A qualitative investigation of the experience of a mindfulness-based intervention with incarcerated adolescents

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Background: This study investigated the experience of 23 incarcerated male adolescents who participated in an adapted 10-week mindfulness-based intervention. Method: Participants completed semi-structured interviews immediately following the final class of the treatment intervention. A six-step thematic content analysis was used to identify major themes from the transcribed semi-structured interviews. Results: Four major clusters of themes were identified: increase in subjective well-being, increase in self-regulation, increase in awareness, and accepting attitude toward the treatment intervention. Conclusion: Results suggest that adapted mindfulness-based interventions are feasible as treatments for incarcerated youth and have promising potential. Clinical implications are discussed.

Key Practitioner Message:
- This is the first-known qualitative investigation of the experience of a mindfulness-based intervention with incarcerated adolescents
- Key themes identified included increased well-being, self-regulation, increased awareness, and an accepting attitude toward the treatment intervention
- Mindfulness-based interventions can feasibly be implemented as treatments for incarcerated youth

Keywords: Mindfulness; adolescents; meditation; incarcerated youth; qualitative

Introduction

Mindfulness-based interventions have shown promising results treating multiple populations including chronic pain (Kabat-Zinn, 1982), adolescent psychiatric outpatients (Biegel, Brown, Shapiro, & Schubert, 2009), and prison populations (Samuelson, Carmody, Kabat-Zinn, & Bratt, 2007) over the last three decades. Baer (2003) suggests that mindfulness-based interventions may be effective in facilitating change for numerous populations by enhancing self-management. One population that may benefit from increased self-management abilities is incarcerated youth. Research on juvenile offenders has shown that higher impulsivity is associated with higher recidivism and delinquency rates (Vitacco, Nuemann, Robertson, & Durrant, 2002).

The problem of incarceration among youth is significant. Approximately 96,000 juvenile offenders in the United States were incarcerated in 2003 (Snyder & Sickmund, 2006). Williams, Tuthill, and Lio (2008) suggest that approximately 10%–12% of youth offenders re-offend into adulthood and Snyder and Sickmund (2006) suggest that percentage to be greater (25%). Nonetheless, juvenile offending seems to fuel the broader issue of crime and delinquency and therefore merits further attention.

Mindfulness meditation practices emphasize non-judgmental awareness and acceptance of mental and emotional content in the present moment (Kabat-Zinn, 1990, 2003). Meditation-based programs have been shown to improve psychological well-being and reduce recidivism (for a review see Hawkins, 2003; Himelstein, 2011). Of the meditation-based studies that have been researched in correctional settings, only one mindfulness-based stress reduction (MBSR) study was found (Samuelson et al., 2007). Briefly, Samuelson et al. (2007) implemented the MBSR program to 1350 male and female participants in six Massachusetts prisons from 1992 to 1996. Results showed statistically significant reductions (p = .0001) on posttest Cook and Medley Hostility Scales at all prison sites. Further, increased scores (p = .006) on the Rosenberg Self-esteem Scales were found at all program sites. Samuelson et al. (2007) found the most dramatic reduction to be on the Profile of Mood States Scale, which dropped approximately 38% for women and 29% in men (p = .0001), suggesting a reduction in negative mood states.

Among scarce literature on mindfulness in correctional settings, literature on mindfulness and youth is also extremely rare. Uncontrolled feasibility studies have explored the impact of mindfulness-based interventions on HIV-infected African American adolescents.
Method
The focus of this study was twofold: (1) to produce systematic qualitative research on a mindfulness-based program in a correctional setting by asking the participants themselves about their experience of a mindfulness-based program and (2) to investigate the feasibility of a mindfulness-based intervention with a novel population in regard to mindfulness research: incarcerated adolescents.

Research paradigm and worldview
We chose an advocacy-participatory (Creswell, 2007) paradigm for this research. According to Creswell (2007) the basic assumptions of the advocacy-participatory worldview are to in some way change or transform the lives of the research participants. We felt it important that the participants in this study received a service given the societal needs of the population. The Mind Body Awareness (MBA) project’s 10-week mindfulness-based intervention was developed specifically to serve the needs of incarcerated youth. Because of this and time constraints, more popular mindfulness-based interventions such as MBSR (Kabat-Zinn, 1990) and mindfulness-based cognitive therapy (MBCT; Seagal, Williams, & Teasdale, 2002) were not chosen for delivery for this population.

Research question
One major question influenced this study: what is the personal experience of incarcerated youth who have completed the MBA project’s mindfulness-based intervention? It was important that the personal experience of the participants were represented given that this was a novel population in regard to mindfulness research: incarcerated adolescents.

