

# A Mind–Body Skills Course Among Nursing and Medical Students: A Pathway for an Improved Perception of Self and the Surrounding World

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Marja van Vliet<sup>1,2</sup> , Miek C. Jong<sup>1,2</sup>, and Mats Jong<sup>2</sup>

## Abstract

Despite increased recognition of self-care and self-awareness as core competences for health care professionals, little attention is paid to these skills during their education. Evidence suggests that a Mind–Body (MB) skills course has the potential to enhance self-care and self-awareness among medical students. However, less is known about the meaning of this course for students and how it affects their personal and professional life. Therefore, we examined the lived experiences with an MB skills course among Dutch medical and Swedish nursing students. This course included various MB techniques, such as mindfulness meditation and guided imagery. Guided by a phenomenological hermeneutical method, three main themes were identified: “ability to be more present,” “increased perception and awareness of self,” and “connection on a deeper level with others.” Overall, participation in the MB skills course served as a pathway to inner awareness and supported connecting with others as well as with the surrounding world.

## Keywords

professional education, lived body, empathy, holistic care, resilience, self-care, stress, nurse–patient communication, doctor–patient communication, phenomenology

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## Introduction

Health care practitioners work in complex environments. While confronted with human suffering and pain, health care professionals are expected to adequately respond to the needs of patients and their families, and to collaborate within multiprofessional teams at the same time (Arnetz, 2001). Currently, many health care professionals find difficulties in coping with this demanding working environment, which is reflected by high levels of burnout among both physicians and nurses from various disciplines, globally (Leineweber et al., 2014; Poghosyan, Clarke, Finlayson, & Aiken, 2010; Shanafelt et al., 2015; Soler et al., 2008; Twellaar, Winants, & Houkes, 2008). Burnout can be described as prolonged stress resulting in emotional exhaustion, a negative attitude to one’s work, low self-esteem, and depersonalization of patient relationships (Maslach, Jackson, & Leiter, 1996). Prolonged stress is not only harmful to the physicians and nurses themselves, but it also has a direct effect on quality of care and patient safety (Drick, 2014; Wallace, Lemaire, & Ghali, 2009). Therefore, self-care and self-awareness are increasingly recognized as important competencies for future physicians and nurses (American Nurses Association

[AMA], 2010; Association of American Medical Colleges [AAMC], 2004; Dutch Federation of Medical Specialists [DFMS], 2017; Epstein & Hundert, 2002; International Council of Nurses [ICN], 2012; Royal Dutch Medical Association [KNMG], 2015; Wallace et al., 2009). They form a cornerstone for patient-centered care in which a mutual, humanistic partnership between patient and health care provider is established (Quinn, 2014). Taking care of one’s self physically and mentally can create a sense of balance in personal and professional life (Hatem, 2006). Furthermore, self-awareness enables individuals to reflect on their own attitudes and emotions and, if necessary, to regulate their responses in a timely manner (Novack, Epstein, & Paulsen, 1999). It can lead to an increased level of consciousness of the influence of their own attitudes and behavior on

<sup>1</sup>Louis Bolk Institute, Bunnik, The Netherlands

<sup>2</sup>Mid Sweden University, Sundsvall, Sweden

## Corresponding Author:

Marja van Vliet, Department of Healthcare and Nutrition, Louis Bolk Institute, Kosterijland 3-5, 3981 AJ Bunnik, The Netherlands.  
Email: m.vanvliet@louisbolk.nl



the patient (Epstein & Hundert, 2002; Novack et al., 1999). However, studies show that little attention is paid in terms of self-care and self-awareness among physicians and nurses during daily practice (Drick, 2014; Wallace et al., 2009).

Difficulties in coping with clinical practice often starts in the early days of health care professionals' careers and Kreitzer and Klatt (2017) pinpoint that the health and well-being of the workforce is poorly accounted for in present health care organizations. High levels of stress are reported among medical students due to exposure to human suffering, heavy workloads in the clinical environment, and high pressure to pass exams (Dyrbye et al., 2011; Maclaughlin et al., 2011). It is estimated that 26% of Dutch medical students suffer from burnout, of which 6% meet the criteria for severe burnout (Prins et al., 2010). Furthermore, nursing education seems to be highly stressful (Edwards, Burnard, Bennett, & Hebden, 2010; Pulido-Martos, Augusto-Landa, & Lopez-Zafra, 2012). Several educational, clinical, and personal factors are reported, including academic overload, dealing with unfamiliar situations, and fear of making errors with patients (Pulido-Martos et al., 2012). Moreover, the transition from nursing student to registered nurse has been described as an extremely stressful process (Blomberg et al., 2014). Given the inevitable sources of stress during medical and nursing education, it is important to provide students with effective self-care activities to support balance in medical and nursing students' personal and professional lives (Brinkhaus & Witt, 2012; Thomas, Haney, Pelic, Shaw, & Wong, 2011). This can contribute to the formation of competent health care professionals who are well prepared for future challenges during their careers (Drick, 2014). Medical and nursing education seems to be an excellent place to start fostering self-care as professional attitudes start to be formed during this period (Brinkhaus & Witt, 2012; Kreitzer & Klatt, 2017).

