

Development of a Trans-disciplinary Intervention Module for Adolescent Girls on Self-awareness

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ABSTRACT

Introduction: Mental health promotion among adolescents has been a key area of intervention for professionals working with children and adolescents. The opinions of experts in the field of mental health have taken to frame a trans-disciplinary intervention for adolescent girls on self awareness.

Aim: To discuss the development and validation of a structured intervention by combining the knowledge from different disciplines in helping adolescents enhancing self awareness.

Materials and Methods: Both qualitative and quantitative methodologies were followed for the development and validation of the module. First phase of the development of intervention module was the framing of intervention module after conducting in-depth interviews with experts in both mental health and yoga fields. Six experts each from mental health and yoga field were chosen for interview through convenient sampling. Validated interview guides were used for the process. The framed

intervention module was given to six mental health experts and six yoga experts for content validation. The experts rated the usefulness of the intervention on a scale 0-4 (4=extremely helpful).

Results: The themes derived in the interviews were importance of self awareness, autonomy of self, physical level of self understanding, self regulation of emotions and self monitoring. The interviews were consolidated to frame the intervention module consisting of eight sessions having two parts in each session. Part one of each session is activities and interactions on mental health and part two is guided instructions for body focused meditation. Sessions were finalized with rating and suggestions from the experts. The final version of the module was pilot tested and had found to have enhanced self awareness among adolescent girls.

Conclusion: Integration of multiple disciplines brought in novel perspectives in intervention.

Keywords: Adolescence, Females, Mental health promotion

INTRODUCTION

Adolescence is a developmental period with many major internal and external changes. Developmental challenges during adolescence includes increased need for independence, evolving sexuality, consolidating advanced cognitive abilities, negotiating changing relationships in family, peers and broader social connections [1]. This paper discusses the development of a structured intervention in combining the knowledge from different disciplines in helping adolescents enhancing self awareness. The opinions of experts in the field of mental health and yoga were sought to frame a trans-disciplinary intervention for adolescent girls on self awareness.

Interventions aimed at adolescent population in Indian context majorly include adolescent health education, sexual and reproductive health, sexuality and sexual abstinence etc., [2]. Life skills education programmes and resilient training have brought in significant changes in the self-esteem, motivation and self-efficacy of adolescents [3].

The concept of self awareness has higher meanings in transcendental terms but for an adolescent who is going through the developmental stage; it is about knowing about the physical changes in oneself and understanding where their thoughts and emotions take them. Studies on awareness in adolescents had majorly looked into their knowledge about the physical changes [4,5]. Self as a construct in an individual is developed in relation with their interaction with others in the society. Recent understanding of self could be seen as the accumulation of experiences one gains by the continuous interaction with the environment [6].

Children could safely practice meditation and simple breathing exercises as long as the breath is never held. Children trained in these techniques are better able to manage emotional upsets and

cope with stressful events [7]. A study recommended carefully constructed research to enhance understanding of sitting meditation and its future use as an effective treatment modality among younger population [8]. Body focused techniques help in understanding the subtle changes of physical body frame [9] and subjective features of internal body responses [10]. Although self awareness and physical changes of adolescence has been addressed in many of these studies, we couldn't find any intervention modules with combined modalities like knowledge, awareness relaxation, breathing exercises or meditation.

The current research was carried out between the months of February, 2015 to October, 2015 in Bengaluru, Karnataka, India, with the aim of developing a trans-disciplinary intervention module for adolescent girls on self awareness.

MATERIALS AND METHODS

The development of the module was carried out in two phases. The Phase 1 was the consolidation of ideas and techniques into framing the intervention module through literature reviews and in-depth interviews with experts in the field. Interview guides were prepared through literature review [10-12]. Separate probes were framed for mental health experts and yoga professionals and validated. In-depth interviews were conducted among six mental health experts and six yoga practitioners to know the preferences of the professionals in aspects of designing the intervention like the structure and content of intervention module. Mental health experts included psychiatric social workers, clinical psychologists and psychiatrists who had knowledge and experience in child mental health. All of the experts were professors in the respective fields. Six mental health experts from three different institutions were chosen for the in-depth interview. Yoga professionals were those experts in

yoga and meditation who were professors and practitioners in yoga education. Experts for the interview were selected by convenient sampling method. Researcher personally contacted the experts and interviews were conducted at their offices. The interviews were later transcribed and themes were identified. Thematic analysis was carried out to categorize the commonly accepted themes from the interview. Intervention module was prepared from the topics discussed and themes derived.

