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The Moral Distress Instrument (MDI): Development, Validation and Associations with Burnout among Finnish Social Workers

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ABSTRACT

Moral distress (MD), the suffering experienced by professionals due to their restricted moral agency, has become a popular subject of study in the fields of social work and health care. Many of the existing measures of MD are targeted at certain professionals, such as health care workers, and are thus restricted to such contexts. This has challenged the conceptual development and empirical examination of MD as a phenomenon occurring across diverse professional groups in different work settings. This study introduces a general measure of MD, the Moral Distress Instrument (MDI). It is not bound to specific professional contexts, and it aims to enable comparative and cross-disciplinary analyses of MD. The MDI consists of seven items that capture different forms of constrained moral agency and follow-up items measuring the level of distress related to these experiences. The reliability and validity of the MDI is investigated, and its distinctiveness from and associations with burnout are studied among a sample of Finnish social workers ($n = 367$). The MDI was shown to be a reliable and valid measure among the sample. The measures of MD and burnout were shown to tap separate constructs, although these experiences were strongly associated with each other.

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Moral distress; burnout; Moral Distress Instrument; workplace wellbeing; ethics stress

Introduction

In recent decades, the concept of moral distress (MD) has developed within social and healthcare discourses. MD refers to suffering experienced by professionals as a result of restricted moral agency (Mänttäri-van der Kuip 2020). The concept was first introduced by Jameton, a bioethicist in nursing (1984). Distinct from moral uncertainties and moral dilemmas, MD results from situations where 'one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action' (6). MD has since gained ground in other social service and healthcare contexts (Brend

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2020; He, Lizano, and Stahlschmidt 2021; Lev and Ayalon 2018) and served as an important concept to capture and understand common moral challenges within these fields.

Recent findings of elevated rates of MD among social service professionals are of great concern because MD has been associated with burnout, post-traumatic stress and even suicide among medical professionals (Foli et al. 2020; Van Oers 2021). It appears that social service and healthcare professionals are struggling to practice their professions in the ways they think they should, and this constricted morality puts their wellbeing at risk (Brend 2020; He, Lizano, and Stahlschmidt 2021; Lev and Ayalon 2018). MD provides a conceptual framework to understand this phenomenon and the resulting potential for harm. However, there are serious limitations in the measurement and empirical study of MD due to an overall lack of conceptual clarity, including how it is related to, and different from, burnout (Benoit, Veach, and LeRoy 2007; Dalmolin et al. 2014; Dzeng and Wachter 2020; Hanna 2004; Mänttäri-van der Kuip 2020; Morley 2019; Mueller 2004; Musto and Rodney 2016; Tigard 2018; Wocial 2016).

Over the past two decades researchers have been working to build a valid instrument to measure MD (Giannetta et al. 2020; McCarthy and Gastmans 2015). Corley et al. (2001) designed the first measure of MD for nurses and several other measures have followed (Giannetta et al. 2020). Nursing scholars have been especially active in developing such instruments and as a result, many focus on the professional experiences of nurses or other health care professionals (Austin, Saylor, and Finley 2017; Epstein et al. 2019). This has resulted in existing measures being bound to specific professional groups through scale items that capture discipline specific experiences, which impedes comparative analyses among professionals working in different disciplines and contexts. Recent evidence suggests that this phenomenon is not bound to healthcare professions (Brend 2020; He, Lizano, and Stahlschmidt 2021; Jaskela et al. 2018; Lev and Ayalon 2018). There is a need for a more general and context-neutral approach to the measurement of MD.

In this article we briefly review the history of the concept of MD, give a description of existing instruments used in measuring MD, and pinpoint some potential challenges related to these measures. We then introduce a new measure, the Moral Distress Instrument (MDI), which aims to tackle the identified challenges of the existing measures. Finally, we present our investigation of the reliability and validity of the MDI among a sample of Finnish social workers. As burnout has been identified as one potential psychological response to MD (Oh and Gastmans 2015) we have investigated the distinctiveness of MD from burnout and associations between these two phenomena in order to increase the conceptual clarity.

Moral distress – a complex and dynamic phenomenon

Multiple different definitions of MD, many of which draw upon Jameton's initial description, can be identified in the MD literature (McCarthy and Gastmans 2015). Despite their differences, it is possible to identify common ground and shared features among these conceptualizations (Mänttäri-van der Kuip 2020; McCarthy and Gastmans 2015). Specifically, MD can be understood as: '(1) the experience of a moral event, (2) the experience of "psychological distress" and (3) a direct causal relation between (1) and (2)' (Morley 2019, 646). It is the direct causal relationship between moral events and distress that separates moral distress from general stress (Dudzinski 2016; Fourie 2015; Mänttäri-van der

Kuip 2020; Morley 2019; Wilkinson 1987). However, there is no consensus on what constitutes these morally loaded events or situations – or the nature of the resulting distress (Mänttäri-van der Kuip 2020; Morley 2019). This lack of consensus is likely to result from the diverse disciplinary contexts in which MD-related research and theorizing has taken place over time.

Beyond the multiple definitions of MD itself, there are several related constructs such as *moral injury, moral pain* and *ethics-related stress* which have been used as equivalent terms or in relationship with MD (DeTienne et al. 2012; Maguen and Norman 2021). This contributes to conceptual confusion. In line with the conclusions of Haight et al. (2016), Maguen and Norman (2021) have proposed that

> moral distress is the negative emotional reaction to potentially morally injurious events (PMIEs), moral pain is the internal conflict and discomfort in response to the transgression that occurred during the PMIE, and moral injury is the long lasting psychological, behavioral and sometimes spiritual pain and disruption that comes from this exposure. (2)

There remains a need to refine the differences and similarities between these related concepts and remove tautologies.