Research shows that a Mind–Body (MB) skills course can strengthen the capacity for self-awareness and self-care in medical students and thereby can contribute to an improved overall well-being of the students (Esch, 2002; Esch & Stefano, 2010; Shapiro, Shapiro, & Schwartz, 2000). An MB skills course aims to enhance psychological and physiological functioning by focusing on the person as a whole where mind and body cannot be separated (Saunders et al., 2007). It consists of several experiential sessions in which participants learn various techniques—such as meditation, relaxation, and guided imagery—to become more aware of themselves and to be better able to deal with stressors in their professional and personal life. The MB skills course developed by Georgetown University (Washington, D.C., USA) has been the first and so far the most robust and best studied MB skills course (Gordon, 2014). Originally, this course was specifically tailored for medical students. The specific aim of it is to increase students' awareness of emotional, physical, mental, social, and spiritual aspects in one's life, with the goal that enhanced self-awareness will lead to improved self-care, and to fostering nonjudgmental, supportive, collegial relationships

(Talisman, Harazduk, Rush, Graves, & Haramati, 2015). Self-awareness can be defined as the students' capacity for introspection and recognition of their own feelings, and for managing emotions well in themselves and in their relationships (Goleman, 1998). Furthermore, self-care is understood as peoples' ability to care for themselves physically, emotionally, and spiritually (Wilkinson & Whitehead, 2009). Previous studies have shown that an MB skills course has the potential to promote self-reflection, to decrease the level of perceived stress, and to develop empathy in medical students (Karpowicz, Harazduk, & Haramati, 2009; Maclaughlin et al., 2011; Rothman Schonfeld, 2008). No studies are available about MB skills courses among nursing students. However, mindfulness programs—that have shared elements with the MB skills course—have been shown to be beneficial in enhancing self-awareness and self-care among nurses (Halm, 2017; Kelly & Tyson, 2017). Furthermore, less is known about the meaning of the course for the participants and the ways an MB skills course affects the participants in their personal and professional life. A qualitative approach is appropriate to explore such subjective experiences among individuals (Creswell, 2009). This type of knowledge can generate an increased understanding in the processes that are evoked by an MB skills course and can thereby provide an additional perspective to studies made with quantitative designs that focus on a range of predefined variables (Verhoef, Casebeer, & Hilsden, 2002). So far, only one study with a qualitative approach has been performed among participants of the Georgetown MB skills course. The study analyzed written responses from six open-ended questions posed directly at the end of course participation, and reported connections, self-discovery, stress relief, learning, and medical education as central themes (Saunders et al., 2007). Moreover, that study was conducted with American medical students while the experiences of European students and nursing students remain unknown. Therefore, the purpose of the present study is to unravel the lived experiences with an MB skills course among Dutch medical and Swedish nursing students.

## Method

### Design

This study uses the phenomenological hermeneutical method according to Lindseth and Norberg (2004) to better understand the meaning and the lived experience of participating in the MB skills course. Data were collected by using semistructured interviews among Dutch medical and Swedish nursing students who had participated in the course.

### Phenomenological Hermeneutics

Phenomenology can be described as “a science, which, instead of looking for the objectification and causal conditions of phenomena, stops at the phenomena themselves and

**Table 1.** Training Components of the MB Skills Course per Session.

- 
- I. Opening ritual: Gathering and focusing by lighting a candle and a short opening meditation
  - II. Check in: Sharing experiences/homework/feedback
  - III. Weekly topics (1 or 2 per session), covering:
    - Breathing (various)
    - Meditation (mindfulness/awareness, loving-kindness, walking, eating, concentrative)
    - Guided imagery (several types)
    - Biofeedback (autogenic training)
    - Art (emphasis on noncognitive approaches)
    - Yoga and tai chi
    - Music (used in meditation and imagery sessions)
    - Movement (shaking, dancing, exercise)
    - Writing (reflective writing, journals, dialogues)
  - IV. Closing ritual: Reflection on experiences during the session and a short closing meditation
- 

Note. MB = mind–body.

compares them as they appear to the spectator as given facts” (Böhme & Schiemann, 1997, p. 16). According to Merleau-Ponty (2005), phenomenology can be regarded as the study of essences, by offering us an account of space, time, and the world as we live it. It aims at gaining a deeper understanding of the nature or meaning of our everyday experiences by relating the particular to the universal, part to whole, and episode to totality (van Manen, 2007). This way of thinking closely connects with the research objective to better understand the overall meaning of the participants’ lived experiences of the MB skills course. More specifically, this study uses the method of phenomenological hermeneutics as described by Lindseth and Norberg (2004). This method was chosen because phenomenological hermeneutics has been developed through an extensive process of mixing hermeneutical and phenomenological traditions with practical experience in health care research (Lindseth & Norberg, 2004). Therefore, it has become an accessible way to study the experiences of the participants and to elucidate understandable meaning from those experiences. The method is strongly influenced by Ricoeur’s philosophy about the interpretation of text (Ricoeur, 1976). Phenomenological hermeneutics assumes that when experiences are narrated out and written down, an autonomous text is produced that expresses its own meaning. This helps the researcher to refrain from making judgments and to reveal the essential characteristics of expressed meaning (Laverty, 2003; Lindseth & Norberg, 2004). According to phenomenological hermeneutics, the process of deciphering text includes a movement from the manifest to the latent meaning of text. Furthermore, it assumes that understanding and interpretation are dialectically related to each other, which means that they interact and overlap with each other during the process of interpretation (Lindseth & Norberg, 2004; Ricoeur, 1976). Overall, studying the lived world of individuals is helpful because it stimulates people to become aware of possibilities, that is, alternative ways of being in the world (Lindseth & Norberg, 2004). Thus, by bringing to light the meaning of the lived experiences of the MB skills course, it is aimed to ultimately

create more attention for self-care and self-awareness during medical and nursing education, and thereby facilitate change where needed among educational institutions and the students themselves.

