RESEARCH PAPER

Development and Validation of a Psychological Intervention for Acid Attack Survivors: Insights from Experts

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ABSTRACT
Acid attacks are gender-based violence aimed at causing harm to an individual. Survivors faced physical, psychological and social challenges after the attack. Current frameworks focus on financial and physical rehabilitation of acid attack survivors, but fail to focus on psychological recovery. Positive psychology offers a fresh perspective to traditional psychology, by focusing on growth-oriented outcomes. This study aimed to develop and validate a positive psychology intervention for acid attack survivors by gaining insights from mental health professionals. One focus group discussion was conducted to develop the intervention. Eight mental health professionals validated the developed intervention using the Content Validation Index. The study has important implications for organisations and professionals working with Indian acid attack survivors.

Keywords: *acid attack survivors, focus group discussion, content validation index, positive psychology intervention*
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INTRODUCTION

Acid attacks are considered gender-based violence in India[1,2]. It is usually a deliberate attack on an individual, mostly a woman, intended to cause harm to her. The reasons in India are varied- property disputes, refusal of love proposals, demand for dowry etc. Acid attacks lead to various physical, psychological and social challenges for survivors[3,4]. Some psychological issues faced by them are traumatisation, identity crisis, loneliness and helplessness.

There are some organisations that provide legal and economic support to the survivors, but few focus on psychological support. The mental health professionals that offer psychological support to them, borrow techniques from various schools of psychology. However, the concerns faced by acid attack survivors are unique to them, and may not be faced by the survivors of other gender based violences.

Traditionally, psychology has grounded the study of psychological trauma in the disease model. It fails to acknowledge the tendency of humans to display resilience in traumatic situations[5,6]. Positive psychology views human nature and traumatic responses in contrast to existing literature, as it provides attention to strength, courage and the survivors. Crisp and Johnson (2024)[7] have advovcated the use of strengths-based perspective to foster resilient and positive outcomes that are growth oriented, for victimised and exploited individuals. A need for developing and using positive psychology interventions for acid attack survivors have been identified and noted by researchers[8].

To the best of our knowledge, no intervention has been developed specially for this group, addressing their psychosocial challenges, in an Indian context. Dutta and Teotia (2003)[9] also pointed out that an intervention shall be developed for acid attack survivors, to address their psychological and emotional challenges. Therefore, the aim of this study is to develop and validate a positive psychology intervention for acid attack survivors. The intervention development was informed by insights from acid attack survivors and mental health experts in India. The intervention will be useful for mental health professionals providing psychosocial support to acid attack survivors.

METHODOLOGY

Study Design

This mixed-method study is a part of a larger study, aimed at developing and validating a positive psychology intervention for acid attack survivors. The main study has been carried out in steps. In the first part of the main study, ten acid attack survivors from Delhi- National Capital Region (NCR) were interviewed and their experiences were analysed using thematic analysis. The findings from thematic analysis have been published. The present

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research has been carried out in two phases: focus group discussion with five mental health experts to inform the development of the intervention, and the content validation of the developed intervention with eight mental health experts.

Study Participants

Phase I: Five mental health experts were recruited to conduct a focus group discussion (FGD) through purposive sampling. The inclusion criteria was that the experts shall have a doctorate or a formal certification course in Positive Psychology, should have at least 5 years of experience in academics or clinical practice, and should study/ work with traumatized populations. All the expert participants were females.

Phase II: For content validation, eight mental health experts were asked to fill out a content validation form. One is male, and seven are female. Four of them are assistant professors in Indian Universities, and four are psychotherapy practitioners.

Data Collection and Analysis

Phase I: One focus group discussion of two hours was conducted. It was conducted over Google Meet platform, and it was video recorded and transcribed with the participants' consent. Common themes were derived from the discussion regarding the techniques, tools, duration, mode of delivery and therapist preparation[10].