In previous empirical studies MD has also been associated with other distinct threats to the wellbeing of social and healthcare professionals. Burnout, a psychological syndrome which develops as a response to chronic interpersonal stressors at work, is one such threat (Maslach and Leiter 2016). It has been found to be a closely related phenomena to MD (Fumis et al. 2017; Oh and Gastmans 2015; Ohnishi et al. 2010). Conceptually, burnout is understood through three core dimensions: emotional exhaustion, cynicism and declined professional efficacy (Maslach and Leiter 2016; Maslach, Schaufeli, and Leiter 2001). Dzeng and Wachter (2020) have posited MD as a major cause of burnout among healthcare professionals. However, most studies of MD are based on cross-sectional data. Therefore, it has not yet been possible to make causal inference between MD and burnout. Nevertheless, both phenomena are worryingly common among social workers and health care professionals. Thus, MD, burnout, their potential conceptual overlap, as well as their association with each other warrant further examination – and underline the need for a measure of MD, that is distinct from the measures of burnout.

A critical analysis of existing measures and conceptualizations of MD

In the first explicit definition of MD, Jameton (1984) emphasized the external barriers to moral action, that is, the institutional and organizational constraints that prevent nurses from doing 'the right thing' (Jameton 1993). He elaborated how these constraints operated through practice-based examples in nursing. The legacy of Jameton's approach is found in most of the existing measures of MD. As we will review next, many of these scales assess the presence of specific moral experiences occurring within the professional practice of specific disciplines. The scales include items that describe specific professional experiences as predefined causes for MD (Mänttäri-van der Kuip 2020). Therefore, these predetermined items generate responses of experiencing MD as a result of these specific situations. By tracing the development of different MD measures over time, we will now demonstrate how using these discipline-specific experiences have served to shape and limit the concept of MD.

The first known measure of MD developed by Corley et al. (2001) was the Moral distress scale (MDS). It consists of 32 items and was developed to capture levels of MD among nurses. The items consist of predefined, potentially morally loaded situations such as, carrying out a 'physician's order for unnecessary tests and treatments' and working 'in a situation where the number of staff is so low that care is inadequate' (254). These items are clearly related to the work of nurses in a clinical setting. The MDS was later revised by Hamric, Borchers, and Epstein (2012). This MDS-R consists of 21 items and was designed to assess MD among nurses and physicians. It is comprised of two sub-scales: the first aims to assess the frequency of predefined morally loaded events and the second assesses the intensity of distress related to those events (Epstein et al. 2019). Both the MDS and MDS-R are widely used, have been translated into different languages, and adjusted for different research settings (Giannetta et al. 2020).

For example, Epstein et al. (2019) adapted the MDS-R to assess MD among health care professionals working in adult or pediatric, critical, acute, or long-term acute care settings. This Measure of Moral Distress for Healthcare Professionals (MMD-HP) consists of 27 items assessing the frequency of predefined morally loaded events and the intensity of distress related to those events (Epstein et al. 2019). Items contain terms related to healthcare practice such as bed capacity and patient-care specific experiences e.g.: 'Continue to provide aggressive treatment for a person who is most likely to die regardless of this treatment when no one will make a decision to withdraw it' (Epstein et al. 2019, 119). Similarly, the 15-item moral distress questionnaire developed for social workers in institutional long-term care settings is based on predefined root causes (Lev and Ayalon 2018). This scale includes items describing morally loaded experiences such as, 'I felt that my personal and environmental resources have not been adequate in order to protect the residents' rights' (Lev and Ayalon 2018, 6). This scale was tailored for social workers rather than health care professionals, continuing the tradition of investigating MD through discipline- and context-specific predetermined experiences.

Schaefer, Zoboli, and Vieira (2016) took a slightly different approach with their Moral Distress Risk Scale (MDRS) targeted for nurses working either inside or outside of hospital settings. They identified the most relevant risk factors for MD by consulting the international nursing literature and adapted these factors into 53 scale items. The participants were asked how often they experienced any of these items, including, e.g. 'nursing shortage' and 'fear of losing your job' (438). MD was defined as 'a limitation perceived by the nurse to perform an action considered morally correct' (463). This definition was presented to the participants, and they were asked if they were currently experiencing it and if they considered any of the previous items as risk factors for MD. If so, they were asked to speculate whether they would be willing to leave their job due to their experience of MD – if their current circumstances allowed it. One benefit of the MDRS is that it sparks an important discussion about the international nature of MD and the context specific nature of its risk factors. However, it faces the same challenge as the previously presented scales by being bound to one specific discipline. In addition, the MDRS focuses on intent to leave as a potential response to MD instead of capturing the severity of distress.

Despite the many strengths of the above-described instruments, there is a need for a measure that more directly and efficiently measures the phenomenon of MD across diverse human service contexts. Understanding MD as a phenomenon consisting of specific, predetermined causes and responses results in a narrow conceptual basis for a

phenomenon that appears to be both internationally relevant and pertinent across many professions. While root cause items are grounded in well-recognized experiences faced by professionals in the Western social welfare and health care settings (such as lack of resources; see Lev and Ayalon 2018, 6 and Corley et al. 2001, 254), it is also plausible that factors causing MD might differ among professionals, even among those belonging to the same discipline. Unanticipated individual experiences of different morally distressing situations, including participants' subjective judgement of moral events and experiences of distress are rendered invisible by such context-specific items (Mänttäri-van der Kuip 2020). Not to mention how the relevance of such specific measures might be irrelevant in certain contexts or impacted by changes in governance structures, policies, practices and funding priorities over time. The measures constructed in this manner risk overlooking the full breadth and depth of MD.

Methodological problems also result from the use of context-, discipline- and profession-bound measures. These kinds of scales do not enable cross-disciplinary comparisons of the prevalence of MD, for example. Further, the inclusion of the factors that might cause MD, such as the lack of staff, in measures of MD hinders the analysis of the potential predictors and impacts of MD (see Baele and Fontaine 2021). It is difficult to empirically study the causes of MD if predetermined causes are included in the measure. To solve this limitation scales have been developed that decouple specific professional scenarios from the measurement of MD (Fourie 2016; Mänttäri-van der Kuip 2020).