### *The MB Skills Course*

The MB skills course, as developed by the medical faculty of Georgetown University, was introduced as a pilot project at Utrecht University in The Netherlands and Mid Sweden University in Sweden during the years 2012 to 2014 (see Schonfeld, 2008, for more details about the Georgetown MB skills course).

Due to experiences/evaluations of a test session with university staff, some small adaptations were made to the course prior to the start of the study to ensure a better fit to European culture. For example, the forgiveness meditation was replaced by a loving-kindness meditation and yoga or tai chi were added. All exercises were translated into the Dutch and the Swedish languages. Final content of the MB skills course was similar for both universities and all subsequent groups and each session followed a structured format (see Table 1). The students received audio files of each exercise at the end of each session to practice at home. Homework also included journaling the experiences of the exercises in the course and at home. The MB skills courses were given by six facilitators. Two of the facilitators were trained and certified in the MB skills course of Georgetown University in 2011, and they trained four additional facilitators. Each course was led by two facilitators.

Although course content was similar for both universities, there were some differences in the way the course was offered. At Utrecht University, the program was offered as an elective course within the medical curriculum. In total, six courses were held, with a total of 75 medical students participating. The course consisted of five weekly sessions, each lasting 4 hours. At Mid Sweden University, five courses were given to nursing students. In total, 48 nursing students participated in the course that was given outside the nursing

**Table 2.** Descriptive Characteristics of Participants in MB Skills Course.

	M/Median	Range	Frequency (%)
Age, years ( <i>N</i> = 26)	25.8/22.5	19–45	
Discipline ( <i>N</i> = 26)			
Medical student			11 (42.3)
Nursing student			15 (57.7)
Gender ( <i>N</i> = 26)			
Female			19 (73.1)
Male			7 (26.9)
Previous MB experience ( <i>N</i> = 26)			
Yes			19 (73.1)
No			7 (26.9)

Note. MB = mind–body.

curriculum and thereby on a voluntary basis. The course consisted of seven weekly sessions, each lasting 3 hours. The course was announced via posters, and information on the course was distributed to all first-year nursing students at the campus.

### Participants and Data Collection

Overall, sampling was based on the concept of “information power.” According to this model, sufficient information power depends on (a) the aim of the study, (b) sample specificity, (c) use of established theory, (d) quality of dialogue, and (e) analysis strategy. The larger the information power the sample holds, the lower the number of participants (*N*) needed (Malterud, Siersma, & Guassora, 2016). To increase sample specificity, the first author purposively selected participating students and aimed for a heterogenic sample that could be representative for the lived experience under study. The participants were distributed over all age groups, both disciplines (medical or nursing students), both sexes, and over all course years. In total, 34 medical and nursing students were invited by email for participation in the interview and a reminder was sent after 1 week. Thereafter, a telephone call was made to all students who were interested to further explain the procedures and objectives of the study. Upon contact, four students were not willing to participate, expressing that this was due to lack of time, and two students chose not to participate due to an unwillingness to be interviewed. Furthermore, two other students did not reply to the emails and their reasons remain unknown. In total, 26 medical and nursing students were interviewed and their descriptive characteristics are presented in Table 2.

The interviews were conducted approximately 3 months after the group sessions. This period allowed sufficient insight to be obtained on the transfer of acquired skills from the MB skills course to the students’ personal and professional lives (Kvale & Brinkman, 2015). As it is important from a phenomenological perspective to have a subject–subject relationship with the participant, almost all interviews were held

face-to-face (Kvale & Brinkman, 2015). Due to practical limitations, this was not feasible for three interviews with Swedish students, which instead took place via video conference. Furthermore, as the level of comfort among participants strongly influences the quality of dialogues (and thereby the level of information power), interviews were conducted in a setting chosen by the participants (in their home, at the university, or other) and no other people were present (Dahlberg, Dahlberg, Drew, & Nystrom, 2008; Malterud et al., 2016). All interviews were performed by the first author, except for four interviews that were conducted by a trainee. These four interviews were included to increase the level of information power (Malterud et al., 2016). Both interviewers were not known to the interviewees and they did not take part in the course. At the time, the first author was a Dutch female PhD student, holding an MSc degree in human movement sciences. The trainee was a Dutch male medical student in the sixth year of his education.

Interviews lasted between 34 and 63 minutes (*M* = 46 minutes 52 seconds, median = 45 minutes 23 seconds) and were supported by a topic guide covering the following items: general impression of the course; motives to sign up for the course, present use of MB techniques; personal and professional development; thoughts, beliefs, and attitudes toward health care; relationship to others; and lessons learned from the MB skills course. The topic guide was used as a support in the interviews and not as a list of questions to be answered. Participants were encouraged to tell stories and narratives about these themes to obtain an understanding of their experiences (Sandelowski, 1991). No additional data such as field notes were collected. All interviews were audio recorded, transcribed verbatim, and transcripts were sent back to the participants to check correctness of the transcript. Furthermore, all participants were allocated a participant identification code (N1 to 15 for nursing students and M1 to 11 for medical students).

