Descriptive Study of Michigan Department of Corrections Staff Well-being: Contributing Factors, Outcomes, and Actionable Solutions

Final Report
Version date: 07/01/2019

Submitted by Desert Waters Correctional Outreach and Gallium Social Sciences
Drs. Caterina Spinaris and Nicole Brocato
The findings and conclusions in this document are those of the authors, who are responsible for the content, and do not necessarily represent the views of the Michigan Department of Corrections.

Disclaimer of Conflict of Interest
None of the investigators has any affiliations or financial involvement that conflicts with the material presented in this report.

Funding Statement
This project was funded under Purchase Order # 190000002121 from the Michigan Department of Corrections.
EXECUTIVE SUMMARY

This report describes a study of Michigan Department of Corrections (MDOC) employees’ well-being. The purpose of the study is to improve MDOC’s ability to support employee well-being. Correctional employees’ wellness is pivotal to the fulfillment of correctional agencies’ mission as it is inextricably linked to the safety and quality of operations and to the effective delivery of services in correctional facilities and in the community.

Given the importance of correctional employees’ wellness, in recent years there has been a notable increase in research on the toll of the job on correctional employees, and in particular on Correctional Officers (COs). This increase parallels administrators’ and other stakeholders’ concerns about the health and functioning of correctional employees, and especially COs, in relation to occupational stressors.

To address these concerns, the Michigan Department of Corrections (MDOC) has embarked on the courageous and ambitious project of examining aspects of MDOC employees’ well-being as a means of identifying possible employee wellness supports and improvements. As a trailblazer in this area, MDOC continues on its path to staff wellness as envisaged in its latest strategic plan to invest in employees by establishing a wellness unit to address employee well-being (Strategic Plan 2019-2022).

The core research questions for this study were:
1. What are MDOC employees’ current well-being levels?
2. What contributing factors might be facilitating or impairing MDOC employees’ well-being?
3. What impacts might employee well-being have on MDOC fiscal considerations?

To answer these questions, this study emphasizes Outcomes and includes a limited set of Contributing Factors. A focus on Outcomes will help MDOC identify areas of well-being that are currently most in need of support. The limited set of Contributing Factors will help MDOC identify some potential programming points and provide direction for future studies to explore more Contributing Factors. The Outcomes for this study encompass the employee well-being indicators of Physical Health (diagnoses received since starting to work in corrections), Mental Health (Generalized Anxiety Disorder, Major Depressive Disorder, Post-traumatic Stress Disorder, suicidal thinking and behaviors, and alcohol abuse), Family Health (family relationship strain and unhealthy family behaviors), Work Health (demoralization, exhaustion, and job dissatisfaction), and Social Health (staff relationships with direct supervisors, coworkers and offenders), as well as Fiscal Impacts (sick leave, FMLA use, and Worker Compensation claim rates).

Contributing Factors included: amount of voluntary overtime worked, amount of mandatory overtime worked, occupational traumatic exposure, length of time worked in corrections, job role, and facility security level.

The study used two primary modes of data collection: (1) an anonymous online survey of all MDOC staff, and (2) anonymous records from MDOC. So that we could better evaluate the effects of the Contributing Factors, we examined the study data across the following eight working groups:
1. Women’s facility, custody staff
2. Women’s facility, non-custody staff
3. All other facilities, custody staff
4. All other facilities, non-custody staff
5. Field Operations Administration, parole and probation agents and Absconder Recovery Unit investigators
6. Field Operations Administration, all other staff
7. Headquarters, managers/supervisors
8. Headquarters, support staff (all other staff)

The final data set used for analysis was 3,502 participants, a response rate of 29%.
Results are presented in two formats: (1) a path model that describes the empirically supported relationships among variables studied, and (2) the estimated prevalence rates for the disorders studied. The path model in Figure ES1 includes variable associations that were statistically significant at the .05 probability level and had standardized path coefficients of at least .2.

![Figure ES1. Final path model of the variables studied and their relationships](image)

As this path model indicates, traumatic exposure on the job has a modest effect on Work Health (demoralization, exhaustion, and job dissatisfaction): as traumatic exposure increases, Work Health worsens. Being a custody employee has a modest negative effect on Social Health (staff relationships with direct supervisors, coworkers and offenders) and Work Health, with custody staff reporting poorer professional relationships on the job and more demoralization, exhaustion, and job dissatisfaction. Social Health has a strong effect on Work Health: as Social Health deteriorates, so does Work Health. Work Health has very strong effects on Mental Health and Family Health, and it has a strong effect on Physical Health: as Work Health deteriorates, so do Mental Health, Physical Health, and Family Health. Conversely, as Work Health improves, Mental Health, Family Health, and Physical Health also improve. Mental Health has modest effects on Physical Health and Family Health: as Mental Health deteriorates, Family Health, and Physical Health also deteriorate.