Phase II: A content validation form was shared with the participants over email, and they were asked to rate each session on relevance, using a four-point Likert scale (1=Not relevant; 2= somewhat relevant; 3= quite relevant; 4= totally relevant). A score of 1 or 2 was scored as 0, and a score of 3 or 4 was scored as 1 in the CVI calculation form. Content validation index (CVI) was calculated (I-CVI= experts in agreement/ number of experts; S-CVI=sum of I-CVI/ number of items) for both relevance and ease of performance. When six to eight experts validate an intervention, a score of 0.83 is considered acceptable[11]. Kappa values were also computed for each session.

Ethics

The main study has been ethically approved by the affiliating university of the authors (No. RCEC/00507/09/23). All the participants gave their written informed consent regarding video recording and transcriptions of the discussion, and using their feedback for the purpose of research.

RESULTS AND DISCUSSION

Phase I: The qualitative analysis of the discussion with five mental health experts led to themes and sub-themes (Table 1). The themes obtained from the FGD with experts are issues faced by survivors, mode of administration, techniques and therapist preparation.

Table 1. *Themes, sub-themes, description and sample verbatims*

Themes	Sub-themes	Description	Verbatim
1. Issues faced by survivors	1.1 Unique challenges	Visiblity and permanence of scars, identity struggles,	*"It becomes a major part of your identity because that's the first thing people see unlike with other abuse episodes. Maybe you can hide those wounds to some extent but in most cases with an acid attack, so it's right there, and they have that kind of helplessness that there's no hiding. It's just out there."*
	1.2 Physical Injuries	Organ damage, repeated need for surgical procedures	*"There are a lot of other factors that are affecting for example, they could be medical factors, one very important where the attack has been done. On the basis of that there will be a lot of pressure just here, psychological effects. For example, if they have an injury on the face, then it surely impacts their self-confidence and esteem."*
	1.3 Reduced Psychological Capital (PsyCap)	Reduced hope, self-efficacy, resilience and optimism	*"One of the major issues that is very important to address here is their low self-esteem or confidence as a result of them, going through these labels like disability or handicap. It can hamper their self confidence to a great extent!... I noticed they just felt like there's no hope going forward ..everything's closed, All doors are closed."*
2. Mode of administration	2.1 Duration of intervention	Ten to twelve weeks, with weekly sessions	*"I would look at a time frame of at least two and a half three months, working with somebody which could cover 12 to 15 session over a period of time, because I think it's the concept that if you water a tree it needs certain amount of water every day. You can't decide that let me give it 1 months' water in 2 days'. It's intense work, and*

			real work happens outside of sessions!"
	2.2 Mode of delivery	A combination of individual and group sessions	*"I would suggest having a combination of individual and group sessions"*
3. Techniques	3.1 Positive Psychology techniques	Some practices like gratitude exercise, meaning making, victim to survivor	*"You can do individual work. You can also introduce group work because even mental health frameworks says you cannot underestimate the power of what a community can do for you if you are able to build it successfully! I think there will still be a support system and a mechanism in place in the form of a community one builds for them."*
	3.2 Strengths-based approach	Utilising VIA based questionnaire, strengths based approach of positive psychology	*"We spoke about identifying strengths.. that you don't only identify it. You make sure that you do at least one thing in the next week or two which makes you practice that strength… You actually make sure that you implement that strength in whatever we possible."*
4. Therapist preparation	4.1 Self-care of the therapist	Vicarious trauma, supervision population	*"social support will also becomes incredibly important just to have those people around you say- Hey, this Leave it at work come back to your own life come back to your own sense of self. these are good relationships. They're healthy relationships."*
	4.2 Training	Preparation for therapy skills, gender based readings	*"One should also be trained to be trauma-informed. You should learn to be a more informed researcher. You shall learn to be a more trauma informed clinician. It will make you a more empathetic person..somebody who's going to be better at time management people skills all of those things"*
	4.3 Rapport building	Building trust and safe space with the vulnerable	*"some kind of preparation for the therapist on that front as well as some kind of slowly easing into it. Rapport needs to be built gradually to make the client feel comfortable to uncover their faces eventually and let them feel safe."*

Phase II:

The intervention was developed based on the information received from qualitative interviews conducted with ten survivors and a focus group discussion with five experts. The duration of the intervention is twelve weeks. There are six individual and six group sessions. Each individual session is planned to for 50 minutes, and each group session is planned for 90 minutes. The goal of each session, the techniques to be utilised, and the homework were outlined. The detailed intervention manual was shared with each participant, and they were asked to rate each session on relevance and ease of performance.