### Data Analysis

Transcribed texts were analyzed following the steps of phenomenological hermeneutics, as described by Lindseth and Norberg (2004): naive understanding, structural analysis, and comprehensive understanding. During the first step, a naive understanding was formulated after thoroughly and repeatedly reading the transcripts to obtain overall understanding about the content. This was done by all authors and results were discussed to formulate a general impression. The second step comprised a structural analysis in which meaning units related to the objective of the study were identified and condensed based on their manifest content. The meaning units were abstracted to form subthemes based on content and similarity with other coded meaning units. The subthemes were further abstracted into themes and the main theme was present throughout the themes. See Table 3 for an example of the structural analysis. The qualitative software program NVivo

**Table 3.** Example of Structural Analysis.

Meaning Unit	Condensation	Subtheme	Theme
“. . . It was a different experience. I could feel myself being more present and not thinking about I have to study, I have to go home, I have to clean, I have to do the dishes. Like no . . . leave it outside and be here”	Being here during the MB skills course and leaving other thoughts behind	Opportunity to be present and experience peaceful moments	Ability to be more present
“. . . from the time the course ended till the time up till now I have done some exercises that kind of build on this course, just to stress down a bit. Just like I told before I was going through some stuff, and we ended a course that was very stressful, a big one . . . I think it would be a much harder course to go through if I hadn't had this course. Just to regroup”	Practicing MB skills exercises in one's own way when feeling stressed	Acquiring tools to better deal with stress	Ability to be more present
“. . . and also the different ways to listen to the birds and like feel the ground you walk on and how it smells and everything, it reinforced that. Made it stronger”	Awareness of mindful walking outside	Being able to embed moments of calmness in daily life	Ability to be more present

Note. MB = mind–body.

Version 8 (QSR International, 2008) was used to guide the structural analysis. This step was independently done by the first and third authors. Differences and similarities in themes and subthemes were discussed between all authors to come to the general findings of this second step. Furthermore, findings of the second step were compared with the naive understanding for validation by all authors. In the third step, the text was again read as a whole, the naive understanding and the themes were reflected on in relation to the literature about lived experiences, and a composite description that presents the “meaning of lived experience” of the phenomenon was formulated. This step was initially done by the first author and results were discussed among all authors to come to a general interpretation. During the analysis process, there was continual review and analysis between the parts and the whole of the text. Furthermore, preunderstanding of the researchers was not bracketed or set aside, but rather was embedded into the interpretive process. During all steps, all authors had access to the transcripts. Subsequent outcomes and decisions during all analysis steps were saved to serve as an audit trail to guide the discussions. The second and third authors were teachers in the MB skills course. They did not have continuing relationships with students in The Netherlands but continued to teach some of the students in other nursing courses at the same university in Sweden.

### *Ethical Considerations*

For the Swedish setting, the study was approved by the regional research ethics committee at Umeå University (Dnr: 2012-71-31M). As this project did not involve experiments with patients or study subjects, it was exempt from ethical approval in The Netherlands (according to the rules of the Dutch Medical Research in Human Subjects Act [WMO]). Prior to participation, all participants provided their informed consent after having received information about the background and purpose of the study, confidentiality,

and the voluntary nature of participation in this study. Next, backgrounds of the interviewers were shared with the participants and it was expressed that the interviewers were not involved in the MB skills course itself and had no interests in certain outcomes of the study. Furthermore, measures were taken to address anonymity of the Swedish participants in relation to the second and third authors who continued to teach some students at the same university in Sweden. For example, only the first author was involved in the selection of participants for the interviews and she assigned code names to the transcripts before review of the transcripts by the second and third authors. Although all Swedish participants knew that some of their teachers took part in the analysis, they were informed that those teachers had access only to anonymous material.

Asking about experiences of the MB skills course can potentially bring up strong emotions and memories and reveal intimate personal stories. To avoid any emotional suffering or other consequences, a balance was sought between those areas of a person's life that the interviewer could access by posing questions, and—from an ethical and moral standpoint—those areas that he or she should stay away from (Kvale, 2007). For example, when an interviewee mentioned a painful situation in his or her youth, the interviewer posed questions only regarding those aspects of the painful situation that were related to the process of the course instead of more specific questions regarding the past painful situation itself.

## **Findings**

### *Naive Understanding*

From an initial reading, we interpreted the lived experience of participation in the MB skills course as a starting point of a journey for the participants to get more connected to themselves and the people around them. The safe and warm atmosphere seemed to enable the participants to slow down and

**Table 4.** Schematic Overview of Main Theme, Themes, and Subthemes.

Main Theme	MB Skills Course as a Pathway to Inner Awareness and a Support to Connecting With Others as Well as the Surrounding World		
Themes	Ability to be more present	Increased perception and awareness of self	Connection on a deeper level with others
Subthemes	<ul style="list-style-type: none"> <li>– Opportunity to be present and experience peaceful moments</li> <li>– Acquiring tools to better deal with stress</li> <li>– Being able to embed moments of calmness in daily life</li> </ul>	<ul style="list-style-type: none"> <li>– Reflection of own personality and preferences</li> <li>– Being more aware of feelings and emotional expression</li> <li>– Being more aware of the connection between body and mind</li> <li>– Becoming more open-minded toward various medical systems</li> </ul>	<ul style="list-style-type: none"> <li>– Sharing personal stories promotes strong bond with other participants</li> <li>– Bridging beliefs of self to others</li> <li>– Sharing of personal stories promotes openness toward others</li> </ul>