The path model showed that the most impactful Outcome variable is Work Health (the presence or absence of demoralization, exhaustion, and job dissatisfaction). Its effects are far larger than any other variable. Work health affects Mental Health, Family Health, and Physical Health. The effects of Work Health are notably larger than the effects of exposure to traumatic events or working in a custody role, which means that the overall quality of the working environment has a greater impact on mental, physical health and family health than exposure to danger or trauma. Just as important is the finding that as Social Health (quality of relationships with supervisors, coworkers and offenders) improves, Work Health improves; and in turn Mental Health, Family Health, and Physical Health improve. In other words, the health of the workplace culture (Social Health and Work Health) is of paramount importance when considering improvements to correctional employees’ well-being.

These types of work-related effects (e.g., no input into decision-making or inadequate employment benefits), are recognized in the field as posing greater risk to mental health than physical dangers (Ferdik & Smith, 2017).
Work Health and Social Health are factors that can be remedied through policies, improved working conditions, resources, evidence-based staff trainings, and systemic programming. Given the strong association between Social Health and Work Health, improving social relationships at work could be a powerful intervention point for improving work health and, therefore, mental, physical, and family health.

Using valid screening instruments, disorder rates for Major Depressive Disorder, Generalized Anxiety, PTSD, suicidal ideation, and alcohol abuse among MDOC employees, especially custody employees, were found to exceed those of first responders, the military, and national data (general public) by several times. These findings are in line with a prior study of MDOC custody employees’ wellness (Michigan Corrections Organization, 2016).

Please note that clinical scoring criteria of screening instruments are not sufficient to provide a formal diagnosis of any disorders screened for in this study. These clinical scoring guidelines can only determine whether people have a certain number of symptoms that are consistent with that disorder. A formal diagnosis requires several other activities that can only be completed by a licensed behavioral or medical health professional, including obtaining a full health history and ruling out other conditions that might explain some or all of the symptoms. Because the clinical scoring in this report is not diagnostic, we urge that interpretations and reports of these study results do not make claims that people have conditions unless they were self-reported in HEALTH1.

In addition to calculating disorder rates based on the survey sample, we calculated weighted statistics to estimate possible disorder rates in the entire MDOC population. Weighted statistics correct for survey non-response bias based on known sources of non-response. We weighted using MDOC-provided demographics for race (simplified into two categories of White and non-White), gender, and numbers of people in each of the 8 Work Groups evaluated in this study.

Using weighted survey statistics, approximately 1 in 6 of all MDOC employees are estimated to meet criteria for Major Depressive Disorder on a valid screening instrument. Examining depression rates by Working Group, about 1 in 4 of custody employees working at male facilities, and about 1 in 8 support staff in headquarters (i.e., not managers), meet criteria for Major Depressive Disorder.

Using weighted survey statistics, approximately 1 in 2 of all MDOC employees are estimated to score in the range of medium to high Generalized Anxiety on a valid screening instrument. This rate is 16 times the national average, and nearly 10 times the rates for military (all personnel, not just active combat).

Using weighted survey statistics, nearly 1 in 4 of all MDOC employees are estimated to meet criteria for PTSD on a valid screening instrument, with almost 1 in 2 (41%) of custody staff working at male facilities meeting criteria for PTSD. Every Working Group in MDOC was estimated to have PTSD rates higher than those of first responders (which are estimated to be 10%). The rates of PTSD at MDOC are nearly 7 times higher than the national average in the general population.

Using weighted survey statistics, nearly 1 in 5 of all MDOC employees are estimated to meet criteria for alcohol abuse on a valid screening instrument, with 1 in 4 of custody staff working at male facilities and about 1 in 6 managers/supervisors in headquarters met criteria for alcohol abuse. The national rate of alcohol abuse in the general population is estimated to be 7%, making MDOC’s overall rate 2.7 times higher than the national average. It is also 2 times higher than the estimated rate among first responders (9%).

Weighted survey estimates indicate that approximately 9% (about 1 in 11) of all MDOC employees reported scores indicative of suicidal ideation on a valid screening instrument, and a need for immediate mental health supports. And of greater concern is that a total of 34 (1%) survey respondents reported they are currently and actively planning to complete suicide. Using weighted survey statistics, we estimate that approximately 1.1% (n = 139) of all MDOC employees are currently and...
actively planning to complete suicide. There have been three known completed suicides of MDOC staff in 2019 to date; all three were male COs working in male facilities (Working Group 3).

As is demonstrated in Figure ES2, the pattern that emerges across all these results indicates that Mental Health Outcomes are clearly worse among custody staff, which includes Working Groups 1 (women’s facility, custody staff) and 3 (all other facilities, custody staff).