The Moral Distress Thermometer (MDT) (Wocial and Weaver 2013) is a single-item screening tool for assessing whether a person has experienced MD during the past two weeks. Although originally designed for nurses (Wocial and Weaver 2013), it is suitable for diverse contexts as it simply offers a definition of MD and asks the participant to estimate the level of their MD relative to an 11-point scale that resembles a thermometer. This attempt to create a simple and more general way to measure MD has, however, created different limitations compared to the context-specific, multi-item scales. A single-item tool does not enable the complexity inherent in MD experiences to be captured. A benefit of the MDT is that it includes the two-week time point reference which enables the study of subjective experiences of MD over time (Wocial and Weaver 2013). However, this can also limit the validity of the results, as these two weeks might not represent a typical working situation.

The scales that come closest to tackling the previously mentioned limitations are The Moral Distress-Appraisal scale (MD-APPS), developed by Baele and Fontaine (2021), and the Moral Injury and Distress Scale (MIDS) developed by Norman et al. (2024). MD-APPS is an eight-item Likert scale is targeted for different healthcare professionals and is suitable to be used in a variety of settings. Four items assess the presence of constraints: two of them are described as *hindrance items* (e.g. 'I am kept from working ethically'), and two others as *coercion items* (e.g. 'I am compelled to do things that I believe are morally wrong'). In addition, the MD-APPS includes four items that assess the absence of constraints. These items are described as *freedom* and *support for moral action* (e.g. 'I am helped to work in a way that I believe is morally right'). However, the dimension of distress is not included in the scale as it only focuses on the presence and absence of moral constraints (Baele and Fontaine 2021).

MIDS (Norman et al. 2024) differs from the MD-APPS by combining PMIEs and subsequent reactions to them. It also assesses symptoms by including pre-defined psychological, behavioral, social and spiritual outcomes of exposure to PMIEs. Developed to assess moral injury, the focus of MIDS is on major events where respondents (1) have done something that is

against their deeply held morals and values, (2) failed to do something (3) or witnessed others commit highly unethical acts, instead of less drastic moral events, which might nevertheless be source of distress (Norman et al. 2024). It might, therefore, not tap into experiences of moral distress resulting from less drastic, or cumulative events.

To conclude, we have identified a need for a measure of MD that: (1) is not bound to specific professional contexts, (2) measures the phenomenon of MD rather than its causes, (3) can capture different and atypical experiences of MD not previously included in scale items, (4) will be relevant regardless of changes in professional practice experiences or contexts, (5) enables comparative, cross-disciplinary and meta-analytic analyses and (6) measures both the frequency of different moral events and the amount of personal distress they can cause. Such a measure would also enable the investigation of potential associations between MD and related constructs such as burnout. We will now describe the theoretical premises, the development and the content of the MDI – a measure that aims to tackle these challenges.

Development and description of the MDI

The MDI was developed by Mänttäri-van der Kuip and Brend based on the conceptualization of MD as a dual phenomenon consisting of: (1) a sense of constrained moral agency, and (2) distress stemming from that experience of constrained moral agency (Fourie 2015; Huhtala et al. 2011, 2022; Huhtala, Kinnunen, and Feldt 2017; Mänttäri-van der Kuip 2020). By constrained moral agency we refer to the subjective experience of a person who is not able to practice or to do their work in the way they believe that they should, i.e. what they consider morally and ethically right, correct or appropriate. The person is either limited from acting as an autonomous moral agent or their moral agency is violated in some way (Baele and Fontaine 2021; Morley 2019; Peter and Liaschenko 2013). The MDI departs from the earlier measures such as the MDS and the MSD-R by excluding predetermined root causes of MD from the instrument, which makes it applicable to professionals across different occupational fields. Instead, the MDI aims to capture the fundamental phenomenon of MD itself. By removing specified causes professionals can report experiences of MD related to any experience, potentially facilitating further inquiry into the potential causes of MD.

The MDI consists of seven items aiming to capture different forms of constrained moral agency and the degree of subjective distress related to those experiences (Table 1). Thus, it enables to collect data that captures both the degree and the pervasiveness of subjective MD experiences. The MDI draws from the critically oriented literature concerning MD such as the work of Hanna (2004), Morley (2019) and Weinberg (2009), and it is based on the conceptualizations built by the authors during their previous and ongoing research related to MD (Brend 2020; Mänttäri-van der Kuip 2016, 2020; Tammelin and Mänttäri-van der Kuip 2022). We will provide a more detailed theoretical background for each of the items in the next section.

Items measuring the constrained moral agency

The seven A-items capture different aspects of the ways in which a person's moral agency might be constrained (Table 1). Respondents are asked to estimate the frequency of such

Table 1. The Moral Distress Instrument (MDI) scale items.

A-items (The constrained moral agency)	B-items (The distress)
A1 Have you ever been unable to do your job in the way you believe it should have been done?	B1-B7 Did this cause you any discomfort?
A2 Have you been pressured, obligated, or forced to do something at work that did not seem like the right course of action?	
A3 Have you been in a situation at work that required you to act despite being unsure about what the right course of action was?	
A4 Have you witnessed things happening at work that you believed to be wrong but felt powerless to change?	
A5 Have you encountered situations at work that have caused you to compromise your **professional** values or ethical principles?	
A6 Have you encountered situations at work that have caused you to compromise your **personal** values or ethical principles?	
A7 Have you encountered situations at work in which you knew the right thing to do, but felt you were unable to do it?	
Scale of the A-items: 0 = Never, 1 = A few times a year or less, 2 = Once a month or less, 3 = A few times a month, 4 = Once a week, 5 = A few times a week, 6 = Every day	Scale of the B-items: 0 = No discomfort, 1 = Yes, but my discomfort was easily manageable, 2 = Yes, and my discomfort took effort to manage, 3 = Yes, and my discomfort was difficult to manage, 4 = Yes, and I was unable to manage my discomfort

Note. Each B-item is answered only if the response to the A item is 1–6. If the respondent has never experienced situation described in the A-item (= 0), they move to the next A-item.

events on a 7-point scale during the past two years. This choice was made based on the possibility that the experiences of MD might be different for employees who have less work experience or choose to leave after a few months of practice. Due to the complexity of many social work and healthcare roles, two years is considered the average length of time a new employee needs to become proficient (Barbee et al. 2018), and in child welfare practice half of all workers have been found to leave their jobs within 1.7 (Smith 2005) to 1.8 years (Edwards and Wildeman 2018).

