

Effect of Yoga on Self-Disclosure and Automatic Negative Thoughts among Adolescents with Visual Impairment

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Abstract

Disability is a challenge for the stakeholders since the early days, the area has gained interest in many disciplines. Visual impairment is the type of disability that affects the ability to sense and interpret visual cues. Adolescents with visual impairment face many difficulties in their life due to their restricted senses. This has a serious impact on their personality and mental health. Self-disclosure is the tendency of individuals to share personal information with others. Automatic Negative Thoughts are quick sudden thoughts with negativity that may or may not have a cause. A study was conducted on 84 adolescents (36 girls + 48 boys) with congenital visual impairment to assess the effect of yoga practices (Asana and pranayama) on Self-Disclosure and Automatic Negative Thoughts. The sample was purposively selected. A one-hour program of yoga was given by a trained coach for especially abled for 2 months to the subjects. Self-disclosure inventory by Sinha (2003) and the Automatic Thought questionnaire by Hollen and Kendal (1980) were used to get the scores. Wilcoxon signed-rank test was used to calculate the results. A Significant difference was found between the scores of participants of the experimental group, pre and post- yoga sessions. But no significant difference was seen in the scores of the control group.

Keywords- Yoga, Self-Disclosure, Automatic Negative Thoughts, Adolescents, and Visual-Impairment

The term impairment consists of a wide range of restrictions an individual experiences due to any physical, cognitive, or emotional lacuna. Sensory disabilities are a matter of concern for the stakeholders as they restrict or hinder the communication of feelings, thoughts, or information, which has a remarkable contribution to catharsis and mental well-being, and growth in all domains. Visual impairment is a type of sensory disability which controls the processing of visual information, this may be congenital or acquired due to an accident or disease but, both have a detrimental impact on a person's life. According to world health organization around 124 million people in world are living with visual impairment and 37 million have complete blindness. More than 90% of this population residing in developing countries. It not only restricts the intake of information but also leads to low acceptance in society, negativity, interpersonal conflicts, and various challenges in personal, social, and occupational life. During adolescence, the situation becomes more sensitive as the stage itself brings many changes and challenges for the individual. Peer pressure and seeking identity are the most important matter of concern for individuals and stakeholders in the field of mental health and education. The term self-disclosure stands for sharing thoughts, feelings, and experiences with other individuals, like peers, parents, siblings, teachers, etc. This is the act of revealing personal information about self that others are unlikely to discover in other ways. This information touches on topics that one would not even think about discussing with particular people and therefore, we keep our thoughts and feelings to ourselves (Derlega, Winstead, & Greene, 2001; Steinberg, 2007; Tang et al., 2013; Wood, 2010). Harvey and Boynton (2021) stated that self-disclosure

has a remarkable impact on psychological resilience, they further added that self-esteem and self-compassion arbitrate the relationship between self-disclosure and psychological resilience. Self-disclosure may work as catharsis for individuals with disabilities if they receive support from the environment but, at the same time they may feel uncomfortable sharing sensitive information with unknown people (Brak et al. 2010). Gerber (2006) mentioned that one should check the positive and negative outcomes of self-disclosure before opting for it.

Another important factor while dealing with adolescents with visual impairment is automatic negative thoughts, they are sudden, quick, and arise without warning but they are exact representations of mental health. Yu, Huang, and Mao (2022) found that childhood maltreatment has a great influence on Automatic Negative Thoughts, they also found that culture and genetics have mediating effects on them. Findley, Plummer and McMahon (2015) identified that individuals with disability experiences one or other form of abuse in their life irrespective of their living area, this may increase the negativity in thoughts and affects their mental health. Honey, Emerson, & Llewellyn, (2011) found that young adults, with a disability score lesser on mental health. Gender seems to play an important role in this, men with any impairment have low mental health than women. Stakeholders are continuously looking for new possible ways to deal with low mental health and negative thoughts among individuals with impairments which has fewer or no side effects.

Yoga has a great history in Indian culture, various systems introduced a three-tier system consisting of spiritual, moral, and physical activities which led to self-awareness and also provided a base to modern

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yoga. The modern system consists of three components: the Asanas (various postures), the pranayama (exercises related to breathing) and the Dhyana (meditation). Riley (2004) found that the various postures of yoga improve flexibility, gaining control over breathing enhances focus and meditation helps in attaining calmness in mind. Yoga can be used as a therapeutic intervention to relieve pain and facilitates understanding of oneself. As the performer uses specific movements to work from outer to inner sheaths. Studies in the field have evidence that yoga contributes in the reduction of stress and related disorders. Yoga helps young adults to overcome symptoms of depression (Woolery, 2004). Pilkington (2004) also found evidence of the contribution of yoga in managing depressive symptoms in individuals.