Note. MB = mind–body.

experience calmness in their demanding lives. Thereby, it appeared to aid the participants to discover emotions and to notice inner feelings and emotions that they were often unaware of. Sharing personal stories seemed to be supportive in this process of inner growth and was helpful for the participants in better understanding other people's situations. Initially, being faced with their inner feelings appeared to be scary and uncomfortable for the participants. The presence of skepticism by peers, family, or friends toward MB techniques seemed to add to the initial experience of inner barriers. However, it appeared that as the MB skills course progressed, participants started to appreciate the focus on their inner feelings and they became increasingly aware that a valuable process was being evoked. In general, while the content of the narratives of medical and nursing students seemed similar, it appeared from the text that the described experiences of the nurses were richer and more profound compared with those of the medical students.

### Structural Analysis

The structural analysis resulted in a main theme, three themes, and 10 subthemes illustrating the participants' experiences of participation in the MB skills course. The main theme present throughout the identified themes and subthemes was that participation in the MB skills course can be understood as "a pathway to inner awareness and a support to connecting with others and the surrounding world." An overview of main theme, themes, and subthemes is presented in Table 4.

In the following section, each theme and corresponding subthemes are more fully described.

#### *Ability to be more present*

*Opportunity to be present and experience peaceful moments.* The participants described that the MB skills course was something completely different compared with all other classes within the medical and nursing programs in that it offered moments of calmness and space to return to themselves. The

sessions were an opportunity to step back from the hassle of everyday life, enabling them to be more present. As expressed by one participant,

With this study it feels sometimes as if I am sitting on a high speed train that keeps running. As if I cannot step out if I want reach my destination. And with this course it is just a moment of calmness. (M2, female)

Experiencing these moments of peace was considered a relief and made the participants more attentive to how stressed their body actually was. Thereby, it reaffirmed to them the need to better look after themselves:

I think that I realize that I have to take care of myself and just handle the stress and focus . . . otherwise I wouldn't be working as a nurse for a long time. (N8, female)

It was also described that the unusual practice of sitting still and being present initially evoked opposing and disturbing feelings such as restlessness, frustration, and irritating bodily sensations. However, it was noted that these sensations gradually disappeared as a result of practicing during the course and, in the end, were replaced by feelings of calmness. Those participants who did not reach the stage of relaxation indicated that they accepted that inactive techniques such as breathing or sitting breathing meditation did not fit them well. Instead, they sought these moments of relief and calmness through more physically active modalities such as walking meditation.

In the end, participants were of the opinion that being more present would help them become better professionals in clinical practice by being better listeners to their patients:

I think that if you are feeling stressed during a patient consultation, and everything is going at high speed, then you cannot fully listen to the patient. Your mind goes everywhere. I think if you are more balanced, then the patient will feel that too. That you are relaxed, taking the time, and listening carefully. I think that a patient will definitely sense that. (M4, female)

*Acquiring tools to better deal with stress.* Participants described how they appreciated learning various MB techniques to better maintain balance in their personal and professional lives. First, the techniques were described as useful tools to release stress in specific stressful or demanding situations, such as prior to an exam or when experiencing pressure during clinical work. Participants mentioned that apart from the benefits of practicing MB techniques during stressful situations, it was also the notion itself of having a tool at one's disposal in case of difficulties that provided inner strength. Second, participants vocalized the experience that regular incorporation of MB techniques was helpful in achieving an overall greater sense of calm and emotional balance.

I still have stress, but I calm down more easily. So, it's not that I have a perfect stress-free life. I have just found the tools to calm myself down in life when it's stressful. (N1, female)

Participants expressed that they regarded the MB techniques not only helpful for themselves, but potentially also for their patients during the healing process. Recommending MB exercises to their patients could help them to better deal with stress and anxieties in their lives. Participants noted that having experienced the effect of MB techniques on their own well-being supported them in recommending it to their patients:

Mainly due to my own experience I know that mind-body really works. Some physicians may find it nonsense, but you see, if it works, that is the most important thing to me. And if it can support patients for example to relax before surgery, then that is truly good. (M9, male)

*Being able to embed moments of calmness in daily life.* Participants reported that they had become more aware of the importance of incorporating moments of calmness within their daily life to maintain balance in life. Thereby, they realized that meditation need not be something extraordinary that exists outside of daily reality, but that it can have a place within everyday life. The experiences and realizations they brought with them from the course were described as being supportive in making them more attentive to identifying potential moments of calmness, for example, during a walk home or a glimpse outside the window. Being aware of these moments enabled them to get even deeper inside the moment and to become even more present. For example, the participant below had already incorporated elements of mindfulness practice in his daily life:

Normally it takes me 10 minutes to cycle from the University campus to my home. But when I feel that my head is spinning, I spend 25 minutes on my bike to reach home. Then I feel like . . . just able to calm down and relax. Yes, this course has definitely influenced me in that way. (M8, male)

While participants expressed that they had become aware of the importance of embedding moments of rest within their

lives, they also remarked on the difficulties of maintaining attention to themselves within daily routines. The participants regarded it easy to "go with the regular flow" and to forget to step back into restful moments.

