

Impact of adding mindfulness practices to a bachelor of social work direct practice course

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Abstract

This study sought to determine whether mindfulness increased or decreased for Year 4 Bachelor of Social Work (BSW) students. Twenty-four participants received a brief mindfulness practice each week at the start of class and completed the Five Facet Mindfulness Questionnaire in the first and last class. Results showed a decrease from pre-test to post-test on the non-reactivity to inner experience facet of the scale. In addition, in a post-test, those participants who came to the BSW programme from secondary school had an overall higher score than those participants who came to the programme from community college. Moreover, participants who had no prior practice in mindfulness and those who did not practice mindfulness during their practicum saw an increase in scores. These findings are discussed and recommendations for future research are offered.

Keywords: Mindfulness, BSW students, practices, social work, course.

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1. Introduction

The impact of adding mindfulness practices to a bachelor of social work (BSW) direct practice course social work practice involves building therapeutic relationships with vulnerable individuals and groups of people who are distressed. This can often create stress and unearth challenging emotional responses for the worker. In addition, Hick (2009) notes that the organisational contexts in which social workers are employed may exacerbate worker burnout due to unreasonable demands on workers to do more with less. Despite the multifaceted challenges that social workers must endure, which may limit their ability to remain emotionally available for their clients (Thieleman & Cacciatore, 2014), workers are required to remain present and attentive while supporting people through problematic circumstances.

Due to the wide array of stressful situations that may be encountered in practice and the potential impacts for clients, social workers must develop their own self-care practices. These practices help to decrease the impact of stressful situations and serve as coping strategies during particularly stressful times (McGarrigle & Walsh, 2011). Self-care strategies are often first developed as students within the educational context, where students go through trial and error and utilise self-reflection to determine which strategies work best (Moore, Bledsoe, Perry & Robinson, 2011). Self-care practices identified by students include listening to music or watching television, being outside, spending time with family, friends, neighbours and fellow students, reading inspirational books, and eating healthier (Moore et al., 2011).

Mindfulness, defined as 'bringing one's complete attention to the present experience on a moment-to-moment basis and as paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally' (Baer, 2003, p. 125), has been suggested as a viable option for self-care that may lead to increased practitioner well-being (Lee & Himmelheber, 2016). While this definition of mindfulness may appear to be straightforward, the term is quite complex, making the process of defining the term challenging. Mindfulness is both a state of mind in bringing 'one's complete attention to a present experience' as well as a practice in 'paying attention in a particular way'. This definition captures the conundrum of defining mindfulness as there is no agreed-upon definition of the term (Davidson & Kazniak, 2015). To further complicate the definition, mindfulness is often linked with meditation, in the term mindfulness meditation. In this context, mindfulness is a specific way of paying attention and a specific practice that is subsumed under the larger umbrella of the term meditation. Meditation, also a challenging definition, is defined as a set of practices that may be grounded in any one of a number of spiritual and/or religious traditions, as well as a form of contemplation, reflection or concentration (Nash, Newberg & Awashthi, 2013). Mindfulness meditation, therefore, can be defined as a specific kind of contemplative practice that is grounded in a specific way of paying attention to the present moment. Therefore, due to the lack of agreement on these terms, mindfulness and meditation will be used interchangeably throughout this manuscript.

In addition, research has shown that frequency and familiarity with the practice leads to increased benefits (Swift, Callahan, Dunn, Brecht & Ivanovic, 2017). In other words, to reap the most benefits, practitioners must first be provided with the time and place for learning and practicing mindfulness activities (McGarrigle & Walsh, 2011). The undergraduate classroom, where social workers begin to develop and refine their practice, may be an option for providing students with that time and place.

2. Literature review

In their mixed methods study, Lee and Himmelheber (2016) surveyed BSW and Master of Social Work (MSW) students ($n = 56$) enrolled in an American university to evaluate the efficacy of a 14-week mindfulness programme during social work field seminars. The study showed that 40% of the participants practiced mindfulness in their personal lives and 50% in their professional lives. The authors suggest this variance may be as a result of the natural inclination for social workers to attend to the needs of others before their own. The researchers also found that participation in the

mindfulness pedagogical model resulted in a significant change in multiple facets of the Five Facet Mindfulness Questionnaire (FFMQ), specifically observing thought, non-judging of inner experience and non-reactivity to inner experience. The FFMQ has 39 Likert-type items each based on a 5-point scale ranging from 1 ('never or very rarely true') to 5 ('very often or always true'). A secondary finding in this study was that the majority of participants reported becoming 'more mindful' the longer they engaged in mindfulness training. These changes were accounted for through engagement in class exercises, utilising mindfulness strategies in their personal lives and applying strategies during practicum.

