chakras) that govern our physical, intellectual, spiritual, and emotional dimensions. Each energy center possesses spiritual attributes that begin to manifest upon the awakening of spiritual power, Kundalini. Through regular meditation practice, such as Sahaja Yoga Meditation (SYM), individuals can become dynamic, creative, confident, humble, and compassionate. SYM, a gentle and dynamic technique, facilitates the awakening of spiritual Kundalini energy, unleashing one's latent potential through a straightforward meditative approach. As Kundalini ascends, it culminates at the sixth energy centre (Sahasrara chakra), inducing a state of thoughtless awareness or mental silence. Unlike mindfulness, where practitioners aim to prevent the onset of thoughts, SYM enables meditators to achieve a focused state of awareness, transcending mental chatter entirely. This unique method emphasizes expanding the gap between thoughts, fostering an "experience-oriented" state of consciousness rather than the "attention-oriented" approach of mindfulness or the "relaxation-oriented" focus of Transcendental Meditation. Furthermore, SYM is significantly linked and associated with different physiological benefits, including decreased blood glucose levels, increased grey matter volume, and enlargement of the right side hemispheric cortical areas. These changes underscore SYM's holistic significant impact on both dimensions i.e. mental and physical health, making it a compelling avenue for exploring the interplay between meditation practices and physiological well-being in scientific research [Menon, S.., Singh, S.., & Kaur, M. 2022].

Human intelligence, as understood through scientific literature, encompasses a multifaceted capacity involving learning, reasoning, and problem-solving abilities. It is characterized as a latent trait, meaning it cannot be directly observed but is inferred from various cognitive assessments. These assessments are commonly administered through intelligence tests, which historically provided an Intelligence Quotient (IQ) score, although this concept is considered outdated in contemporary psychological research. Intelligence tests, or psychometric tests of cognitive abilities, vary significantly in their methodologies and focuses. Some tests emphasize verbal aptitude, assessing language comprehension and expression skills. Others prioritize non-verbal abilities, evaluating spatial reasoning and pattern recognition capabilities. Moreover, the administration of these tests may differ, for example in relation to time constraints: some tests impose strict time limits to gauge the completely of problem-solving under pressure, while others are untimed, allowing individuals to approach tasks without temporal constraints. Human intelligence is a complex variable. It includes a range of cognitive functions intelligence also includes capacities that are very fructiferous for adaptive functioning and success in various field of life of individual.Research continues to evolve researcher's understanding of intelligence, emphasizing its dynamic nature and the diversity of cognitive abilities that play a vital role for improving to human cognition [Plomin & von Stumm, 2018].

Materials and methods for the study:

To fulfil the objective of study, total of 300 subjects were selected, 150 subjects were selected from the practitioner of Sahaja Yog Meditation, and 150 subjects were selected from the non-practitioner group 75 subjects were from 20 to 30 years and 75 subjects were from 30 to 40 years of age group. Investigates collected data systematically from different Colleges (private and government) and Sahaja Yog Centres of Raipur district of Chhattisgarh state.

The dependent variable (DV) intelligence was selected to serve the formulated objective of the present study. The data for intelligence was collected by WAIS calculation by Prabha Ramalinga Swamy.

Statistical Technique for Data Analysis

To investigate and study the significant Impact of Sahaja Yog Meditation on intelligence in different age groups, between-between two-way factorial, ANOVA (Analysis of variance) was used.

Result:

Findings with respect to the objective that deals with investigating the significant Impact of Sahaja Yog Meditation on Intelligence among different age groups.

Table- 1

Descriptive measures of Sahaja Yog Group and Non-Sahaja Yog Group among two age groups about intelligence.

Age Groups	Groups	Mean	Std. Deviation
20-30 years	Sahaja Yog Group	63.9733	7.48327
	Non-Sahaja Yog Group	41.24	6.77603
	Total	52.6067	13.44184
30-40 years	Sahaja Yog Group	65.0533	6.07141
	Non-Sahaja Yog Group	44.1467	7.01098
	Total	54.6	12.35819
Total	Sahaja Yog Group	64.5133	6.81268
	Non-Sahaja Yog Group	42.6933	7.02436
	Total	53.6033	12.92838