#### *Increased perception and awareness of self*

*Reflection of own personality and preferences.* It was described by the participants that the MB skills course offered a space to focus on themselves. The participants reported that the practice of various MB techniques during this course helped them gain increased insight into their own personality, their preferences, and their barriers. The participants remarked that this increased self-awareness helped them stay true to themselves and make decisions that were in line with their own preferences.

I tended to place myself to the back. . . . And now it is more like: "Why do I actually do that?" "Why do I feel like this?" (M1, female)

*Being more aware of inner feelings and emotional expression.* The participants reported that practicing various MB techniques allowed them a deeper sense of emotional exploration. It was perceived as helpful to learn how to face all emotions without judgment, to accept their existence. Participants expressed that the course often made them more aware of different types of manifestations of emotions such as anger, anxieties, or unintended habits in daily life. During a process of self-discovery, they gained new insights into the origin of various feelings and emotions, such as the impact of earlier life experiences. This is illustrated by the participant below:

I don't see myself as an angry person and I don't think those around me do either. But I found out I was pretty angry. And just all the things that had happened in my life. . . . I just kept it inside of me, but I found out that I had to deal with it. (N13, male)

Participants described that the MB course had helped them realize that feelings and emotions are not external, but something that they can act on/upon and regulate, as expressed by the following participant:

I realize that I can control my thoughts and feelings. (N9, female)

Some participants reported embodied events during meditation exercises in which they went back to precious childhood memories, persons, or safe places. These experiences were often accompanied with strong emotions that were experienced again when the interviewee related to it during the interview.

*Being more aware of the connection between body and mind.* The participants described that the MB skills course made them increasingly aware about the strong connection between the body and the mind. The autogenic training in particular was exemplified as a powerful tool to gain more insight into this connection. The participants expressed that

they were impressed by an increase in temperature that was induced by a visualization exercise. They remarked that it was the objective proof provided by the temperature device, in combination with self-experience, that had a great impact on their beliefs about the influence of the mind on the body:

It really changed my mind. One exercise when you have the temperature sensor on the finger and we influenced the body to heat up. It really worked, it was proof that you can affect your body and your mind. (N14, male)

This increased awareness of the connection between mind and body was described as being helpful to becoming more aware of the possible mental disturbances that can underlie physical complaints among patients.

*Becoming more open-minded toward various medical systems.*

Participants expressed that the positive experience with various MB techniques during the course had broadened their perspectives. According to them, the introduction to various MB techniques has made them more aware of the existence of other treatment approaches, alongside the Western medical tradition. As summarized by one participant,

Yes, because I think that I have become more open to other possibilities. And I think that is quite important. That you should consider all options before you can judge about it. And not just say “that won’t work.” I think that it was certainly helpful in that way. (M4, female)

*Connecting on a deeper level with others*

*Sharing personal stories promotes strong bonds with other participants.* The experience of an open and warm atmosphere provided a safe place for the participants to share personal stories about emotions and experiences in their daily life with other group members. Participants remarked that this led to a sense of connection and gave rise to meaningful bonds between participants:

Everybody listened to each other and gave each other space. As much or as little as you wanted. It was really good energy! I felt good, I felt safe. (N4, female)

*Bridging beliefs of self to others.* The participants expressed that listening to the stories of others enabled them to relate their own lives to others’ way of living. Participants felt strengthened by hearing that other participants were facing similar struggles and thereby realizing that they were not alone in their experiences:

I learned from them that all people have problems. Because we were very open to each other and we told each other our problems. (N3, female)

Participants who usually felt inhibited about letting other people into their inner worlds felt open to reveal personal

stories that they had never shared with other people. The experience that others were open to listen without any prejudice gave them confidence as a result. This led to personal growth and acceptance of their own being.

In the beginning it was difficult to trust people, it was kind of nerve-racking in the beginning. . . . But I thought here I can be who I want to be. (N8, female)

*Sharing of personal stories promotes openness toward others.*

The participants expressed that sharing personal stories created more openness toward other individuals. Participants described that sharing stories made them realize that different people can experience situations differently. Furthermore, they described that listening to others’ experiences made them more aware of the existence of personal emotions in others and made them less judgmental.

I heard such amazing stories of all people. [I learned that] . . . . I should not have any thoughts about people before I meet them. I think that is the biggest change. (N1, female)

This increased understanding of other people’s situations was reported as being beneficial in their contacts with patients and relatives. The participants expressed that it had made them more aware of the importance of including the patient’s perceptions during diagnosis and treatment:

There were eight different people in the room so there were eight different stories to tell and that goes to show that everybody experiences everything completely differently and that I definitely must know as a nurse. I can’t think that what’s going to be good for me is good for the patient. (M7, female)

Furthermore, it was expressed that this increased understanding encouraged them to take the whole human being into account instead of focusing mainly on physical complaints.