Participants and procedure
Adolescent male inmates incarcerated in a juvenile hall in the greater San Francisco, CA Bay Area were eligible to participate in this study. Participants were recruited by unit staff based on anticipated duration of incarceration at the juvenile hall. Unit staff asked prospective participants if they were open to participating in a ‘meditation class’, and youth who opted to were then referred to the study for the full informed consent procedure. There were no data collected on how many prospective participants declined invitation. The ethics of this study underwent a full review process by the research ethics committee at the Institute of Transpersonal Psychology, the educational institution overseeing this research. Furthermore, the presiding juvenile court judge overseeing the juvenile hall in which this study took place approved the current research and signed informed consent because the participants were wards of the court and not in the custody of their primary caregivers who normally would sign. In addition to informed consent, the incarcerated juvenile participants signed assent forms prior to participation in the study. At the start of each group, the participants were informed of the nature of the research project, of the fact that their participation was entirely voluntary, and that compensation in the form of a course certificate and chocolate bars would be given as incentives.

Twenty-three participants in this study volunteered to be semi-structurally interviewed about their experience of the treatment intervention immediately following its completion. A total of two 10-week cycles were completed for this study. All participants were male, ranged in age from 14–18 (M = 16.75), and identified ethnically as Latino (n = 14), African-American (n = 4), Caucasian-American (n = 3), and Pacific Islander (n = 2). The demographic information of the participants in this study is representative of the national average of incarcerated adolescents by age (national average is 17) and minority ethnicity (Snyder & Sickmund, 2006).

The MBA intervention
The MBA project’s 10-session mindfulness-based curriculum incorporates formal and informal mindfulness meditation training with experiential emotional intelligence activities, group process, and specific discussion topics. Each session starts with formal mindfulness meditation and a check-in (an activity in which each group participants describes how he or she feels in the present moment and is followed by either specified experiential activities or discussion topics (depending on the session). These are interspersed with more formal meditation training periods and each session ends with a dedication of positivity. Table 1 depicts the modules and some of the key activities. Note that although it is not highlighted in every module below, formal meditation does occur in each module: ideally, each session is 90 minutes long. However for this study, each session had to be shortened 60 minutes to cooperate with institutional time restraints. For a more in-depth review of the treatment intervention see Himelstein (2009).

Data collection and analysis procedures
Semi-structured interviews were conducted immediately after the 10th class. Four overarching questions inquiring about the personal experience in the treatment intervention guided the semi structured interviews. The first question was general and asked, ‘What was your overall experience with this meditation class? You can talk about anything related to this class; whether you liked it, didn’t like it, if and how it helped you, or how it didn’t help you’. Questions two and three investigated the major components of the curriculum. Question 2 was, ‘What was your experience learning and practicing the mindfulness meditation? You can talk about the practice we did in the classes, or practice you did on your own. Was it helpful or not helpful? Why?’ Similar to the second question, the third question was, ‘What was your experience with the discussion topics and experiential activities we did in class? Were they helpful or not helpful? Why?’ Finally, the fourth question was a catchall open-ended question: ‘Was there anything else about your experience in this class that you want to tell me that I didn’t ask about in the interview? It could be about any part of the class’. Table 2 summarizes the semi structured interview protocol.

The interview took approximately 10 minutes. We initially requested from the institution 15–20 minutes to interview study participants however the institution
themes that represented participants' experiences. A six-step thematic content analysis method, as suggested by Braun and Clarke (2006), was used. First, after each semi-structured interview occurred, the data were immediately transcribed verbatim by the primary investigator for proper coding and data storage, as well as for the primary investigator to become familiarized with the data. After completing the interview response transcription, the primary investigator read the data twice. Second, initial codes were designated to represent any interesting features that occurred throughout the entire data set. These codes were revised numerous times to generate a master codebook. Third, the primary investigator collated codes into potential themes. Fourth, themes were reviewed to check that they were in conjunction with their coded extracts and with the entire data set. This generated a thematic map of the different themes. After an ongoing analysis of the specifics of each theme, the fifth step was to define and name each theme. The sixth and final step was to write out a description of each theme (Braun & Clarke, 2006).

In an attempt to control for author bias in the interpretation of themes, a peer-review process, as outlined in Creswell (2007), took place as a validation strategy. A qualified research colleague neutral to this study received full transcripts of all interviews and reviewed the codes and themes completely independently of the primary investigator's participation. This peer reviewer did not code blank transcripts but rather reviewed each code already designated by the author against each meaning unit and quote from the transcripts. Peer debriefing sessions then took place in which the primary investigator and neutral colleague met to compare and contrast coded themes. No changes were made to the overall code book however the frequency of some of the codes changed as a result of the debriefing sessions.