A randomised, controlled, crossover trial completed by Swift et al. (2017) tested whether a 5-week mindfulness training programme for graduate student psychotherapists ($n = 40$) could have a positive impact on students' ratings of their state and trait mindfulness. State mindfulness involves incorporating mindful practices into one's daily life, whereas trait mindfulness involves having a mindful perspective across specific experiences and contexts (Bilevicius, Smith & Kornelsen, 2018). The study also sought to determine whether the training programme could impact psychotherapy session outcomes. Participants in this study reported increased mindfulness when engaging in formal mindfulness practices. Similar to the findings by Lee and Himmelheber (2016), the authors suggested this may be related to the experience participants gained throughout the sessions. In addition, it is suggested that there may be a connection between the students' mindfulness rating and their familiarity with the particular mindfulness practices. Another finding in this study is that involvement in a formal mindfulness programme led to improved trait mindfulness. As a result of their involvement in the study, participants adopted a broader mindful disposition. The authors suggest that formal mindfulness practices may be a viable option for self-care and lead to improved practitioner well-being.

An experimental study completed by Aspy and Proeve (2017) compared the effects of mindfulness meditation and loving kindness meditation on social nature and connectedness for undergraduate psychology students ($n = 115$). A secondary aim of this study was to explore the effects of each of these forms of meditation on positive and negative affect. Students listened to guided meditation recordings and completed the Positive and Negative Affect Schedule pre- and post-tests. The Social Connectedness Scale and the Connectedness to Nature Scale were completed post-test only. The study found that mindfulness meditation and specifically, loving kindness meditation, enhances feelings of connectedness. A primary limitation of this study is that it focuses on a single session of mindfulness, which is contrary to how mindfulness practice is typically taught (Aspy & Proeve, 2017).

Cacciatore et al. (2015) looked at an experiential death education programme with mindfulness components to determine its efficacy in increasing mindfulness and empathy. Graduate students ($n = 210$) at an American university were surveyed using the FFMQ to identify increases in mindfulness. The course encouraged internal awareness and strategies were used to foster awareness of the current experience, a fundamental characteristic of mindfulness practice (Bishop et al., 2004). Students surveyed demonstrated increased levels of mindfulness from pre-test to post-test. Significant increases were seen in all five subscales: observing, describing, acting with awareness, non-judging and non-reactivity. The authors suggested that differences in the observing subscale may be related to having a meditation practice prior to involvement in the study.

Decker, Brown, Ong and Stiney-Zisind (2015) examined the relationship between compassion fatigue, compassion satisfaction and mindfulness with MSW student interns. Participants ($n = 111$) completed two measures, the Professional Quality of Life Scale and the FFMQ. Results showed that greater levels of mindfulness positively correlated with greater potential for compassion satisfaction ($r = 0.46, p < 0.00$), whereas lower levels of mindfulness increased a student's risk for compassion fatigue ($r = -0.53, p < 0.00$). Thus, mindfulness may assist in diminishing compassion fatigue and increasing compassion satisfaction for helping professionals.

Since mindfulness is a demonstrated tool for improving patient outcomes, this suggests it could be helpful in training therapists (Grepmaier et al., 2007) to cope with the rigours of working with

populations that are often emotionally distraught and who present with chronic needs. However, there is a gap in the literature related to the efficacy of mindfulness practice amongst graduating BSW students who will soon be working with these populations. This study seeks to fill this gap.

3. Methods and materials

3.1. Research model

The research ethics board approval all study procedures. This study is based on a non-experimental, pre-test and post-test, single group design. In order to determine the degree to which mindfulness increased or decreased in participants during the 12-week academic term, a baseline measure was taken during the first week of class, and again during the last week of class. No control groups were utilised for this study. A research assistant visited the classroom in the first week of class to recruit for the study. All Year 4 social work students enrolled in an advanced, direct practice course at a predominantly undergraduate, Canadian university were invited to participate. Each week participants took part in a 10-minute mindfulness practice (see Appendix A) at the start of the class led by the instructor and first author. Prior to all mindfulness practices participants were initially guided in positioning their body: feet flat on the floor, hands placed comfortably in the lap or on the knees, eyes closed or unfocused gaze downward and torso straight but not rigid in the chair. The instructor closed her eyes during the practices so as not to see who did and did not participate. Each week participants engaged in a different practice. Initial practices focused on the breath moving into and out of the body while later practices involved guided visualisations.