*Comprehensive Understanding*

The structural analysis brought forward that participation in the MB skills course can be understood as “a pathway to inner awareness and a support to connecting with others as well as with the surrounding world.” From a phenomenological perspective, this increased inner awareness and connection with others can be interpreted as an improved perception of participants’ inner and outer world. Paraphrasing Merleau-Ponty (2005),

The gaze gets more or less from things according to the way it questions them, ranges over or dwells on them. To learn to see colors is to acquire a certain style of seeing, a new use of one’s own body: it is to enrich and recast the body schema. (p. 177)

In this light, the body schema can be described as an intuitive understanding of one’s own body system (including the

mind) and its position in space (Merleau-Ponty, 2005). Hence, the MB skills course enriched the students with a new style of seeing and ways of using their body and mind. This resulted in an improved perception of themselves in connection to the world, thereby giving access to a renewed manner of being in the world. The MB skills course provided the participants space to step back from daily routines, and thus allowed the participants to “go back to the things themselves” (Husserl, 2001). This means that it enabled the participants to see the true nature of themselves and the surrounding world, which requires a view without prejudice and an acceptance of things as they actually are. The learning process that was evoked by the MB skills course should not be regarded as a simple learning experience that can be completed within a single intervention. Rather, the MB skills course served as a starting point of an inner journey that needs further practice and continuation afterwards.

## Discussion

### *Summary of Findings*

Overall, participation in the MB skills course can be understood as “a pathway to inner awareness and a support to connecting with others as well as with the surrounding world.” The MB skills course was perceived as a remover of barriers, leading to new personal insights. Participation in the MB skills course made the participants gradually more aware of their own being, their feelings and emotions, and of the importance of taking care for themselves physically and mentally. The experiential sessions created more insight into the body–mind connection. This made the participants aware of the usefulness of incorporating MB practices in their own daily life to cope with stress and the corresponding benefits for their patients. Furthermore, being in contact with their inner feelings and sharing experiences with other participants in the group increased awareness of the various perspectives and feelings of others. From a phenomenological perspective, this can be interpreted as an altered perception of one’s inner and outer world. The opportunity to step back from daily routines enabled the participants to see the true nature of themselves and the surrounding world, including the need to pay attention to themselves.

### *Reflection on Findings in Relation to Existing Literature*

In this study, participants initially felt barriers to facing their inner feelings. Perhaps, some of the participants were not used to focusing on themselves. Self-care and self-awareness are foundational elements that comprise the core values of nursing. Florence Nightingale, commonly regarded as the founder of modern nursing, advocated since its beginning the importance of self-care for nurses and directed nurses to use reflection for self-discovery and understanding others

(Dossey, 2000). Today, however, the demanding workplace seems to have shifted attention away from self-care and self-awareness within the nursing community (Drick, 2014; Mariano, 2013). Apart from not being used to focus on their inner feelings, the initial barriers experienced by the participants may also be related to inner constraints caused by the existence of normative social behavior. This is explained by Ricoeur’s theory about the influence of social context on self-consciousness (Ricoeur, 1950/1966). This theory implies that judgments that people make about themselves are constrained by social expectations and cultural values. Also, it implies that the way people express themselves through their actions is reflected off by others and is influenced by their socially defined role (Ricoeur, 1950/1966). Hence, participants may have experienced initial inhibitions as a result of a perception that focusing on their personal wellness and engaging in discussions on health concerns is not expected within their culturally defined roles as medical or nursing students.

The present study showed that the MB skills course led to enhanced empathic capacities among the participants. By sharing personal stories, the participants appeared to become more capable in viewing situations from different perspectives and to increase their ability to understand others’ context and living situations. Experiences of increased awareness about their own feelings and emotions might have helped participants to show compassionate feelings when faced with human suffering and pain. This is in line with a study of Saunders et al. (2007) in which first year medical students reported that the Georgetown MB skills course gave them the opportunity to show, share, and reflect on their feelings and helped them to regulate their responses. These findings are also in line with the observed quantitative increase in empathic capacities among both medical and nursing students (van Vliet, Jong, & Jong, 2017). Enhancing these empathic capabilities are considered core competences for both nurses and physicians as it helps both groups to effectively meet the health care needs of the people they serve (DFMS, 2017; ICN, 2012; KNMG, 2015). It is a universal principle within nursing theories that guiding and supporting individuals in their healing process requires, in a sense, the ability to get inside the skin of each patient to know what he or she needs (George, 2011). With the current trend of patient-centered care and shared decision making, this is regarded a vital capacity for medical professionals as well (Bensing, 2000; Butalid, Verhaak, Boeije, & Bensing, 2012). Improved empathic capacities in patient care are related to improved satisfaction, better treatment compliance, better clinical outcomes, and fewer medical errors (Batt-Rawden, Chisolm, Anton, & Flickinger, 2013; Del Canale et al., 2012; Hojat, Louis, Maio, & Gonnella, 2013). However, the prevailing biomedical and technology driven focus, in combination with the high turnover of patients, may hamper health care professionals from providing attentive and person-centered care (Kreitzer & Klatt, 2017; Maizes, Raket, &

Niemiec, 2009). According to the recently introduced holistic and salutogenic oriented approach of Integrative Nursing, self-awareness makes a person not only more perceptive of self, but also of the other. Thereby, it can generate health care professionals with conscious control to deeply attune to the patient when providing care or to step back and reload if necessary (Quinn, 2014).