### Results

#### Theme identification and assembly

After thematically analyzing full transcripts, 17 unique major and minor themes were originally identified. Major themes were defined for this study by having convergence among data of at least eight participants, while minor themes were defined for this study as exhibiting convergence among data of four to seven participants. Eight major themes and nine minor themes were uniquely identified. Each unique theme was then further generalized into broader clusters of themes grouped by exhibiting similarity in nature. Table 3 summarizes the findings of this study: due to journal length requirements, only four of the five major clusters of themes are reported here. These include: increases in subjective well-being, increases in self-regulation, increases in self-awareness, and attitude toward the treatment intervention.

#### Increases in subjective well-being

Participants frequently described increases in subjective well-being. A large portion of the participants reported an increase in subjective well-being as a result of participating in the treatment intervention. Increases in subjective well-being referred to an increase in a positive subjective physical or psychological experience or to a decrease in a negative physical or psychological experience. Participants used examples of stress, sleep, relaxation, and self-esteem while discussing experiences related to this major theme.

When queried about a personal experience with the mindfulness meditation exercises, one participant discussed his experience of relaxation:

I was just able to relax, all my troubles went away. And I just felt like I was on top of water, just laying flat on top of water, just floating along... just relaxing being one with myself, all my troubles went away. I was able to think happy thoughts, I was able to notice my body, my breath, and just take in life.
Another youth described a decrease in stress in regard to a common situation among juvenile offenders’ experience:

When I was stressing about court or about time [time spent in juvenile hall] ... I meditated, tried to forget a little bit about it, and it just helped. It wouldn’t make me forget about it, but it helped me ... not let it affect me as much.

One youth described his increase in self-esteem:

I feel like I’m not a failure anymore, that’s what I was feeling like when I first got here cause I got locked up man, told myself I was never gonna be locked up by the time I was 18 ... I finally completed something, got a certificate, I feel good about myself, I’m happy.

Increase in self-regulation

Participants frequently described increases in self-regulation. A large portion of the participants reported an increase in self-regulation as a result of participating in the treatment intervention. Increases in self-regulation referred to an increase in the ability to regulate both mental and emotional content, as well as physical action. Participants used examples of emotional, behavioral, and cognitive regulation while discussing experiences related to this major theme.

One participant described his experience of how the treatment intervention was helpful in regulating his experience of anger:

I don’t know if you remember when I first came in here, I was hella hot [angry], and umm, we did the breathing, and I still felt mad, but then as I started doing more breathing, I started doing breathing in my room, just a lot of breathing, and the exercises you taught me with the stomach, the chest, those really helped ... I still would have it [anger] but it wouldn’t be as strong ... Like if it was at a 10, it would go down to a solid five or four.

Another participant described being better able to control his emotions as a result of the treatment intervention:

It [the treatment intervention] was cool ... I just, able to control my emotions a little better, you know my anger. Kinda like, I used to have hella problems, [now] I just go to my bed and just chill, relax ... take a deep breath.

One participant discussed an increased ability to abstain from negative physical altercations:

Very first time I started meditation I was just the type a dude that just really, didn’t care and, I hit somebody if they was talking mess, but, for me being in this class, it taught me how to control myself ... and when I’m calmed down and I’m thinking, I will think about the whole problem, and just solve it throughout the day, and meditate.

Another participant discussed an increase in behavioral regulation when dealing with other inmates and juvenile hall staff members:

I feel like I can control myself. I wouldn’t say like a lot more, but I feel like I can control myself a little more in situations, like when it comes to staff or other youth here. So you know, I really think it helped me a lot.

One participant discussed an increased cognitive regulatory capacity in the context of behavioral regulation:

Now I think twice about something. If somebody called me something, instead of swinging, I could take back a second and think about my consequences I might get ... it [mindfulness] makes you think about, ‘are you sure you want to do this? Or you want to react that way?’ It just helps me a lot.

Another participant framed cognitive regulation in regard to a common analogy used in the treatment curriculum:

It was really like the analogy used, like lifting weights for your brains. It was directly applied to my decision-making, the mindfulness. Specifically the mindfulness exercises like, it was directly related to my awareness of my environment. So it was like an exercise.

Increases in self-awareness

Participants frequently described increases in self-awareness. A large portion of the participants reported...
an increase in awareness as a result of participating in the treatment intervention. Increases in awareness were defined for this study as increases in one’s capacity to be aware of cognitive, emotional, physical, and present-moment activity within oneself. Furthermore, increases in awareness encompassed experiences of self-contemplation (i.e., thinking about one’s past or future). Participants used examples of emotional, cognitive, and physical awareness, alongside self-contemplation while discussing experiences related to this major theme.