3.2. Sample

Of the 40 students in the course, 24 students initially volunteered to participate. Participants ranged in age from 21 to 45 with an average age of 28 (SD = 7.15). Twenty-one were female (87%) and three were male (12.5%). The vast majority self-identified as White (83.3%), while other students self-reported as African descent, Indigenous and mixed race. Half of the participants reported some college education, and 30% reported completing university-level courses before enrolling in the social work programme (in Canada community colleges are diploma-granting institutions, whereas universities are degree-granting institutions). Of the 24 participants recruited, however, three withdrew before the end of the term. Thus, the post-test sample was reduced to 21 participants. Qualitative interviews were conducted with participants following the conclusion of the course and are reported elsewhere (Author 1, 2019).

At the onset of the study, only 25% of the participants reported having a personal mindfulness practice. Of these participants, all reported practising on their own for an average of 1.67 hours a week (SD = 1.40), some for as little as 10 minutes a week and others up to 4 hours a week. Nearly all had a personal mindfulness practice for a period of 1 year or more prior to this study. As a result, it was expected that these students would exhibit different mindfulness scores from other students who had never been exposed to mindfulness meditation practices. These students were not among the three students who withdrew before the end of the term.

3.3. Measure and procedures

To measure changes in mindfulness, this study utilised the FFMQ developed by Baer, Smith, Hopkins, Krietemeyer and Toney (2006). The instrument consists of a battery of 39 Likert-type items, each based on a 5-point scale ranging from 1 ('never or very rarely true') to 5 ('very often or always true'). Specific questionnaire items are summed together to measure five distinct facets of mindfulness: observing thought, feelings and any external experiences, describing and labelling these observations, acting with awareness, non-judging of inner experience and non-reactivity to inner experience. An overall mindfulness scale is obtained by summing all questionnaire items together. All

summed facets were standardised back to the 5-point Likert scale. Higher scores denote increased mindfulness.

The FFMQ is a well-validated instrument. The psychometric properties (Baer et al., 2008) revealed strong internal consistency amongst questionnaire items on all five facets; Cronbach’s alpha coefficients were reported as 0.75 for non-reactivity, 0.83 for observing, 0.87 for acting with awareness, 0.91 for describing and 0.87 for non-judging. For this study, instrument reliability results proved to be similar to Baer et al. (2008) psychometric tests with Cronbach’s alpha coefficients results of 0.82 for observing, 0.86 for describing, 0.83 for acting with awareness and 0.87 for nonjudging of inner experience. Non-reactivity to inner experience, however, was much lower with a Cronbach’s alpha of 0.62. The overall mindfulness scale has a Cronbach’s alpha of 0.88.

Although the FFMQ instrument shows strong construct validity, psychometric studies show that the ‘observing’ facet is less reliable amongst participants with little to no meditation experience (Baer et al., 2008; Williams, Dalgleish, Karl & Kuyken, 2014). It has been recommended to use a four-facet scale for non-meditators, and a five-facet scale for those who have meditation experience (Gu et al., 2016). A closer look at the intercorrelations between all five facets reveals the same pattern as depicted by Baer et al. (2008): correlation with non-judging and observing is much smaller than all other facets and negative. For these reasons, this study will present alongside the FFMQ, a four facet (minus the observing) overall scale.

3.4. Analysis

The data were analysed using a combination of descriptive and inferential statistics. First, baseline scores were tabulated for all five facets and subsequently broken down by demographic variables to ascertain any differences amongst participant characteristics. Second, baseline data were also compared to other studies relying on social work students, and the general population to assess similarities and differences in mindfulness scores prior to treatment. Third, mean differences, effect sizes and paired *t*-tests were computed on the pre-test and post-test measures to quantify any changes before and after the treatment. Finally, an exploration of the distribution of mindfulness scores, such as convergent–divergent and anomalous scores, was conducted as potential areas for further scrutiny.

4. Results

Baseline mindfulness scores on the FFMQ were, on average, $M = 3.32$ ($SD = 0.40$), including all 24 participants. The ‘observing’ facet scored highest, $M = 3.65$ ($SD = 0.60$), and ‘non-reactivity to inner experience’, $M = 3.05$ ($SD = 0.53$), the lowest. To better contextualise these baseline data, a search for similar mindfulness studies using social work students and non-social work students was conducted in psycINFO, psycARTICLES, Social Services Abstract, Social Work Practice and Web of Science online databases. Our search focused on six mindfulness-related studies conducted on BSW and MSW students, and three social work-related mindfulness studies conducted on non-social work students (e.g., inmates, general student population and disadvantaged mothers).