Phase 2 was a quantitative phase wherein the validation of the framed module was done quantitatively. Six experts from each field who were not part of the interview were contacted personally by

	Part 1:	Part 2:
Session 1	Mental Health Intervention Introductory session: Ice breaking and knowing oneself. Duration: 25 minutes	Body Focused Meditation Sitting posture was described; Breathing awareness and conclusion with awareness of outer space Duration of part 2: 5 minutes
Session 2	Self; "I, me and myself". Session on knowing about oneself. Duration: 30 minutes	Berating awareness and concluding with awareness of outer space Duration was 5 minutes
Session 3	Multiple selves, one's functioning in different social roles. Duration: 28 minutes	Detailing of breathing-inhaling and exhaling with awareness of physical body part, subtle movement of body while breathing etc. Closure with awareness of outer space Duration was 7 minutes
Session 4	Session on physical body awareness. Body mapping. Duration: 25 minutes	Sitting descriptions and brief outer awareness, detailing of breath with physical awareness, awareness of body part on a bottom to top manner and closure with awareness of outer space. From this session onwards, duration of instructions was 10 minutes
Session 5	Emotions- identification and regulation. Duration: 25 minutes	Brief sitting description with more autonomy for them to get settle. Awareness on body parts; to do on their own with freedom given to choose between top to bottom or bottom to top approach, reminding of any incident where emotions experienced with increased awareness about body parts feelings in its memory. Long and slow breathing instructions. (to help them come out of the changes in body created by memory); Brief positive suggestions and closure with outer awareness. Duration was 10 minutes
Session 6	Identifying emotional responses during interpersonal situations and an activity to letting of oneself (guided instructions) Duration: 25 minutes	Awareness on body parts; to do on their own with freedom given to choose between top to bottom or bottom to top approach with focus on specific sensations which they would be aware of and positive suggestions on confidence and experiencing relaxation. Duration was 10 minutes
Session 7	3 R's: Reacting, responding and Responsible. Duration: 25 minutes	Awareness on body parts; to do on their own with freedom given to choose between top to bottom or bottom to top approach with focus on specific sensations which they would be aware of, positive suggestions and confidence and future life and experiencing relaxation. Duration was 10 minutes
Session 8	Introducing the concept of monitoring device and conclusion. Duration: 25 minutes	Sitting descriptions and brief outer awareness Awareness on body parts; to do on their own with freedom given to choose between top to bottom or bottom to top approach with focus on specific sensations which they would be aware of and positive suggestions on confidence and experiencing relaxation. Duration was 10 minutes

[Table/Fig-1]: Session wise details of the module: Each session has introduction and conclusion activities ranging from 10 to 15 minutes.

Mental Health intervention sessions	Scoring (0-4) (Number of experts)					n (%) of experts rating ≥2	Content Validity Ratio
	0 (0)	1 (1)	2 (1)	3 (4)	4 (0)		
MH session 1	0 (0)	1 (1)	2 (1)	3 (4)	4 (0)	5 (83.33)	0.6
MH session 2	0 (0)	1 (0)	2 (1)	3 (3)	4 (2)	6 (100)	1.0
MH session 3	0 (0)	1 (0)	2 (0)	3 (4)	4 (2)	6 (100)	1.0
MH session 4	0 (0)	1 (0)	2 (0)	3 (3)	4 (3)	6 (100)	1.0
MH session 5	0 (0)	1 (0)	2 (1)	3 (3)	4 (2)	6 (100)	1.0
MH session 6	0 (0)	1 (0)	2 (0)	3 (2)	4 (4)	6 (100)	1.0
MH session 7	0 (0)	1 (0)	2 (0)	3 (3)	4 (3)	6 (100)	1.0
MH session 8	0 (0)	1 (0)	2 (0)	3 (4)	4 (2)	6 (100)	1.0

[Table/Fig-2]: Content validity ratio of mental health intervention sessions.

researcher for validation. Out of the six experts in mental health field, two were psychiatric social workers, two were clinical psychologists and two were psychiatrists; all working as professors and assistant professors. All the six experts in yoga were having Doctoral degree in yoga.