Need for the study

Yoga has shown its positive impact on mental health of individuals since early days and the alarming rate of personality problems and negativity among individuals with visual impairment raise the demand of natural therapeutic ways to deal with it. Low mental health not only affects the individual itself but also, restricts the utilization of a big resource of society. Foley-Nicpon & Lee (2012) there is a paucity of research for dealing with the mental health and related conditions of individuals with impairment so, it is a need of the hour to find out natural and effective methods for reducing psychological problems among the visually impaired.

Problem

To assess the effect of yoga practices (Asana and pranayama) on Self-Disclosure and Automatic Negative Thoughts.

Hypotheses

There will be a significant positive effect of yoga practices (Asana and pranayama) on Self-Disclosure. There will be a significant positive effect of yoga practices (Asana and pranayama) on Automatic Negative Thoughts.

Method

Design

The pre-post research design was used

Sample

84 adolescents (36 girls + 48 boys) with a congenital visual impairment from Mathura Uttar Pradesh were purposively selected for the study. The age range of adolescents was 15-18 years. Participants were randomly divided into an experimental and a control group. The experimental group (n=45) participated and was given 1 hour session of yoga (Asana and pranayama) daily over a two-month period by a trained coach for the especially abled, postures were taught by audio method and corrected personally when needed. The control group (n =39) didn't receive these sessions at all. Both groups were evaluated again after two months.

Tools

Self-Disclosure Inventory (SDI) developed by Sinha (2003).

Automatic Thoughts Scale (ATS)- It was developed by Hollon and Kendall (1980). it contains 30 items. The scale's internal consistency coefficient was 0.97.

Results and Discussion

Wilcoxon signed-rank test was used to calculate the results from the data obtained.

The result tables show the statistical values of the experimental and control groups. When the pre and post-yoga values Automatic Negative Thoughts and

Table 1: Significance of difference in means scores of the experimental group

	N	Mean	Z value	Sig.(2-tailed)
Ant pre-yoga)	45	65.91	5.844	.001
Ant(post yoga)	45	49.78		
Self-disclosure (pre)	45	86.33	5.780	.001
Self-disclosure (post)	45	100.13		

Table 2: Significance of difference in means scores of the Control group

	N	Mean	Z value	Sig.(2-tailed)
Ant (pre- yoga)	39	70.1538	-1.608	.108
Ant(post yoga)	39	69.6154		
Self-disclosure (pre)	39	77.5641	-2.250	.024
Self-disclosure (post)	39	78.0769		

Objectives

To evaluate the effect of yoga practices (Asana and pranayama) on Self-Disclosure.

To evaluate the effect of yoga practices (Asana and pranayama) on Automatic Negative Thoughts.

Self-Disclosure were compared it was found that the experimental group showed a significant reduction in Automatic Negative Thoughts, the z value obtained is 5.844 which is significant at .001 level of significance. The amount of self-disclosure increased among the

participants of the experimental group the z value was observed as 5.780, which is again significant at .001 level of significance.

Table 2 of the control group represents the mean and z values of variables (Automatic Negative Thoughts and Self-Disclosure). There was no significant difference in the values of Automatic Negative Thoughts and Self-Disclosure after two months.

The study examined the effect of Yoga Practices (Asana and Pranayama) Self-Disclosure and Automatic Negative Thoughts. The results depicted that yoga has a significant effect on Automatic Negative Thoughts and Self-Disclosure of adolescents with visual impairment. This study compared Automatic Negative Thoughts and Self-Disclosure of adolescents with visual impairment scores in experimental and control groups pre and post-yoga intervention. Experimental and control groups were matched for gender, age, and educational state. The results are supported by a study conducted by Bridges and Sharma (2017) they reviewed 23 studies related to the effect of yoga on depression conducted in various countries and concluded that yoga and its postures help in managing depression. Yoga is an alternative method of dealing with depression. Its effect and efficacy generally depend on the time for which yoga was given as an intervention to the individuals. Shohani et al (2018) found that Yoga has an effective role in reducing stress, anxiety, and depression. Thus, it can be used as complementary medicine. Dalgas et al. (2008) proved that the nature of yoga is controlling the mind and central nervous system and unlike other sports, it has a moderating effect on the nervous system, the hormonal emissions, physiological factors, and regulation of nerve impulses; therefore, it can be effective in improving depression and mental disorders

Limitations

This study has some limitations such as-
A group of adolescents with no impairment could be included to compare the effect on different groups.
The sample size of both groups was also small more participants could be included to generalize the results.

Implications

The study may be useful for the parents and teachers of individuals with visual impairment to manage their depression and enhance mental health.

The study will also give insight to the stakeholders about the alternative ways to treat depression and facilitate direction to frame policies for individuals with visual impairment.

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