One participant reflected on how his past experiences influenced his present circumstances:

Like it [the treatment intervention] made me think more about myself, it made me get to know me better. The things we would talk about would make me think back to my past and see how it made me now.

Another participant described an increase in self-contemplation when asked about his experience in the treatment intervention:

I got a lot out of it. I like, got to know myself better. More than I was, ‘cause I feel like I wasn’t paying attention to me for a couple of years. And now I feel like I’m aware of me and what I want and what I need, and what I want to pursue. And this has helped me a lot.

One participant described an increase in emotional awareness as a result of the specific mindfulness exercises:

It’s so amazing how all this meditation can do to you. You’re mad one instant but the other instant you forget what staff told you, what anybody else told you here, and then, you know you just catch up on how you’re feeling and what you’re feeling ... what’s going on inside of you.

Another participant reported an increased emotional awareness due to both the specific mindfulness exercises and the discussion portion of the treatment intervention. When asked specifically about the meditation, he shared his experience: ‘It’s helped me a lot, seeing how I could be still chilling, bringing my mind to just me, and be aware of the internal and not the external.’ Interestingly, this same participant seemed to be able to exercise emotional awareness in part of the interview. When asked about the discussion portion of the treatment intervention, he stated:

The discussion topics were helpful for me ... when he [facilitator] had me saying ‘I a couple of times, I don’t know like, I usually say ‘people’ or ‘they.’ It’s just like when he made me feel ‘I,’ I can’t explain that feeling, but I know I haven’t had that feeling in a long time. There’s a certain feeling like the way, like saying I want love! Even when I say it right now I get, it’s not like butterflies but, I don’t know what it is. It’s something in there.

One participant discussed an increased sense of cognitive awareness when asked about his experience of the intervention as a whole:

I thought it [treatment intervention] was good for me because I was able to be aware of what I was thinking and how to like, bring myself to the point where I’m just thinking about what’s happening at the moment, and like kinda forget about my worries.

One participant discussed an experience of increased awareness of his physical body when meditating:

Just noticing my breath, my breathing. Like it got me paying attention to inside my body. I got to feel stuff I never felt. On my finger tips, it felt like I had five hearts, and they just pumping at the same time. I never felt that before.

One participant described his experience in response to the question about the mindfulness exercises:

So I feel like, I’m like even free sometimes. I ain’t got shit to worry about, I’m just meditating, my mind’s just blank and hollow, nothing really coming in, just like the present moment shit we’re always talking about. It’s like that.

Accepting attitude toward the treatment intervention

One major theme comprised the last major cluster of themes: accepting attitude toward the treatment intervention. A large portion of the participants described an open and accepting attitude toward the treatment intervention. This major theme was defined by two stipulations: an accepting and open attitude toward the information and activities in the treatment intervention and an absence of resistance toward the treatment intervention. One participant described his fondness of the treatment intervention at the end of the interview:

Personally I want to add, that this program here, was the best program, while serving here in [unit 6]. It helped me a lot, it gave me something new, ’cause I never been in these kinds of programs before ... so I was new to it. It really opened a different sector for me, such as seeing things in a different perspective, how to analyze it, just see it from different points of view. It really helped me out ... coping with it [being incarcerated].

Another participant discussed his initial resistance that turned into acceptance toward the treatment intervention:

It was a new experience for me. And like most of the discussions was like personal stuff for each other and like, at first I didn’t like it, ’cause I didn’t like opening up that much. But like towards the 6th week, around there, I was looking at everybody and knowed that everybody respected each other.

Another participant suggested that other inmates experience the treatment intervention:

I say everybody should right here [in the juvenile hall] just try it. Every youth in here, it’s gonna help them a lot. Even though they may think they’re too tough for this, and they can’t show they’re weak, but I say every youth should try it in here to help them. Maybe to clear their mind, open their mind.

Discussion

The results of this study suggest that mindfulness-based interventions may feasibly be implemented with incarcerated adolescent populations. Not only were mindfulness classes successfully implemented and conducted within a juvenile hall setting, the participants also expressed an accepting attitude toward MBA’s intervention. This is optimal given that as client resistance to treatment decreases, the possibility for change increases (Miller & Rollnick, 2002).

Furthermore, this study has contributed the voices of participants to a literature based almost entirely on quantitative data. Mindfulness researchers have primarily focused on randomized clinical trials to validate
mindfulness-based programs as evidenced-based, but have left out an important aspect that is a key foundation to mindfulness: the subjective state. The voices of the participants in this study contribute to both a systematic review of their experience with a mindfulness-based program and a research paradigm closely associated with the construct understudy.