Two of the A-items focus on *hindrance* factors that restrict one's moral or ethical agency, as described by Baele and Fontaine (2021). Item A1 captures situations where the person feels unable to do their job in the way they believe it should be done. An example of this kind of a situation could be when an employee feels that they must compromise the quality of their work due to lack of time (Lohvansuu and Emond 2020). Item A7 taps into situations where the person knows the right thing to do, but feels unable to do it (Jameton 1984). For example, a person might judge certain support measure as necessary for the client, but the service is too expensive to carry out (Mänttäri-van der Kuip 2022, 2023).

A person might also be constrained to do the right thing by being coerced to do something that does not feel right (Baele and Fontaine 2021). For example, social workers and residential childcare workers have both described being forced to make decisions that they do not agree with, causing them to experience distress (Brend 2020; Mänttäri-van der Kuip 2023). Thus, the item A2 addresses such situations where the moral agency of the person is *violated*. The item focuses on situations or events in which employees have been pressured, obligated or forced to do something that does not seem like the right course of action.

Witnessing practices that feel wrong while not being able to affect them can also be a source of MD for workers (Mänttäri-van der Kuip 2023). This can be considered as a *secondary* form of MD, as it captures the potential distress of being a witness to (im)moral events without the capacity to act on them. Item A4 captures these experiences of constrained moral agency related to witnessing the unethical practices of others or working in organizational contexts rife with ethically questionable events (Brend 2020).

Although Jameton (1993) excluded moral dilemmas and uncertainty from the definition of MD, we argue that it is possible that professionals might experience MD in such situations (see also Morley 2019). More specifically, a person's moral agency is constrained when they must act even when feeling unsure about the right course of action. Knowingly taking action, such as doing things that impact vulnerable people, even when being unsure that the result will be to their benefit represents a potential source of MD. Thus, item A3 captures such situations which include *the requirement to act*, separating them from experiencing mere uncertainty of weighing different options.

Finally, two items were added to capture situations where the person feels that they must compromise their professional ethics (A5) or their personal moral values (A6). Social workers who are unable to meet their ethical obligations have been found to experience increased stress (Fenton 2014). In addition, personal values related e.g. to one's worldview or religion, that do not align with one's professional obligations, might also generate stress (see Davis, Schrader, and Belcheir 2012; Dobrowolska et al. 2020). These two items allow for greater specificity in identifying the different types of moral experiences that can elicit distress.

The constraints presented in all the A-items are not bound to certain disciplines or contexts unlike items in many other instruments. For example, the MMD-HP item 'Continuing to provide aggressive treatment for a person who is most likely to die regardless of this treatment when no one will make a decision to withdraw it' (Epstein et al. 2019, 119) is discipline and situation specific. The MDI is designed to capture a similar situation with more general items (A2 or A6). In this way MD can be captured by items that describe qualitatively different types of constraints, but at the same time allow the respondent to make the judgement of what kinds of practical events and situations are behind these constraints based on their personal work and its context. In the MDI the essential point of reference is the subjective level of distress experienced by the individual. This determines whether an experience was MD or not. An experience cannot be considered as MD without (1) a sense of constrained moral agency, and (2) distress stemming from that experience.

Items measuring the degree of distress

The MDI follows a similar dual structure as the MDS-R, where participants are first asked to estimate the frequency of an event or situation and the related stress. If they have experienced such events (response to A-items = 1–6), they are also asked to estimate if these events caused them any discomfort and if so, how manageable they found their discomfort to be using a 5-point scale (see Table 1, B-items). We chose to use the term discomfort in the scale items, in order to have a scale that can trace experiences ranging from mild to very severe. In this way, participants can more accurately rate the severity of their associated emotional response and report on experiences that were not perceived as

overwhelming or dangerous to themselves. Distress is a clinical term describing a state of being overwhelmed and with the potential of posing serious health risks (American Psychological Association 2018). Using discomfort, therefore, increases the accuracy and discrimination ability of the full measure.

In creating the response scale for the discomfort items, we took into account the effort it took from the respondent to manage the discomfort. This was done to further identify if an experience was felt to overwhelm their capacities. We based this decision on the definition of distress as 'a type of stress that results from being overwhelmed by demands, losses, or perceived threats' (American Psychological Association 2018). For example, DeTienne et al. (2012) argued that experiences of moral stress are determined both externally (e.g. due to organizational constraints and expectations) and internally (e.g. related to subjective appraisals of one's competence, capacity and autonomy). Thus, if the respondent has difficulties in managing their discomfort, the experience can be understood as distress. By allowing respondents to assess their sense of capacity related to managing their discomfort the MDI produces a score that represents experiences ranging from *no discomfort* (= 0) to unmanageable discomfort, that is to say, high *distress* (= 4; see American Psychological Association 2018).

To summarize, the MDI was created to capture the complexity related to MD. Thus, our aim has been to provide a less directive and context-specific, yet more nuanced opportunity for employees to rate their experiences of MD. By doing so we also hope to contribute to the clarification between the plethora of concepts related to MD.