Table 1. Five Facets Mindfulness Questionnaire normative mean scores at baseline

Mindfulness facets	Baseline Scores	Studies conducted on social work students						Studies on non-social work students		
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Observing	3.39	NR	3.26	3.43	3.30	2.32	NR	3.32	3.41	2.42
Describing	3.65	NR	3.62	3.63	3.62	2.62	NR	3.36	3.66	2.73
Acting with awareness	3.23	NR	3.34	3.45	3.46	2.75	3.12	2.60	3.81	2.39

Non-judging	3.25	NR	3.49	3.48	3.54	1.96	NR	3.06	3.61	2.88
Non-reactivity	3.05	NR	3.08	3.27	3.24	2.50	NR	2.54	3.10	2.41
Mindfulness (five facets)	3.32	3.4 3	3.37	NR	NR	NR	3.35	2.99	3.59	NR

(1) Swift et al. (2017); (2) Cacciatore, Thieleman, Killian and Tavasolli (2014); (3) Decker et al. (2015); (4) Brown, Ong, Mathers and Decker (2017); (5) Lee and Himmelheber (2016); (6) Piatkowska (2014); (7) Heeren et al. (2014); (8) Tollefson and Phillips (2015); (9) Eames, Crane, Gold and Pratt (2015)

Most studies used mindfulness as part of a quasi-experimental design to ascertain the value or impact of a mindfulness programme; two cross-sectional studies focused on the correlational relationship of mindfulness with other well-being constructs. It is noteworthy that baseline scores obtained for our study are similar in magnitude to studies conducted on social work students and the non-social work population, with studies 5 and 9 being the exceptions. The relative structure of baseline scores does vary, but the highest and lowest scores are to be found amongst ‘describing’ and ‘non-reactivity’ facets; again, with the exclusion of studies 5 and 9. Barring differences due to sample size, experimental condition and demographic composition, baseline FFMQ scores from our sample of social work students appeared to be well within the range observed in other studies.

A closer look at the demographic composition of the sample (see Table 2) reveals differences in baseline mindfulness scores amongst participants.

Table 2. Five Facets Mindfulness Questionnaire scores at baseline by demographic characteristics

	<i>n</i>	FFMQ (5) M (SD)	Mean Δ	Cohen's <i>d</i>	Sig.
Gender					
Men	3	3.45 (0.59)	0.18	0.36	0.484
Women	21	3.27 (0.39)			
Age					
Less than 23	7	3.11 (0.31)	–	–	–
23–29	9	3.38 (0.47)	0.27	0.67	0.398
30 or greater	8	3.37 (0.39)	0.26	0.73	0.453
Self-reported					
Racialised background	4	3.37 (0.19)	0.08	0.25	0.716
White	20	3.28 (0.44)			
Education					
College or university background	16	3.40 (0.44)	0.31	0.89	0.077
None reported	8	3.09 (0.21)			
Intervention participation					
Started and completed	21	3.32 (0.40)	0.18	0.41	0.478
Started but did not complete	3	3.14 (0.47)			

On average, male participants, participants aged more than 28 years and participants reporting a racialised background had higher baseline mindfulness scores than female participants, participants less or equal to 28 years and participants who did not report a racialised background. A moderately-strong effect between participants’ age groups ($d = 0.63$, $p = 0.14$) was observed but did not reach statistical significance. The average age was 28 and the median age was 26.5. Those who reported prior post-secondary education, however, showed considerably higher baseline mindfulness scores ($M = 3.4$, $SD = 0.44$) than those who did not ($M = 3.09$, $SD = 0.21$). This difference, $+0.31$ ($d = 0.89$), did reach statistical significance at the $p < 0.1$ level.

Having prior mindfulness practice also had a substantial impact on baseline mindfulness scores ($M = 3.5$, $SD = 0.37$, $d = 0.72$), but did not reach statistical significance. The three participants, who

subsequently withdrew from the study, had an average baseline score of $M = 3.14$. The remaining 21 participants had, on average, a baseline score of $M = 3.32$. This slight difference of -0.18 in mindfulness scores between these two groups did not reach statistical significance, $t(22) = 0.72$, $p = 0.478$, but represented a moderate-sized effect, $d = 0.41$. It is conceivable that these slightly lower baseline scores may have been a factor in their reasons for dropping out of the study. There are no further indications, however, that this may be the case.

Generally speaking, barring limitations associated with pre-post studies, there was a very modest, statistically non-significant increase in all mindfulness score facets, except non-reactivity to inner experience (see Table 3).