Our findings of an accepting attitude toward the treatment intervention may be of considerable interest. Resistance to psychological treatment has been widely discussed for adolescents (Baer & Peterson, 2002) and juvenile offenders (Borum & Verhaagen, 2006; Elliott, 2002; Ginsburg, Mann, Rotgers, & Weekes, 2002; Hoge, Guerra, & Boxer, 2008). Given that the participants in this study reported an open and accepting attitude toward the MBA intervention, it may be that mindfulness and emotional intelligence curricula are feasible as adjunctive group treatments for this population. Interventions that are preferred by participants and take into account specific cultural values are a strong component of evidence-based practices as defined by both the Institute of Medicine (2001) and the American Psychological Association (2005).

Limitations

Although this study shows promising results, some limitations are worth consideration.

First, the primary investigator of this study personally facilitated the intervention and conducted the semi-structured interviews. It could be, for example, that the interactions and relationships the facilitator developed with the participants affected the outcomes reported in the interviews. Participants may have wanted to represent themselves positively or report what they thought the interviewer might want to hear. This rapport may have limited these research findings but also may have played a significant role in data collection. That is, had another interviewer not known to the participants attempted to ask the same questions without a prior relationship and rapport, several one word or short answers may have been given and rich data might not have been collected. We urge future researchers with this dilemma to carefully consider the impact that rapport has on data collection in interviews with marginalized populations.

Second, it might have been that the rapport developed between the primary investigator and the participants was more therapeutically effective than the actual intervention itself. Bohart, Elliott, Greenberg, and Watson (2002) suggest that empathy from the therapist toward the client might account for more healing than the actual therapeutic intervention. Indeed, in a meta-analysis examining the effect of empathy on psychotherapy outcome, Greenberg, Watson, Elliot, and Bohart (2001) found that empathy from the therapist as perceived by client and third party observers related to positive psychotherapy outcome. Thus, the participants in this study may have been more influenced by the facilitator’s empathic understanding rather than the treatment intervention itself. This is critical given that one of the major clusters of themes found was an accepting attitude toward the treatment intervention. It may be that the accepting attitude toward the intervention had more to do with a response to the facilitator rather than the treatment intervention itself, a limitation any research attempting to replicate this study must take into account. An important factor worth mentioning is that the facilitation of the treatment intervention is not a mechanical process. That is, the primary investigator was successfully certified by the MBA project to facilitate the treatment intervention. The duties of the facilitator at times call upon psychotherapeutically based techniques to enhance relationships among participants and between the facilitator and the recipients of the intervention. Working with such a vulnerable population calls upon highly trained and skilled clinicians who can deal with numerous cultural and contextual issues that incarcerated adolescents deal with.

Third, although we chose an advocacy-participatory worldview, we were unable to fully include the participants in the planning of the research design and checking of the data (Creswell, 2007), mostly because of institutional limitations (e.g., could not get access to re-interview youth for a member checking validation strategy). It may be that if participants were able to view the data that some of the themes would be reworded or even changed. We urge future researchers in this field to attempt to empower participants by including them as co-collaborators (Creswell, 2007).

Fourth, although there was an overall accepting attitude toward the treatment, it might be of considerable interest that no negative experiences were reported in reference to the intervention as a whole. Demand characteristics the lead investigator elicited when conducting the interviews for this study might be the answer as to why participants did not express negativity about the intervention as a whole. It might be that an interviewer more neutral to the research could have elicited more honest feedback about possible negative experiences with the program or way it might improve. This was not feasible during this study given our institutional and resource restraints. Furthermore, because this was a feasibility study we believed that having the lead investigator interview the participants was acceptable.

Conclusion

Although this study was limited and not a controlled trial that points toward efficacy, the results suggest the intervention to be feasible for incarcerated adolescents and in need of further efficacy research. This study also supports the notion that mindfulness programs can be applied with underserved adolescent and ethnically diverse populations. This research contributed the first-known systematic qualitative data to the field of mindfulness-based programs with juvenile offenders. This study also extends mindfulness research to encompass the subjective state, an aspect of mindfulness research that we hope will be studied more given its paradigm alignment. Furthermore, we strongly advise that future researchers in this area consider the use of qualitative and mixed method designs alongside randomized controlled trials to obtain the subjective experiences and opinions of the participants themselves. Juvenile correctional facilities, policy makers, and mindfulness intervention experts should consider mindfulness interventions as another possibility for facilitating rehabilitation in incarcerated youth.
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