The CVI computation is shown in Table 2 .

Table 2. *Content validation Index of intervention module*

Session	E1	E2	E3	E4	E5	E6	E7	E8	Experts in agreement	I-CVI	Kappa
1	0	1	1	1	1	1	1	1	7	0.875	0.87
2	1	1	1	1	1	1	1	1	8	1	1.00
3	1	1	1	1	1	1	1	1	8	1	1.00
4	1	1	1	1	1	1	1	1	8	1	1.00
5	1	1	1	1	1	1	1	1	8	1	1.00
6	1	1	1	0	1	1	1	1	7	0.875	0.87
7	1	1	1	1	1	1	1	1	8	1	1.00
8	1	1	1	1	1	1	1	1	8	1	1.00
9	1	1	1	1	1	1	1	1	8	1	1.00
10	1	1	1	1	1	1	1	1	8	1	1.00
11	1	1	1	1	1	1	1	1	8	1	1.00
12	1	1	1	1	1	1	1	1	8	1	1.00

It can be seen in table 2 that the content validity by eight experts of the intervention module was used to compute the I-CVI scores. A score above 0.79 is considered relevant and is accepted[12,13] and all twelve sessions have a CVI score above 0.79, hence, all the sessions are considered highly relevant by the experts. All the sessions and their activities were retained after the content validation from the experts. The kappa values for all sessions are also significant and considered excellent (above 0.80), indicating that all the experts have a consensus on the relevance of twelve sessions[14]. This means that the content validity of the manual is excellent.

DISCUSSION

This study aimed to develop and validate a positive psychology intervention for acid attack survivors. For this purpose, a focus group discussion was conducted with mental health experts. Content validation was then computed for the developed intervention with another set of mental health experts.

Five experts with relevant educational qualifications and experience participated in the focus group discussion, from which four themes and their sub-themes were obtained. These themes informed the development of the intervention. Then, the content validation index (CVI) and kappa values were computed from the inputs provided by eight mental health professionals.

The themes derived from the FGD are issues faced by the survivors, mode of administration, techniques and therapist preparation. The themes are further divided into sub-themes.

The first theme that was derived from the discussion was issues faced by the survivors. One of the sib-themes within this theme is the unique challenges faced by acid attack survivors- visibility and permanence of scars, which impacts the identity. The most commonly affected area due to acid is the face of the survivors, which makes the visibility of scars a major issue among acid attack survivors[15]. This also leads to low self-esteem[16,17,18], struggles with identity[19,3] and depression[20,21]. The permanence of scars also leads to unwanted attention from people in public places and identity being tied to being a survivor. The acid attacks also lead to serious and often irreversible damage to organs, like the eyes, nose, throat, and ears[22]. The organ damage makes their life tougher, as it leads to restrictions, pain, a need for repeated surgical procedures, and disability. These challenges further impact the education and employment opportunities. Gupta et al. (2025)[23] suggested a design to facilitate the personal growth of survivors to make their professional journeys smooth. The experts in our study also noted that the physical and psychosocial challenges lead to reduced psychological capital. Their hope, self-efficacy, resilience and optimism levels are impacted, which shall be targeted in the intervention. Few researchers in India have attempted to target their hope, optimism, self-efficacy, and resilience through techniques and exercises, but it was suggested in our study that this should be done through an intervention module, including other variables. The suggested duration of the intervention being developed was ten to twelve weeks. This suggestion was made as twelve weeks were deemed to be a reasonable amount of time for the intervention, making it neither too short nor too long. Shorter interventions may not bring about the desired growth, and longer durations may present drop-outs. It was also suggested to include group sessions along with individual sessions. The individual sessions would allowed for safe exploration of issues. The group sessions would enhance community building and peer support, which enhances their well-being[24]. A stronger peer network, relationships and community also contribute to increased resilience amongst survivors[15].