Methods and data

After developing the MDI items, we ran a separate study to investigate the new scale's reliability and validity among a sample of Finnish social workers. We conducted confirmatory factor analysis (CFA) with M-plus (Muthén and Muthén 1998–2017) in order to test the fit of the hypothesized two-factor model (MD frequency and discomfort) with the data, and to compare it with alternative factor solutions. In addition, we used structural equation modeling (SEM) to investigate the discriminant validity of the MDI in relation to burnout, as based on previous empirical evidence MD and burnout have been found to associate with each other (Fumis et al. 2017; Ohnishi et al. 2010). Thus, we studied the distinctiveness of MD from burnout, and investigated how the two dimensions of MD associate with the three fundamental dimensions of burnout: (1) exhaustion, (2) cynicism and (3) inadequacy at work (Lee and Ashforth 1990; Salmela-Aro et al. 2011).

Study sample

The study sample consisted of Finnish social workers ($n = 367$). The data were collected in co-operation with the Finnish union of social workers (Talentia) between December 2020 and March 2021. The board of the union reviewed and approved the research plan and the questionnaire that was used in the study. The respondents were offered information about the research (research notification), and they were given a detailed privacy notice concerning the use and management of the data before asking for their consent to participate to the study. Voluntariness of participation was underlined, and the respondents had an option to leave those questions unanswered that they preferred not to answer.

Thus, the data collection was based on informed consent, and the guidelines of the Finnish Advisory Board on Research Integrity were followed throughout the study.

The data were collected with an online questionnaire. Talentia distributed the link to the questionnaire by email to those members who, based on their membership register, were practicing social work in clinical settings. The union estimated that the number of such members during the data collection was 2623. Altogether 414 social workers consented to participate the study, and 367 of them gave responses to the questions concerning the experiences of MD (response rate 14.0%). Thus, these respondents formed the final study sample (Table 2).

In Finland social work is a licensed profession, to become licensed, one needs to accomplish graduate level studies in social work and complete a master's degree (see National Supervisory Authority for Welfare and Health 2021). Social work students can, with certain restrictions, work temporally as social workers after earning their bachelor's degree, thus not all the social workers have formal qualifications. Joining the union is not mandatory for social workers; however, most of the licensed social workers, as well as many social work students are members.

The majority of social workers, who practice social work in clinical settings, are employed in public sector organizations, and their duties are regulated by law. Despite operating in the Nordic welfare state context, also Finnish social workers face situations, which cause them MD. For example, struggling to meet the needs of their clients due to inadequate services, or finding themselves in situations where they feel pressured to make decisions that they do not consider to be in the best interests of their clients (Mänttäri-van der Kuip 2016, 2023).

According to the union register, the average age of social workers practicing in the field of social and healthcare was 45.7 years and a majority (94.5%) of them were women and employed in the public sector (94.5%). Thus, despite the somewhat small sample size, the study sample was representative of the union members' demographics (see Table 2). However, the existing statistics concerning all the members of the union and Finnish

Table 2. Description of the study sample ($n = 367$).

Background variables	*% (f)*	
Gender:		
Female	94.6% (347)	
Male	3.8% (14)	
Other, nonbinary, undisclosed	1.6% (6)	
Formally qualified social worker (master's degree)	89.6% (329)	
Type of the current work contract:		
Permanent	77.7% (285)	
Fixed term/temporary	18.8% (69)	
Currently without a contract	3.5% (13)	
Type of employment organization:		
Public	95.6% (349)	
Private	3.6% (13)	
Third sector	0.8% (3)	
Type of employment:		
Part-time	11.5% (42)	
Full-time	88.5% (324)	
	Range	*mean (SD)*
Age	24–66	45.3 years (10.8)
Years of professional experience	0–43	14.4 years (10.2)
Length of employment within the current employer	0–42	7.7 years (8.4)

social workers in general is rather limited. The estimates given here concerning the full target population might not be accurate as turnover among Finnish social workers is high and members might not update their status or contact details to the membership register. Although these limitations should be considered when evaluating the generalizability of the findings, the sample size was adequate for testing the reliability and validity of the MDI instrument. Moreover, because the aim of the current study was not to study the prevalence of MD in this population, representativeness poses less of a problem.

Variables

Moral distress

The MDI-scale was originally formulated in English by the first two authors but translated for the purpose of this study into Finnish. To assure the quality of the Finnish translation, the scale was back translated from English to Finnish and then back to English by two independent professional translators. The Finnish version of the scale was used in this study.

To calculate item indexes for each individual item, the scores from the answers to all A and B items were multiplied to form an index of each item (A × B = Item Index; see Table 3). Each item index had the range from 0 to 24. To calculate the total index to represent the MDI total score, all seven item indexes were added together (AB1 index + AB2 index + AB3 Index + AB4 Index + AB5 Index + AB6 Index + AB7 Index = MDI total score). This overall score had the range from 0 to 168.

Burnout

Burnout was measured with the shortened, Finnish 9-item version of the Bergen Burnout Inventory (BBI-9) (Feldt et al. 2014) (for the original version of the scale see, Matthiesen and Dyregrov 1992; Salmela-Aro et al. 2011). We chose to use the BBI-9 scale as it has been shown to be a valid measure that captures the three core dimensions of burnout. *Exhaustion* at work was measured with the following items: (1) I am snowed under with work (2) I often sleep poorly because of the circumstances at work and (3) I constantly have bad conscience because my work forces me to neglect my close friends and relatives. *Cynicism* toward the meaning of work was also measured with three items: (1) I feel dispirited at work, and I think of leaving my job, (2) I feel that I have gradually less to give and (3) I feel that I am gradually losing interest in my clients. A sense of *inadequacy* at work was measured with the items: (1) I frequently question the value of my work, (2) My expectations to my job and to my performance have reduced and (3) Honestly, I felt

Table 3. Item indexes and the Moral Distress Instrument (MDI) total score.