Table 3. Mindfulness scores of pre-test and post-test paired t-test results

Mindfulness facets	Pre-test M (SD)	Post-test M (SD)	Mean Δ M (SD)	Cohen's d	Sig.
Observing	3.39 (0.71)	3.46 (0.60)	0.07 (0.65)	0.11	0.621
Describing	3.65 (0.60)	3.68 (0.56)	0.03 (0.74)	0.05	0.856
Acting with awareness	3.23 (0.63)	3.32 (0.45)	0.09 (0.51)	0.16	0.435
Non-judging of experience	3.25 (0.77)	3.27 (0.78)	0.02 (0.68)	0.03	0.874
Non-reactivity to inner experience	3.05 (0.53)	2.72 (0.39)	-0.33 (0.51)	-0.71	0.008
Overall mindfulness scale (five facets)	3.32 (0.40)	3.37 (0.29)	0.05 (0.39)	0.16	0.522
Overall mindfulness scale (four facets)	3.30 (0.42)	3.35 (0.34)	0.05 (0.38)	0.13	0.550

On average, students, after the 11-week mindfulness practices, scored higher on the overall FFMQ ($M = 3.37$, $SD = 0.29$), than at the onset of the course ($M = 3.32$, $SE = 0.40$). This difference, $+0.05$, did not reach statistical significance, $t(20) = 0.65$, $p = 0.522$, and represented a small-sized effect, $d = 0.16$. This positive effect was unevenly spread across the observing, describing, acting with awareness and non-judging of experience facets. Quite unexpectedly, however, non-reactivity to experience decreased after the 12-week period. On average, students scored lower on the non-reactivity mindfulness facet ($M = 2.72$, $SD = 0.39$) than at the onset of the course ($M = 3.05$, $SE = 0.53$). This difference, -0.33 , did reach statistical significance $t(20) = -2.95$, $p = 0.008$, and represented a large-sized effect, $d = 0.71$.

A mixed-groups factorial analysis of variance (ANOVA) was carried out to assess the effect of having (or not having) any prior mindfulness practice experience on pre-test and post-test mindfulness scores (see Figure 1 for effect means).

Table 4. Overall mindfulness scores pre-test and post-test by practice paired t-test results

Mindfulness practice	n	Pre-test M (SD)	Post-test M (SD)	Mean Δ M (SD)	Cohen's d	Sig.
Prior personal practice						
Yes	6	3.50 (0.37)	3.50 (0.24)	0.03 (0.37)	0.10	0.852
No	18	3.23 (0.40)	3.31 (0.29)	0.06 (0.40)	0.19	0.543
Practiced during placement						
Yes	8	3.55 (0.38)	3.54 (0.21)	0.02 (0.43)	0.06	0.903
No	11	3.17 (0.38)	3.29 (0.31)	0.12 (0.39)	0.35	0.332

Prior mindfulness experience does have a substantial main effect on mindfulness scores ($F[1] = 1.62$, $MSE = 0.22$, $p = 0.22$), as observed earlier. There were, however, no interactions between mindfulness scores and prior mindfulness experience, $F(1) = 0.02$, $MSE = 0.002$, $p = 0.89$. A slight increase from pre-test to post-test mindfulness scores was equally observed in both groups ($F[1] = 0.28$, $MSE = 0.02$, $p = 0.503$). It would appear that participants who had a prior mindfulness experience equally benefited from the mindfulness practices.

The same mixed-groups factorial ANOVA also tested the effect of having (or not having) a college or university education prior to enrolling in social work (see Figure 1 for effect means).