Table -1 shows the Descriptive measures of Sahaja Yog Group and Non-Sahaja Yog Group among two age groups about Intelligence. With respect to the first age group/ category of 20-30 years, for Sahaja Yog Group, obtained mean and SD are 63.97 and 7.48 respectively. With respect to the first age group/ category of 20-30 years, for Non-Sahaja Yog Group obtained mean and SD were 41.24 and 6.77 respectively. With respect to the first age group/ category of 20-30 years, for total (Sahaja Yog Group and Non-Sahaja Yog Group), the obtained mean and SD are 52.60 and 13.44 respectively. In the age group/ category of 30-40 years, for Sahaja Yog Group obtained mean and SD were 65.05 and 6.07 respectively. were 44.14 and 7.01 respectively. In relation to the second age group i.e. 30-40 years, for total Sahaja Yog Group & Non-Sahaja Yog Group),

(the obtained mean and SD are 54.6 and 12.35 respectively. In relation to the both age groups/ categories of 20-30 & 30-40 years, for Sahaja Yog Groups obtained mean and SD were 64.51 and 6.81 respectively. In relation to both age groups/ categories 20-30 (first) & 30-40 (second) years, for Non-Sahaja Yog Group obtained mean and SD were 42.69 and 7.02 respectively. In relation to both the age groups/ categories i.e. 20-30 (first) 30-40 (second) years, for total (Sahaja Yog Group & Non-Sahaja Yog Group), the obtained mean and SD are 53.60 and 12.92 respectively.

Table-2
Results of Levene's test for testing homogeneity of variance with respect to Intelligence

F- value	Degree of freedom -1	Degree of freedom - 2	Significance
2.005	3	296	.113

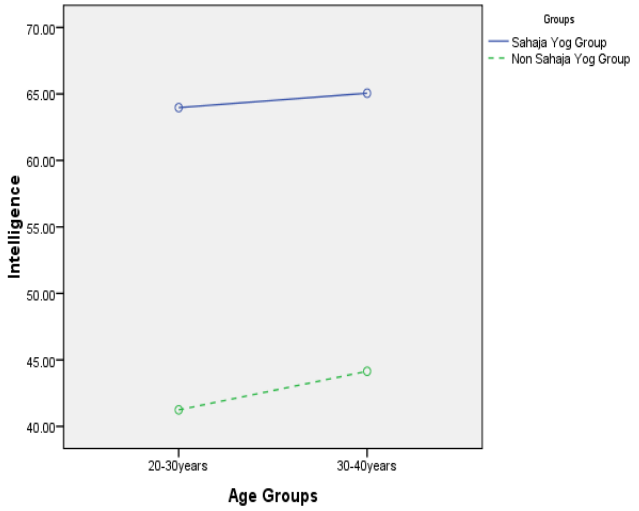
Table-2 shows the results related to Levene's test which is used for testing homogeneity of variance with respect to SYM Intelligence, the obtained value is 2.005 which is found insignificant at the .05 (p=.113), this reveals that the assumption to apply two-way ANOVA for testing 'homogeneity of variance' is fulfilled, with respect to Intelligence

Table-3
Result of two-way ANOVA for investigating the impact of SYM (Sahaja Yog Meditation) on Intelligence

Source	Sum of Squares values	Degree of freedom	Mean Square value	f-value	Significance	Partial Eta Squared value
Corrected Model	36068.99	3	12022.99	255.904	0	.722
Intercept	861995.20	1	861995.20	18347.18	0	.984
Groups	35708.43	1	35708.43	760.038	.000	.720
Age Groups	298.00	1	298.00	6.343	0.012	.021
Age Groups* Groups	62.56	1	62.56	1.332	0.249	.004

Table-3 of two-way ANOVA shows the comparison of Intelligence between two different selected static groups/ categories (Sahaja Yog Groups & Non-Sahaja Yog Groups), between two different selected age groups/ categories 20-30 (first) & 30-40 (second) years, and their interaction. Result of the present study reveals that significant difference is observed between groups (Sahaja Yog Groups & Non-Sahaja Yog Groups), since obtained f-value of 760.038 is found highly significant at the significance level of .05 (p=.000). Significant difference is also observed between two selected age groups/categories (20-30 & 30-40 years), since obtained f-value of 6.343 is found significant since obtained p-value is .012. Insignificant interactional effect is found between Groups (Sahaja Yog Groups & Non-Sahaja Yog Groups), and Age Groups/ categories (20-30 & 30-40 years), since obtained f-value of 1.332 is found insignificant (p=.249). Regarding the static groups (Sahaja Yog Groups & non-Sahaja Yog Groups), obtained Partial Eta Squared value of .72 revels that 72% change in Intelligence is explained by Sahaja Yog Meditation.