Item indexes	*n*	M	SD	Range
1 AB	367	7.2	5.7	0–24
2 AB	367	2.9	3.4	0–20
3 AB	365	4.3	4.1	0–24
4 AB	366	4.7	4.6	0–24
5 AB	364	4.1	4.6	0–24
6 AB	362	3.7	4.4	0–24
7 AB	362	3.5	4.0	0–24
MDI total score	359	30.4	24.1	0–164

more appreciated at work before. The items were rated on a 6-point frequency-based scale ranging from 1 (completely disagree) to 6 (completely agree), higher mean scores indicating a higher level of burnout (see Feldt et al. 2014; Salmela-Aro et al. 2011). The Cronbach's alphas for the subdimensions were .73 (exhaustion), .83 (cynicism) and .77 (inadequacy) (Table 4).

Results

The most common manifestation of constrained moral agency was related to the experiences of being unable to do one's job in the way one believes it should have been done (Table 5). Least common were the experiences of been pressured, obligated, or forced to do something at work that did not seem like the right course of action. However, these latter experiences received the highest distress scores (Table 5) despite their rarity. In addition, those situations which had caused the respondents to compromise their professional values or ethical principles were evaluated as highly distressing (Table 6). Being in a situation that required the person to act despite being unsure about the right course of action was evaluated as least distressing (see Tables 5 and 6). The Crohnbach's alphas for both subscales, the frequency of the experiences of compromised moral agency (Table 5) and the distress related to these experiences (Table 6), were high, which indicates good internal consistency.

Next, we ran CFAs to test the fit of the hypothesized two-factor model with the data, and to compare the two-factor model to alternative factor solutions (Table 7). We compared the fit between the nested models by using the Satorra-Bentler scaled difference chi-square test (Satorra and Bentler 1999), which compares the most restricted model with the less restricted one. However, because in the two-factor model the first factor had a skewed distribution, the model produced a higher scaling correction factor compared to the one-factor model. Subsequently, this led to a negative value in the chi-square test. Because of the skewed factor, it was not possible to calculate the recommended strictly positive Satorra-Bentler chi-square test in Mplus (see Asparouhov and Muthén 2013). Therefore, we performed the chi-square test using a scaling correction factor of 1 for both models (M1 and M2). These results are presented in Table 7.

In addition, we also investigated the changes in the CFIs, as recommended by Cheung and Rensvold (2002). A value of ΔCFI smaller than or equal to −.010 indicates that the invariance hypothesis should not be rejected. The changes in the CFIs supported choosing the two-factor model (M2) against both the null model and the one-factor model (see Table 7). Taken together, all findings indicated that the two-factor model showed a better fit to the data than the null model or one-factor model, and the fit improvement from M0 to M2, and from M1 to M2 was statistically significant.

Table 4. Correlations between the subdimensions of moral distress and burnout.

	1.	2.	3.	4.
1. Frequency of compromised moral agency (A-items)				
2. Discomfort (B-items)	.513***			
3. Exhaustion	.530***	.474***		
4. Cynicism	.414***	.360***	.544***	
5. Inadequacy	.405***	.393***	.513***	.725***

Table 5. Frequencies and descriptive statistics for the A-items of the Moral Distress Instrument (MDI).

Item:	Never (= 0)	A few times a year or less (= 1)	Once a month or less (= 2)	A few times a month (= 3)	Once a week (= 4)	A few times a week (= 5)	Every day (= 6)	M	SD
A1. Have you ever been unable to do your job in the way you believe it should have been done?	3.3% (12)	19.9% (73)	15.8% (58)	20.4% (75)	12.5% (46)	19.3% (71)	8.7% (32)	3.12	1.71
A2. Have you been pressured, obligated, or forced to do something at work that did not seem like the right course of action?	28.3% (104)	48.0% (176)	10.6% (39)	9.3% (34)	2.2% (8)	1.4% (5)	0.3% (1)	1.14	1.11
A3. Have you been in a situation at work that required you to act despite being unsure about what the right course of action was?	6.0% (22)	39.5% (114)	17.5% (64)	22.2% (81)	6.3% (23)	5.8% (21)	2.7% (10)	2.12	1.44
A4. Have you witnessed things happening at work that you believed to be wrong but felt powerless to change?	6.6% (24)	39.9% (146)	19.7% (72)	18.0% (66)	6.0% (22)	5.7% (21)	4.1% (15)	2.11	1.50
A5. Have you encountered situations at work that have caused you to compromise your *professional* values or ethical principles?	15.9% (58)	46.2% (168)	14.8% (54)	12.6% (46)	3.3% (12)	3.6% (13)	3.6% (13)	1.66	1.46
A6. Have you encountered situations at work that have caused you to compromise your *personal* values or ethical principles?	18.0% (65)	45.6% (165)	14.9% (54)	11.0% (40)	3.6% (13)	4.1% (15)	2.8% (10)	1.60	1.45
A7. Have you encountered situations at work in which you knew the right thing to do, but felt you were unable to do it?	17.1% (62)	45.9% (166)	17.7% (64)	11.0% (40)	2.5% (9)	4.1% (15)	1.7% (6)	1.55	1.34

Cronbach's alpha for the subscale (Frequency of compromised moral agency, 7 items), α = .869.

The hypothesized two-factor model provided a good fit with the data, and the CFA results did not show any high modification indices, which would suggest that the structure should be altered in some way. In addition, in the two-factor model all the standardized factor loadings were at a good level, varying between .56 and .86 (see Figure 1). Thus, the dimensions of frequency and distress were captured well by the scale items. The correlation between the factors was .55, indicating that the dimensions are naturally correlated and not independent, but also that there is not a risk of multicollinearity between the factors.