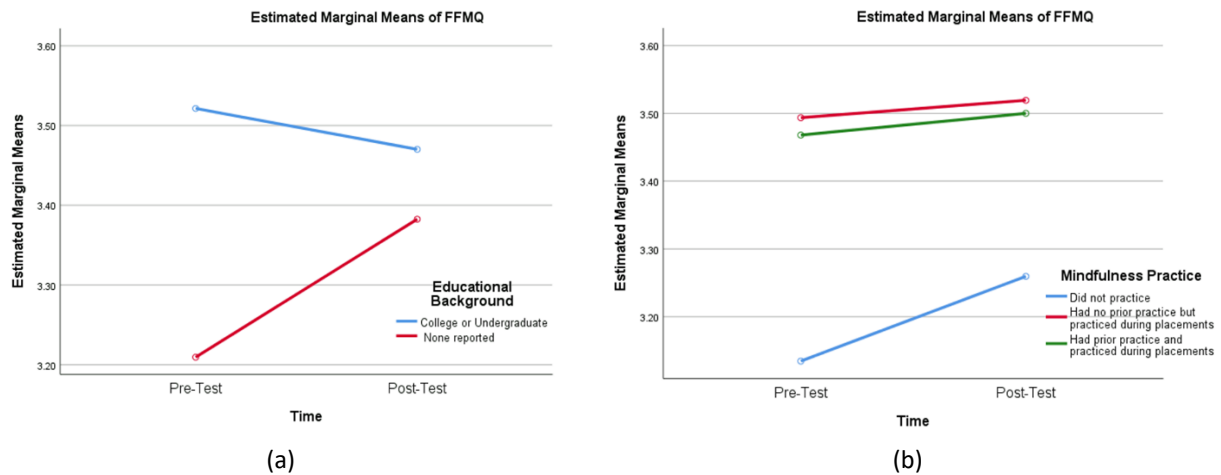


Figure 1. Education and mindfulness practice between-group effects

There was an interaction between education and pre-test post-test measures ($F[1] = 0.23$, $MSE = 0.02$, $p = 0.64$). Those who reported prior college or university experience showed very little improvement between their pre-test and post-test scores. Those who did report any prior post-secondary education, however, showed a substantial change in their mindfulness scores. Having any prior post-secondary education remains, however, an important main effect ($F[1] = 2.33$, $MSE = 0.31$, $p = 0.145$). None of the mean effects reached statistical significance.

While one might imagine that mindfulness scores would increase after a semester of mindfulness sessions, this was not the case for all participants.

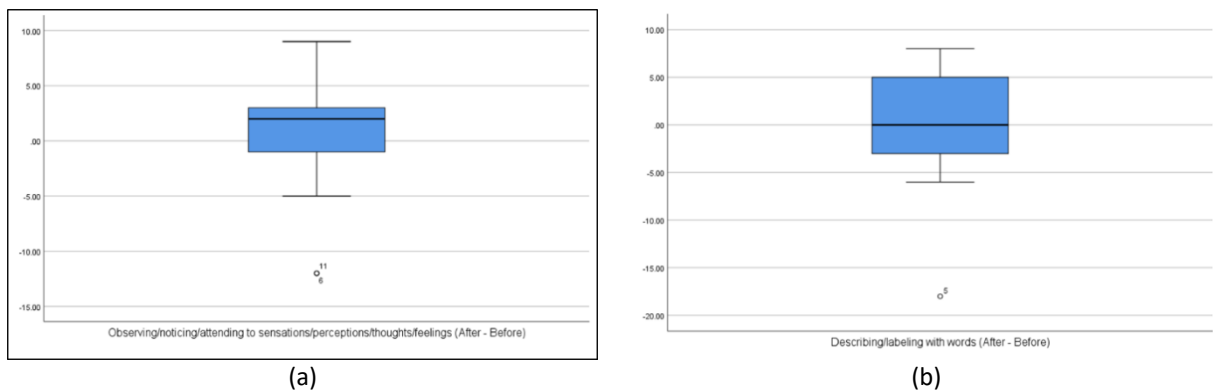


Figure 2. Lower post-test outlier FFMQ scores

For a few participants, post-test scores were much lower than their pre-test scores. There were two lower-bound outlier scores in the observing mindfulness facet (see Figure 2a, $z = -2.48$, $p = 0.008$), and one lower-bound outlier score in the describing facet (see Figure 2b, $z = -3.08$, $p = 0.001$). Admittedly, with a sample of 21 participants, there is one chance out of 20, or 5% chance, that some mindfulness scores will be at the tail-end of the spectrum. In this study, however, all outliers showed remarkably lower post-test scores. The probability of getting such scores stands at less than 1 chance out of 100, or less than 1%. It is unclear why these three participants reacted negatively at the post-test time-point of the 12 weeks' sessions. No particular clustering in any of the demographic variables was detected.

5. Discussion

In the present study, there was a modest increase on most of the traits on the FFMQ except one, which is non-reactivity to inner experience. From pre-test to post-test, there was a significant decrease on this particular facet. This was an unexpected finding. The participants either remained as reactive or became more reactive to their inner experience. One explanation for an increase in participants' emotional reactivity is the potential that mindfulness practices have to broaden attention to include aspects of experience that were previously overlooked (Garland, Farb, Goldin & Fredrickson, 2015). Such increased experiential awareness can include awareness of previously repressed or suppressed feelings and emotions, a process that then causes increased emotional reactivity (Britton, 2019; Iani, Lauriola, Chiesa & Cafaro, 2019; Ostafin, Brooks & Laitem, 2014).

The question becomes how to best manage potentially increased emotional reactivity in students who may not have an extensive background in mindfulness practice. One aspect of the FFMQ, describing, tempers emotional reactivity as labelling experience downregulates reactivity (Garland et al., 2015; Iani et al., 2019). Downregulating emotional reactivity through describing and labelling experience can occur as part of mindfulness practice when a structured reflection is included at the end of each practice. Training students in structured reflection involves offering (i) an explanation of the four foundations (body, emotional valence, state of the mind and thoughts) of mindfulness, (ii) a vocabulary of words that can be used to label each of the four foundations, (iii) time after each practice to individually write a short reflection and (iv) time to debrief in pairs and as a large class. The latter part of the process is essential in assisting students in accurately understanding the four foundations of mindfulness and how to use them to label their own experience. This process is detailed in a conceptual article by Author 2 (2019) who is currently conducting research with Author 1 to study this very process of teaching students the process of structured reflection in a course on the use of mindfulness in direct social work practice.