Another theme that was obtained from the FGD was positive psychology techniques suggested by the experts. A discussion was also held on how positive psychology is misunderstood by some mental health practitioners in India, who follow a diagnostic model strictly. The techniques were advised based on the tenet that they shall be used as a part of the intervention module, and not individually or in isolation. They mentioned some techniques like gratitude exercise, blessings exercise, meaning-making exercise, victim-to-survivor mindset narrative, and finding a purpose in their lives. The techniques are reported to improve the mental well-being of individuals[25,26,27]. It was also suggested that a strengths-based approach should be utilised with the survivors. VIA Questionnaire[28], which is available for free use, could be used for assessing the top strengths of the survivors. Identification and building upon the strengths would contribute to enhanced psychological capital and happiness among the survivors[29]. Further, concepts of overuse, underuse and optimal use of character strengths would be helpful for the survivors[30].

The fourth theme that was derived from the FGD was therapist preparation. Suggestions were made for the facilitator of the intervention/ therapist. The first sub-theme is self-care. The experts mentioned vicarious trauma and compassion fatigue that the therapist might experience. Some researchers understand it as an “occupational hazard of providing direct services to traumatised people”[31]. The experts suggested that the therapist should be under supervision to reduce the impact of vicarious and secondary trauma. This suggestion aligns with other studies[32,33,34]. The experts also suggested that because the population is vulnerable, the therapist should be appropriately trained in positive psychology and should be trauma-informed. The importance of training for professionals working with traumatised populations has been highlighted by Cook et al (2019)[35] also. Experts also suggested that the therapist/ facilitator should be adequately equipped to make the participants feel safe and comfortable, which are important factors in rapport building with traumatised people[36,37,38]. The therapist should also manage the negative emotions experienced, using support and acknowledgement during the sessions to enhance rapport and safety[37].

The developed intervention was shared with eight mental health professionals for content validation using the content validation index. The CVI values and kappa values were excellent and significant. The experts rated all the sessions of the developed intervention highly relevant and valid. Hence, the intervention can be used with acid attack survivors from India, keeping in mind the suggestions made the experts in the therapist preparation theme.

The developed intervention is based on insights from acid attack survivors (gathered through qualitative interviews)[3] and focus group discussion with mental health experts. The intervention has been validated by experts, and thus can be confidently used with acid attack survivors in India. The intervention can be used in non-governmental setups, hospitals and clinics by psychologists providing counselling and therapy to them. It provides with a non-diagnostic perspective that can help them improved their well-being, hope, self-efficacy, resilience and optimism levels. It can also aid in posttraumatic growth. A pilot with a group of survivors should be done to quantitatively ascertain the benefits of this positive psychology intervention.

STUDY STRENGTHS AND LIMITATIONS

The intervention is deeply rooted in lived experiences of the survivors and is based on their anecdotal inputs. This also is based on the inputs of mental health experts working with gender based violence clients, specially Indian acid attack survivors. This makes the intervention culturally appropriate for Indian survivors. Also, this intervention, unlike many others, includes community building aspect which can help them after the intervention terminates. However, this intervention and study has some limitations as well. It may not be directly applicable to survivors outside the Indian subcontinent as their experiences and concerns might differ. Also, this intervention can not be applied to survivors seeking only individual sessions as it includes six group sessions also. So it can be applied in collaboration with organisations and hospitals where the survivors have a community. Also, the challenges that may arise due to hospital admissions leadin to drop outs has not been accounted for.

CONCLUSION

A positive psychology intervention has been developed and validation, for acid attack survivors, specially in India. This intervention has been validated as highly relevant by mental health professionals. It focusses on constructs of positive psychology like wellbeing, community support and psychological capital.

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