Ethical consideration: Prior permission was taken from each of the experts for in-depth interviews and validation. Interviews were done by researcher by visiting their offices with prior appointment. The objectives of the interview were explained and informed consent was taken from each of them. Consent for audio recording was sought for and done for all who agreed for. Confidentiality maintained while transcribing the interviews. The research had received ethical clearance from Institute Ethical Committee, National Institute of Mental Health and Neuro Sciences, Bengaluru, Karnataka, India.

RESULTS

Phase 1

In-depth Interview

The main theme derived was the importance of self awareness. There were four sub themes emerged from the interview. Some of the voices corresponding to the theme and sub themes are discussed below.

Main theme: Importance of self-awareness

Most of the experts had given their opinion on the importance of self awareness.

"Awareness of what they are good at; what they are not good at; what their strengths are; weaknesses are; those things."(MH 4)

"A holistic approach is needed to enhance awareness in the girl. (MH 5)

With better awareness of oneself, they would gain confidence to face and deal with day to day issues in a better way. The yoga practitioners opined the need of clearly demarcating the self awareness in adolescent period from that of older people.

Sub themes

1. Autonomy of self: Experts viewed that seeking autonomy is a prime factor during adolescence, and intervention on self awareness helps in the achievement of autonomy.

"..so as part of the development itself during that phase, their style of functioning was of seeking freedom and also they do not want to get dependant on the parents." (MH 1)

Experts shared that though dependence on peers is seen in adolescents, they want to experience their freedom and hence the responsibility of understanding about self can be given to a growing individual.

2. Physical level of self understanding: The need for physical level of understanding for adolescent was enquired into.

Body Focused Meditation sessions	Scoring (0-4) (Number of experts)					n (%) of experts rating ≥ 2	Content Validity Ratio
	0 (0)	1 (0)	2 (0)	3 (2)	4 (4)		
BFM session 1	0 (0)	1 (0)	2 (0)	3 (2)	4 (4)	6 (100)	1.0
BFM session 2	0 (0)	1 (0)	2 (0)	3 (2)	4 (4)	6 (100)	1.0
BFM session 3	0 (0)	1 (0)	2 (0)	3 (2)	4 (4)	6 (100)	1.0
BFM session 4	0 (0)	1 (0)	2 (0)	3 (1)	4 (5)	6 (100)	1.0
BFM session 5	0 (0)	1 (0)	2 (0)	3 (2)	4 (4)	6 (100)	1.0
BFM session 6	0 (0)	1 (0)	2 (0)	3 (3)	4 (3)	6 (100)	1.0
BFM session 7	0 (0)	1 (0)	2 (0)	3 (2)	4 (4)	6 (100)	1.0
BFM session 8	0 (0)	1 (0)	2 (0)	3 (2)	4 (4)	6 (100)	1.0

[Table/Fig-3]: Content validity ratio of body focused meditation sessions.

“they can be given guided instruction to focus on big to smaller things..by starting with awareness of external reality, like listening to the sounds..breath and then each part of the body..”(YP 4)

The use of physical body as a frame for focusing also was opined by experts. The process helps one in reconstruction of one's idea about one's physique.

3. Self regulation of emotions: Majority of experts stated that the emotional regulation can be a significant part in self awareness.

“ immediate emotional reactivity is something that they need to examine in and learn to tone it down and delay it..”(MH 6)

They can cognitively understand the world, but the understanding their own emotions and those with whom they interact with, becomes difficult due to their age.

4. Self-monitoring: Experts suggested encouraging self monitoring of adolescent even after the intervention.

“..They can write it and discuss with someone if required. Recording it and even discussing with peers under supervision helps them to understand them better.” (YP 3)

Both mental health experts and yoga practitioners shared the view of having self monitoring frameworks for continued understanding of oneself.

The Module: After analysing the interviews and conducting further discussions among the authors, the intervention module was framed focusing on three aspects:

1. Knowledge of physical changes during adolescent period;
2. Knowledge about emotional fluctuations during adolescence;
3. A technique to enable them to understand and accepts these changes.