Without such training in structured reflection, it is possible that simply engaging in mindfulness practices may bring up previously suppressed or repressed emotional experiences without providing students the tools with which to manage strong emotions that were previously outside conscious awareness. Providing participants with training in structured reflection as a part of mindfulness practice would allow them to increase their awareness through the mindfulness practices and have the tool of structured reflection to make meaning of this broadened awareness.

There is a significant difference in the effect of the mindfulness practices with respect to education. At the post-test, those participants who came to the BSW programme straight from secondary school had a higher score on the FFMQ than those participants who came to the programme from community college. For former secondary school participants, there was a significant increase in the overall mindfulness score between pre-test and post-test. These specific participants appeared to benefit more from the mindfulness practices in the course whereas participants who entered the programme from college did not really see a change in their mindfulness scores pre-test to post-test. This seems to suggest that the mindfulness practices were particularly effective for former secondary school students, thus introducing mindfulness practices to undergraduate social work students who come from secondary school appears beneficial. It is possible that these participants were uncertain how to proceed with their skills and mindfulness provides them with direction in this area. It is also possible that this particular group of students approaches mindfulness from the perspective of a beginner's mind (Suzuki, 1999) more so than students with prior community college or university education. It is further possible that this latter group of students had more exposure to mindfulness programmes in their early education as recent years have seen increased attention in emotional regulation programmes at the secondary school level (Langera, Ulloab, Cangasc, Rojasd & Krausea, 2015).

Participants who had no prior practice in mindfulness and those who did not practice mindfulness during their practicum saw an increase in mindfulness scores. It is possible that these participants may

not have had the opportunity to use mindfulness in their particular placement site. Participants who already had a prior mindfulness practice and used it in placement did not see a difference between pre-test and post-test as the scores in both were high. It is possible that some facets may be well-developed amongst social work students who already have mindfulness practices and thus will not show large improvements. It is also possible that these participants were familiar with the various mindfulness practices. Overall, mindfulness appears to breed confidence in using it.

There were three participants who demonstrated a post-test decrease in their FFMQ scores. This was an unexpected finding and, while it is not unusual to have outliers in a pre/post design, the scores of these participants were extreme. It is possible that the mindfulness practices or an aspect(s) of the course in general impacted these participants in a negative way. Mindfulness, as a form of attention regulation, assists in the conscious redirection away from past negative memories or future worries back to present sensations (Bishop et al., 2004). If these participants experienced greater emotional awareness and did not know how to interpret, label or manage this awareness as noted earlier in the discussion their scores may have been lower post-test. We also do not know the trauma backgrounds of these students and the practices may have unexpectedly evoked a traumatic response in them.

6. Application to the social work curriculum

The following section, drawn from the study findings and mindfulness literature, offers BSW educators avenues by which to include mindfulness practices in the social work curriculum.

6.1. Introduce mindfulness practices early in the BSW programme

This study's results found that students entering university from secondary school had a significant increase in the overall mindfulness score between pre-test and post-test. This may be due to secondary schools' increasing focus on mind/body practices, mindfulness and emotional regulation (Langera et al., 2015), which familiarises students with these practices. As a result, it is advised to introduce mindfulness early in BSW programmes both to familiarise students with mindfulness and solidify them in clinical practice prior to entering practicum.

6.2. Integrate structured reflection exercises at the end of each practice

Structured reflection should follow mindfulness practice to allow students the opportunity to process the practice within the four foundations of mindfulness (Author 2, 2019). Sharing structured reflections within dyads or small groups of peers can provide safe opportunities to explore, deepen and normalise their mindfulness practice over time.

6.3. Identify sensorimotor experience

Mindfulness has been demonstrated to increase self-awareness of internal processes (Gockel, Cain, Malove & James, 2013) and participants in this study either remained as reactive or became more reactive to their inner experience pre-test to post-test. To assist BSW students in managing their inner experience and to facilitate the writing of structured reflections, Author 2 (2017) advocates providing students with words to elucidate sensorimotor experience (i.e., jerky, warm) and embody self-awareness through connection to internal and external physiological cues. A vocabulary of experience may assist students to manage their reactivity to inner experience.

6.4. Consider suitability for mindfulness practice

Mindfulness is not a practice suited for everyone as demonstrated by the fact that three students withdrew from the study. Wherever possible, BSW educators are advised to screen students for suitability or allow students the option to not participate in mindfulness practices.