Associations between MD and burnout

Structural equation modeling was used to investigate the discriminant validity of the MDI in relation to burnout (measured with BBI-9), and to analyze how the two dimensions of MD associate with the three dimensions of burnout (Figure 2). The full model showed

Table 6. Frequencies and descriptive statistics for the B-items of the Moral Distress Instrument (MDI).

Did this cause you any discomfort? Item:	No discomfort (= 0)	Yes, but my discomfort was easily manageable (= 1)	Yes, and my discomfort took effort to manage (= 2)	Yes, and my discomfort was difficult to manage (= 3)	Yes, and I was unable to manage my discomfort (= 4)	*n*	M	SD
B1	0.6% (2)	20.8% (74)	48.5% (172)	23.7% (84)	6.5% (23)	355	2.15	0.84
B2	0.4% (1)	12.5% (33)	47.9% (126)	30.8% (81)	8.4% (22)	263	2.34	0.82
B3	0.9% (3)	28.3% (97)	51.6% (177)	16.0% (55)	3.2% (11)	343	1.92	0.78
B4	0.3% (1)	22.2% (76)	51.5% (176)	21.1% (72)	5.0% (17)	342	2.08	0.80
B5	0% (0)	13.7% (42)	54.6% (167)	22.5% (69)	9.2% (28)	306	2.27	0.81
B6	1.7% (5)	19.5% (58)	49.5% (147)	22.2% (66)	7.1% (21)	297	2.13	0.87
B7	0.7% (2)	24.0% (72)	47.7% (143)	22.3% (67)	5.3% (16)	300	2.08	0.84

Cronbach's alpha for the subscale (Discomfort, 7 items), α = .877.

Table 7. Goodness-of-Fit indices for the tested confirmatory factor analysis models.

	df	χ2	CFI	TLI	RMSEA	SRMR	Δdf	$\Delta\chi^2$	Model comparisons ΔCFI
M0: Null model	77	238.25	.91	.89	.08	.20	–	M2 vs M0: 209.86***	M2 vs. M0: −0.048
M1: One-factor model	77	617.40	.69	.64	.14	.11	–	M2 vs. M1: 463.61***	M2 vs. M1: −0.265
M2: Two-factor model	76	153.79	.96	.95	.05	.04	1		

Note: *** $p < .001$. Null model: all factor correlations are set to zero. One factor model: all items are set to load on one factor. Two-factor model: hypothesized factors for frequency of compromised moral agency and discomfort caused by these situations. CFI = Comparative Fit Index; TLI = Tucker Lewis Index; CFI and TLI values range between 0 and 1, and the values above .90 are considered to indicate an acceptable fit of the model (Marsh et al. 2004). RMSEA = Root Mean Square Error of Approximation, values .00–.05 indicate a very close model-data fit (Hu and Bentler 1998), .06–.08 a good data-fit and values .08–.10 a moderate data-fit (MacCallum et al. 1996). SRMR = Standardized Root Mean Square Residual. Values below .08 indicate a good model fit (Hu and Bentler 1999).

good fit with the data: χ2 = 434.04, df = 220, $p < .001$, CFI = .934, TLI = .925, RMSEA = .054, SRMR = .051. However, based on the modification indices, there was some overlap between the first constraint item (A1) and exhaustion. This item (A1) correlated with the first exhaustion item, and it also showed a cross-loading to the exhaustion factor. This kind of conceptual overlap is understandable based on the realities which social workers face: being unable to do one's work in a way one believes it should be done is likely to go hand in hand with feelings of being 'snowed under with work'. When social workers are struggling with high caseloads and limited time, they might end up compromising the quality of their work (Lohvansuu and Emond 2020; Mänttäri-van der Kuip 2022, 2023).

Both MD dimensions (frequency and discomfort) showed quite similar associations with the three burnout dimensions. The strongest associations were identified between MD and emotional exhaustion. All the estimates were highly significant, and both MD dimensions together explained almost half (46%) of the variance in emotional exhaustion. The MD dimensions also accounted for almost a third of the variance in cynicism (27%) and inadequacy (30%).

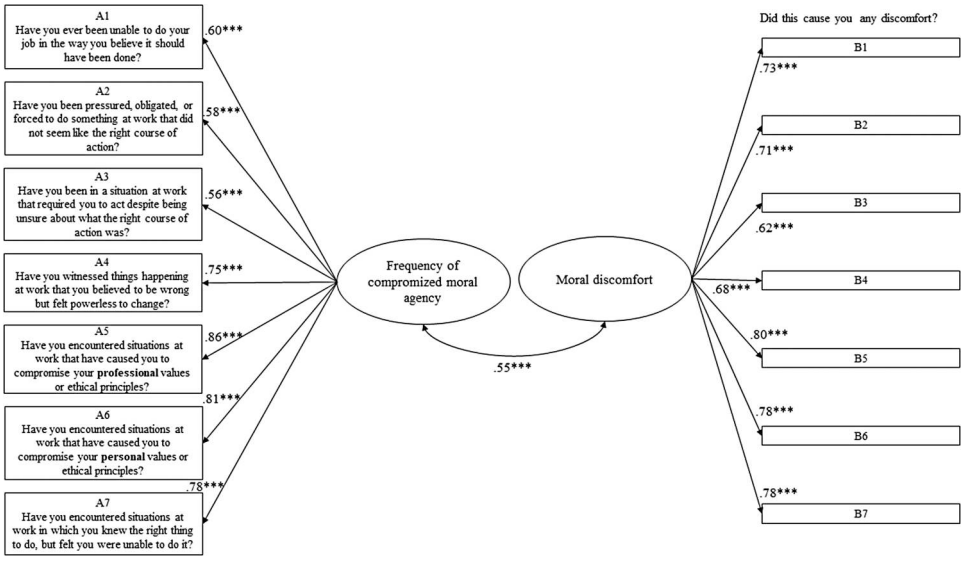

Figure 1. Standardized factor loadings for the dimensions of (a) frequency of compromised moral agency (A-items) and (b) discomfort (B-items).