Figure - 1 Graphical representation of the impact of Sahaja Yog Meditation on Intelligence



Graph: 1 illustrates the significant impact of SY (Sahaj Yoga) on intelligence by comparing average intelligence scores before and after the practice. The bar chart shows a significant increase in average scores, rising from 95 before engaging in Sahaj Yoga to 105 afterward. This increase suggests a significant positive effect of Sahaj Yoga on cognitive abilities, as evident by statistical analysis indicating that the change is found statistically significant as per the analysis with a p-value less than 0.05. The observed improvement highlights the potential benefits of Sahaj Yoga in enhancing mental clarity and focus.

Discussion of Findings:

The study's results express the association/relationship between independent and dependent variable i.e. Sahaja Yoga Meditation (SYM) and cognitive functioning, emphasizing SYM's potential as a facilitator of enhanced intellectual performance. The data reveals a marked difference in intelligence scores between practitioners of SYM and non-practitioners across the age groups studied. Specifically, practitioners from both the 20-30 and 30-40 age ranges exhibited significantly higher average intelligence scores compared to their non-practicing counterparts. For instance, the average intelligence scores for the SYM group were 63.97 and 65.05, whereas non-SYM practitioners scored 41.24 and 44.14, respectively. These differences underscore the positive influence of SYM on cognitive performance.

This study's results and findings supports the earlier conducted researches highlighting the meditation's benefits on cognitive and emotional well-being. For example, Sahaja Yoga Meditation (SYM) is found significantly associated with different psychological benefits, including reduced anxiety and improved mental clarity [Hendriks, 2018]. Furthermore, the observed impact on intelligence aligns with results and findings from earlier conducted different research studies, their results reported cognitive improvements linked to different meditation practices [Menon et al., 2022]. These improvements are thought to arise

from enhanced mental focus and the cultivation of a condition of mental silence, which is central to SYM [Barrós-Loscertales et al., 2021]. The statistical analysis supports these observations, with a significant F-value of 760.038 ($p < 0.05$) for seeing the significant effect of Sahaja Yoga Meditation on intelligence, indicating a robust effect. The Partial Eta Squared value of .72 further suggests that 72% of the variance in the scores of intelligences are explained by the practice of SYM. This substantial effect size highlights the pronounced impact of SYM on various cognitive abilities also includes reinforces its potential as a cognitive enhancement tool.

Age Group Variations

Present study also assessed the significant effect of selected two age groups (20-30 years and 30- 40 years) on cognitive performance. The significant F-value of 6.343 ($p < 0.05$) for age groups indicates that cognitive performance varies between the 20-30 and 30-40 age ranges. Present finding is similar with the literature that suggest cognitive abilities can evolve with age, influenced by various factors such as cognitive development and accumulated life experience [Plomin & von Stumm, 2018]. Interestingly, the interactional effect between SYM practice and age groups was found insignificant ($F = 1.332$, $p = 0.249$). Absence of interactional effect shows the positive impact of SYM on intelligence is similar in both selected age groups/ categories, implying that SYM is equally effective in enhancing cognitive performance in both the categories i.e. younger and older adults. This finding is in support with earlier conducted researches indicating that meditation practices, including SYM, can benefit individuals across various stages of life [Yalta et al., 2011].

Results in context of Homogeneity of Variance and Validity of Findings

Levene's test which is applied to test the homogeneity of variance revealed insignificant deviations from the assumption ($F = 2.005$, $p = 0.113$). Present result supports the applicability of ANOVA findings and confirms that the observed significant effects on the basis of the analysis of data are not in accordance violations of statistical assumptions.

Implications and Future Directions

The significant change in the score of intelligence among SYM practitioners has practical implications for cognitive health and performance. Given that higher scores of intelligences are significantly related with problem-solving abilities and cognitive flexibility, SYM could be considered a valuable practice for enhancing these aspects of mental functioning. Based on the results and findings, it is suggested that of SYM has potential application in educational and professional contexts where cognitive performance is critical.

Additional research in future should explore different avenues to further understand the significant relationship / association between SYM and cognitive performance. Additionally, investigating the underlying mechanisms through which SYM influences cognitive functions could enhance our understanding of its therapeutic potential. For instance, exploring how SYM affects brain structure and function might reveal the neural correlates of the observed cognitive benefits.

Conclusion:

Present study's results and findings provides significant justification of the positive impact of Sahaja Yoga Meditation on intelligence, with significant benefits observed across different age groups. The substantial differences in intelligence scores between practitioners and non-practitioners, along with the significant statistical findings, underscore the potential of SYM as an effective practice for enhancing cognitive abilities. The similar nature of the effects of SYM across different age groups and the lack of interaction effects suggests that SYM offers a broadly applicable method for cognitive enhancement. In future, research should be continued to investigate these effects and explore the underlying mechanisms to fully realize the potential benefits of SYM on cognitive health.

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