7. Limitations

The question of whether the introduction of mindfulness-based practices can strengthen the professional development of students studying social work is integral to teaching the necessary skills for cultivating positive, therapeutic relationships with clients. Controlled studies, however, are difficult to implement in smaller social work programmes where only a small cohort of students is available at any given time. Moreover, increasing the number of time-points to clearly ascertain the effect of the intervention, as in repeated-measures studies, would surely introduce testing effects. Thus, the fall back to an uncontrolled, before–after study is the most practical method for studying this type of intervention using the FFMQ instrument in a small, undergraduate, university setting.

Uncontrolled before and after designs, however, are not without considerable weaknesses. The use of a convenience sample of social work students limits the generalisability of the results beyond those being studied. Moreover, the self-selection recruitment process may introduce a selection bias, where only those students already receptive to mindfulness practices may have enrolled in the study. In the demographic data, while we asked participants about the presence of a personal mindfulness practice, we neglected to further this question and ask for a description of these practices. In addition, the absence of a control group does not allow one to evaluate threats to internal validity such as history, maturation, instrumentation and even Hawthorne effects. It remains unclear whether any observed changes (or lack of changes) are the product of external circumstances that may have impacted the outcome. Students may have acquired greater maturity since these mindfulness practices were delivered during a placement practicum and the FFMQ instrument, when applied over a period of 4 months, may be more a measure of one’s ability to meditate than the acquisition of mindfulness skills (Goleman & Davidson, 2017). It is entirely conceivable that the involvement of the in-class instructor or other individuals may have enhanced or diminished the impact of the intervention. In short, there are numerous, unaccounted alternative explanations to the observed results before and after the intervention. The study cannot determine with any degree of certainty whether the introduction of mindfulness practices had an impact in cultivating positive, therapeutic relationships with clients.

Despite these limitations, the relatively low drop-out rate suggests that social work students, presumably those interested in mindfulness practices, will commit to the full 12 weeks intervention period, a necessary time-frame for the acquisition of pre-requisite meditation skills. Second, this exploratory, experimental study was conducted in the midst of multiple, conceivably contradictory, academic, practicum and personal demands by a graduating cohort of students. These factors may have contributed to three students withdrawing from the study. However, the slight increase in observed mindfulness scores at the post stage of the intervention is encouraging.

8. Future research

First, given the small and largely homogeneous nature of the sample, future studies should be conducted with a larger and more varied sample. Second, future studies are advised to use a control group, even if this involves collecting FFMQ measures from other social work programmes that did not implement the intervention. Third, this study showed that participants who entered the BSW programme directly from secondary school appeared to benefit from mindfulness practices to a greater extent than those participants who entered from a community college programme. Additional research is needed to explain why these participants appeared to benefit to a greater extent from mindfulness practices. Fourth, research should include an assessment of those participants who may have been hurt by the intervention, specifically how and why (Speigman & Spear, 2009). Study results showed that three participants had a significant decrease in mindfulness scores from pre-test to post-test. Fifth, future research could focus on the length of the mindfulness practices, the timing of the practices during the class and if the practice is sustained between classes. Finally, given that these students were in their final year of the BSW programme additional research could ascertain what benefit, if any, the mindfulness practices had on students’ social work practice following graduation.

We do not know if the effects lasted after the course ended. This could be accomplished by a 6-month follow-up survey or interview to determine whether gains were maintained or lost.

9. Conclusion

The purpose of this study was to examine the effectiveness of weekly mindfulness practices on graduating BSW participants. Modest increases in most facets of the FFMQ were encouraging along with the increases in scores from participants entering university from secondary school. For social work educators interested in implementing mindfulness in the undergraduate curriculum, these exploratory findings offer avenues to investigate such as introducing mindfulness early in the BSW programme and assisting field instructors to implement mindfulness where possible in practicum placements. This would foster the transition from classroom to field and highlight the benefits of mindfulness in both domains. As mindfulness increasingly takes its rightful place in social work education, the challenge for educators and students alike is to approach the practice with a beginner's mind, a mind free from preconceptions about this practice, allowing for as rich as possible an experience in the classroom and curriculum.

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Appendix A

- Week 1 – Grounding through breathing
- Week 2 – Grounding using the breath and calming statements
- Week 3 – Positive mind/body affirmations
- Week 4 – Body and chair exercise
- Week 5 – Shrinking stress
- Week 6 – My tree has roots
- Week 7 – Tension released through colour
- Week 8 – Grounding cord meditation
- Week 9 – Tense and let go: yoga nidra
- Week 10 – Giant strides
- Week 11 – Loving kindness meditation