Discussion

Based on existing research MD appears to be a phenomenon that resonates strongly with professionals working in social work and healthcare settings and which has a significant impact on their wellbeing. It is evident that capturing MD and identifying its causes and

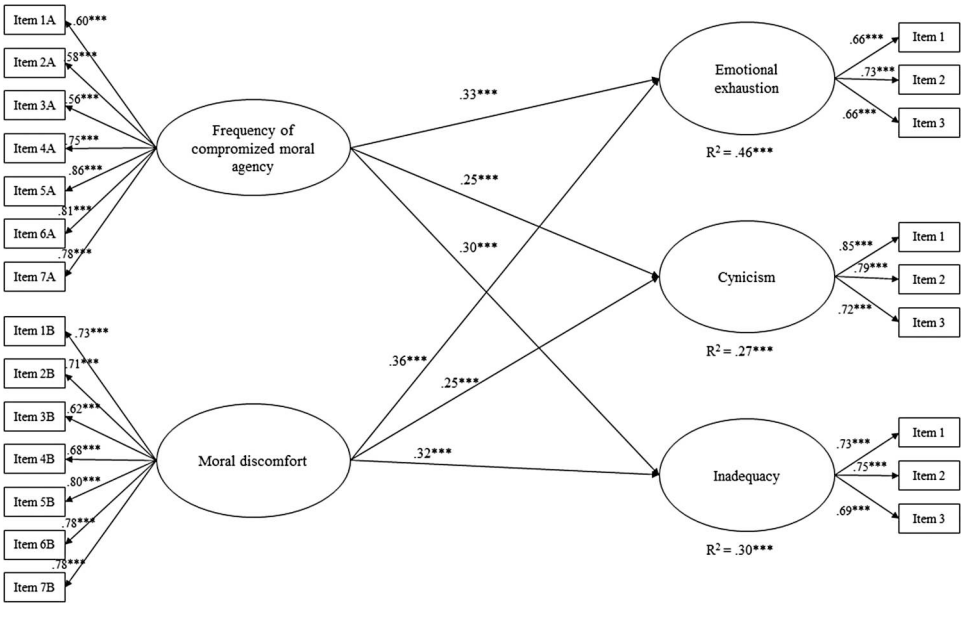

Figure 2. Path estimates from MD to burnout based on structural equation modeling.

consequences call for both empirical and practical attention. However, developing a measure that fully captures the complexity of MD has not been a simple task. In this article we have introduced and tested a novel measure, the MDI, which aims to tackle the identified challenges of pre-existing instruments. The MDI captures the dual structure of the phenomenon by measuring moral events that are related to constrained moral agency and the distress that these events might evoke among employees. The MDI also captures how often different kinds of events have been experienced by the workers. Thus, data collected with this measure enables a more detailed understanding of the prevalence and pervasiveness of MD experiences.

The essential feature that differentiates the MDI from the majority of existing measures is that it is not bound to a specific discipline, profession or context. It aims to measure the actual phenomenon of MD rather than its causes. In this way, it can enable comparative, cross-disciplinary and meta-analytic analyses between different areas of work, and the item indexes and the MDI total score can be used for that purpose. In this study the MDI was validated among Finnish social workers, among whom it was shown to be a reliable and valid measure of MD. As the sample was restricted to social workers, the obvious next step is to further validate it among other professionals and in other languages. Given that the items are not targeted to specific professionals or types of work, the MDI could be used among wide range of workers and professionals in diverse contexts – including those outside of social services and healthcare domains, such as teachers, sports coaches, police officers, military personnel or lawyers. As Jameton (2013) has underlined, MD *is* not something that only nurses encounter in their work. For this reason, a measure that captures the phenomenon of MD itself is necessary to study its causes and consequences and to develop interventions to prevent its negative outcomes.

Previous studies have found that MD is closely linked to burnout, which is another common phenomenon among social and healthcare workers. Therefore, we investigated the discriminant validity of the MDI in relation to burnout and studied how the dimensions of MD associate with the dimensions of burnout. Although we found that MD and burnout were strongly associated with each other, their measures were shown to tap separate constructs. Further, we found that the MD dimensions explained almost half of the variance in exhaustion, and a third of the variance in cynicism and inadequacy. Because of the cross-sectional setting of this study, we were not able to make causal inferences (whether MD causes burnout or vice versa). However, there seems to be a strong association between them, and it is plausible that experiences of MD contribute to burnout (Dzeng and Wachter 2020). These associations should be studied further with appropriate longitudinal designs and by simultaneously using other burnout indicators (e.g. MBI).

The well-being of human service professionals is intimately related to the success of the treatments they provide and the wellbeing of the people whom they serve (Brend and Sprang 2020; Matte-Landry and Collin-Vézina 2020; Middleton and Potter 2015; Rivard et al. 2005). It is clear that the systems within which these professionals operate and the work that they perform puts them at increased risk of numerous potentially devastating harms (Lentz et al. 2021; Molnar et al. 2017; Tosone 2011). MD is one such harm (Austin, Saylor, and Finley 2017; Brend 2020; Mänttäri-van der Kuip 2016; Shoorideh et al. 2015). Previous efforts to describe, measure, and mitigate MD have provided a rich variety of concepts that have been based on broad research evidence. The potential for moral agency to be restricted in social work practice has been understudied. We

developed the MDI to enable future research to capture and understand common moral challenges within the field of social work, establish prevalence rates, and begin the challenging work of isolating the most morally harmful aspects of engaging in social work practice. We hope that our work will contribute ongoing efforts internationally by distilling the essential qualities of MD into a tool that diverse professionals and researchers can use to isolate and identify MD. In addition, we hope it can be applied to discover the reasons behind MD to find ways to prevent it and to support the moral agency of the workers in different fields.

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