Both medical and nursing students had actively learned MB techniques during the MB skills course, which were used as tools to cope with stress in their personal and professional lives. The ability to handle stress in life was also one of the central themes in a qualitative study of the MB course developed by Georgetown University (Saunders et al., 2007). Similarly, a previous qualitative study describes experiences of increased self-care and stress reduction among nurses after participating in a mindfulness program (Cohen-Katz et al., 2005). Furthermore, Halm (2017) concludes in a recent narrative review that mindfulness practices by nurses are associated with a number of direct health benefits such as less stress and more resilience. However, a previously published quantitative study that investigated the long-term effects of the MB skills course by using validated self-reporting scales showed a decrease in overall perceived stress only among nursing students (van Vliet et al., 2017). These quantitative findings suggest that nursing students benefit more than medical students from the MB skills course in relation to dealing with stress. This might be explained by the fact that perceived stress scores prior to the MB skills course were higher among the nursing students compared with the medical students. Although the quantitative study found that the MB skills course did not lower the levels of stress among medical students, acquiring tools to deal with stress is still important as it can strengthen them for future personal and professional challenges (Brinkhaus & Witt, 2012; Kreitzer & Klatt, 2017; Turner & Kaylor, 2015).

### **Methodological Considerations**

Some methodological issues need to be addressed. First, the sampling procedure might have resulted in inclusion of relatively more study participants with a general positive attitude toward the MB skills course. However, a purposive sampling procedure aims to include those who actually have the experience of the topic under study and here a relatively large “qualitative” sample was included, resulting in deep and rich information about the meaning of the lived experience (Malterud et al., 2016). Furthermore, the most reported reason for refusal was lack of time because of internships, which is not necessarily related with positive or negative opinions toward the course. Second, using interviews carries the risk of socially desirable answers (Kvale & Brinkman, 2015). However, as participants were not dependent on the interviewer (e.g., no teacher relationship) and were encouraged to tell both positive and negative experiences, this type of bias is probably very limited. Overall, the broad range of stories

suggest that the results reflect all experiences well. Third, all interviews among Swedish nursing students were conducted by Dutch interviewers and therefore in English. This might have created a language barrier for the Swedish students, which would make it more difficult for them to express themselves fully. To overcome this, time was taken to let the students feel comfortable and give them every opportunity to express themselves well. The students themselves indicated that they felt able to express themselves well during the interviews. This is confirmed by the rich and vivid information that was obtained among the Swedish nursing students and is confirmed by the positive feedback from the Swedish participants on the transcripts that were sent to them to check correctness. The richness of the interviews also supports the information power of the study and the trustworthiness of the findings. Malterud et al. (2016) argue that “the larger information power the sample holds, the lower  $N$  is needed.” (p. 1754) Although using a phenomenological hermeneutical method, this present study included a larger number of participants ( $N = 26$ ) than usual. This large number is motivated by the relatively broad and explorative aim of the study and the low level of available established theories regarding MB skills courses in relation to self-care and self-awareness among medical and nursing students prior to the study.

This study was conducted among Dutch medical and Swedish nursing students. Therefore it is difficult to know if differences in experiences between medical and nursing students can be attributed to cultural differences between countries and/or between disciplines. Therefore, it would be of interest to further explore differences in experiences of the MB skills course between nurses and medical students within the same country. Finally, the study aimed for trustworthiness by following a structured method and by discussing the findings from each consecutive step among all authors. Still, the findings are based on our own interpretations of the interview data. Therefore, it would be valuable to obtain feedback from the participating students to check if they can identify with our reflection and interpretation of their experiences.

### **Conclusion**

Previous studies in the area of this study have mostly used quantitative methodology, focusing on measuring different aspects of effects from participating in meditation/mindfulness-based programs. This present study brings forward a deeper understanding of what participation and subsequent personal integration of the elements in daily life means for the person. Thereby, the study is an important contribution in adding and building evidence for these complex interventions. In conclusion, this study revealed that participation in the MB skills course is understood as a pathway to inner awareness and a support to connecting with others and the surrounding world. This process of personal development can be interpreted as an altered perception of the participants’ inner and outer world. The opportunity to step back from

daily routines enabled the participants to see the true nature of themselves and the surrounding world, including the need to pay attention to themselves. Overall, the results show that the MB skills course contributed to increased self-awareness and self-care among participants and therefore seems a valuable addition to both medical and nursing education.

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### ORCID iD

Marja van Vliet  <https://orcid.org/0000-0002-0178-2046>

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### Author Biographies

**Marja van Vliet** graduated with her PhD in the health sciences department at Mid Sweden University, Sundsvall, Sweden in May 2017. Currently, she works as a researcher at The Louis Bolk Institute, Bunnik, The Netherlands and the Institute for Positive Health, Utrecht, The Netherlands. Her work focuses on promoting resilience and vitality among patients and health care professionals.

**Miek C. Jong**, PhD, is lecturer in Public Health and associate professor in the health sciences department at Mid Sweden

University, Sundsvall, Sweden. She is a former employee of the Louis Bolk Institute. Her areas of research include studies into the effects of mind body techniques and integrative medicine.

**Mats Jong**, PhD, is an associate professor in nursing, working at the department of health sciences/sport science at Mid Sweden University, Sundsvall, Sweden. He teaches in research methodology and supervises students in numerous areas of health research. His research line is especially focussed on promoting self-care and a healthy lifestyle among healthy people as well as people with illness and disease from a salutogenic perspective.