The part I of the intervention addressed the first two aspects and part II of the intervention addresses the third aspect. Thus the intervention module had eight sessions with two parts in each session. The methodology used in Part I was interaction, activity and group based activities. Part II was activity based on body focused meditation, in which, guided instructions were given to the participants of the intervention.

[Table/Fig-1] detailed the intervention module which was consolidated from the responses discussed and topics derived. The intervention module has got eight sessions with two parts in each session. Each session had an introductory discussion, followed by the main section of intervention (which had two parts-Mental Health Intervention and Body Focused Meditation) and a conclusion discussion. Each session of the intervention module was timed for 45-50 minutes. The introductory discussion was for less than ten minutes of duration. The methodology used in Part I of the main section was that of interaction, individual activity and group based activities. Part II had activity based on body focused meditation, in which, guided instructions are given and it has to be followed by the students. It is prepared in such a way that the beginning sessions, is of shorter duration, and the time increases for the later sessions. The concluding interaction stretches up to ten minutes wherein participants share about their experiences while in the session.

Phase 2

Validation of the intervention module: Part 1 of each session which had mental health interventions were validated by the mental health experts and Part 2 which has guided instructions for body focused meditation were validated by the yoga experts. Experts were requested to rate the usefulness of the activities in each session in a five point scale ranging from 0 to 4 wherein, '0' signifies the activities in that session 'not helpful' and '4' signifies extremely helpful. Activities that were rated with a score (based on their knowledge and experience in the field) of two and above by majority of experts were retained for final module.

[Table/Fig-2] gives the validation score for Part 1 of the intervention module, that is, the Mental Health Intervention Session. Practices that received a score of 2 or more from 80% of the experts were retained in the final module. Content validity ratio for majority of the sessions was 1.0 which indicated high validity and hence used for the main intervention. [Table/Fig-3] showed the validation score for Part 2 of the intervention module, that is, the Body Focused Meditation part. Practices that received a score of 2 or more from 80% of the experts were retained in the final module. All sessions had a content validity ratio of 1.0 which indicated high validity of the intervention as rated by the experts.

Pilot study was done among 18 adolescent girls by providing the intervention and assessing their self awareness before and after the intervention. The intervention was provided by the researcher for eight days (weekly two sessions) for a period of four weeks during September 2016. The scale used was the Life Skills Assessment Scale (Vranda, 2007), the subsection of self awareness. The data was normally distributed and ANOVA was conducted to find out the changes. The score at baseline was 31.39 (SD=4.975) and at the post intervention was 39.85 (SD=4.590) which indicated significant change at 0.05 level in the perception of self awareness among adolescent girls.

DISCUSSION

In this study, we attempted to develop an intervention module for adolescent girls with trans-disciplinary approach by combining mental health intervention for adolescents with body focused meditation techniques. The module was developed after in-depth interviews with experts from both the fields and further validated by another set of experts in both fields. The topics derived out of interviews were importance of self awareness, autonomy of self, physical level of understanding, self regulation of emotions and self-monitoring. Experts viewed the need for understanding of physical level is crucial for healthy development and that can happen in the beginning of puberty itself. Mental health experts suggested the inclusion of the concept of brain changes and the related changes in behaviour and emotional aspects in adolescent girls for the intervention. Knowing about self in different situations also was stressed on. Aspects of autonomy were given importance by all in the mental health field.

The CVR scores show that majority of the experts rated each session as extremely helpful and hence suggested to retain sessions with minor changes. Earlier studies have used similar methodology in validating yoga interventions for persons with different mental illnesses and the content validity scores correspond to the current study [11,12]. Future directions include the testing of the module among adolescent population and assessing the efficacy of this module in enhancing self awareness. The module could be used in the community for promotional mental health interventions among adolescent girls.

The pilot study conducted was able to demonstrate change in the variable of self awareness due to the intervention. This marked the need of optimizing the intervention and providing it for a larger population.

LIMITATION

Experts were contacted only once for the validation of the intervention module. They were not revisited for further opinion after incorporating the suggestions given. Pilot testing was done with single variable; other related variables were to be studied for further evidence.

CONCLUSION

The intervention module provided evidence multiple disciplinary approaches for the promotion of mental health among adolescent girls. Mental health professionals working with children could be trained for implementing this intervention among adolescent girls.

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