Figure ES2. Clinical Disorder Rates by MDOC Work Group

These findings are a cause for grave concern, as they point to a mental health crisis among MDOC employees and a workforce culture in dire need of assistance and support. Similar results have been obtained from correctional agencies in other states and other jurisdictions, which means that MDOC is not the only agency facing these challenges.

Published research strongly indicates that the most effective path forward is through evidence-informed interventions coupled with participatory methods that continually incorporate employee feedback.

The results in this study indicate that a promising first direction is to apply those evidence-informed programs and participatory methods to improving MDOC employees’ Social Health and Work Health. These areas are highly amenable to change through multiple strategies, although change may take some time. Research-supported programming strategies include: the provision of specialized staff trainings and programs; implementation of policies and resources that impact the workforce culture; and the maintenance of long-term, system-wide efforts. An additional benefit to addressing Social Health and Work Health is that they form a strong foundation for effective delivery of programs such as Peer Support and Employee Assistance Programs.

MDOC has undertaken the brave and honorable task of supporting employee wellness, becoming a leader in the field. MDOC’s Strategic Plan emphasizes employee wellness, providing MDOC with one of two components of the necessary infrastructure to implement the research-informed programs that will help them improve their employee’s well-being. The other key component is ongoing participatory engagement from employees. Ongoing participatory engagement from employees is an invaluable source of data to help MDOC ensure that employees participate and benefit from the
programs. Participatory feedback can vastly reduce the amount of time, money, and other resources MDOC will need to create effective programming. We also encourage MDOC to develop a systematic and structured plan for creating and implementing its programs. A systematic and structured programming plan will ensure that the programs cover all the necessary topic areas, include support for all employees, and are tailored to unique populations’ needs (e.g., those of staff working in particular roles, demographics, etc.). Many resources exist to help with that work, including DWCO, a range of public health programming sites (e.g., HealthyPeople.gov, CDC.gov, NationalService.gov, wkkf.org/resource-directory, re-aim.org), as well as collaboration and consultation with other agencies.
CONTENTS

Executive Summary .................................................................................................................. 3

Introduction ............................................................................................................................... 12
  Overview ................................................................................................................................. 12
  Audience ................................................................................................................................. 12
  Use ......................................................................................................................................... 13

MDOC Background .................................................................................................................... 13

Prior Studies ............................................................................................................................. 13

Study Background .................................................................................................................... 14

Study Questions ....................................................................................................................... 14

Purpose .................................................................................................................................... 14

Indicators .................................................................................................................................. 15
  Well-being Outcomes ............................................................................................................. 15
  Michigan DOC Fiscal Impacts Outcome .................................................................................. 15
  Contributing Factors .............................................................................................................. 15
  Working Groups ..................................................................................................................... 16

Scope ....................................................................................................................................... 16

Stakeholder Engagement .......................................................................................................... 16

Cultural Responsiveness ........................................................................................................... 16

Budget ..................................................................................................................................... 17

Study Team ............................................................................................................................... 17
  Potential conflicts of interest .................................................................................................. 17

Study Design ............................................................................................................................ 17

Conceptual Framework ............................................................................................................. 17
  Corrections Fatigue .................................................................................................................. 18

Data Sources ........................................................................................................................... 20
  Survey of employees .............................................................................................................. 21
  MDOC records ....................................................................................................................... 21

Data Collection Methods ........................................................................................................ 22
  Survey administration methods ............................................................................................. 22
  Timeline ................................................................................................................................. 22
  Data management .................................................................................................................... 22

Data Analysis ............................................................................................................................ 22

Data Analytic Challenges .......................................................................................................... 23

Between-Groups Method ......................................................................................................... 23
Appendix A: MDOC survey instrument

Appendix B: Dimension reduction methods

Scoring of the scales that were intended by their authors to be scored
Creation of the Outcome scores for entry in the path model

Appendix C: Path modeling methods

Appendix D: Data conditioning & missingness rates

Data conditioning
Missing data rates

Appendix E: Survey comments

Mental health
Depression
Generalized Anxiety Disorder
Post-traumatic Stress Disorder and traumatic exposure
Alcohol Abuse
Suicide
Physical health
Work health
Family health
Social health
List of Figures
ES1. Final path model of the variable studied and their relationships ........................................... 4
ES2. Clinical disorder rates by MDOC work group ........................................................................... 6
1. Continuing path for staff wellness by Michigan Department of Corrections .............................. 12
2. Summary of 2016 MCO Wellness Study findings ......................................................................... 14
3. Associations between Contributing Factors and Outcomes ....................................................... 15
4. The Corrections Fatigue process model ......................................................................................... 19
5. Benefits of path models .................................................................................................................. 23
6. Initial path model .......................................................................................................................... 25
7. Final path model ........................................................................................................................... 27
8. Major Depressive Disorder rates by MDOC work group .............................................................. 30
9. Generalized Anxiety rates by MDOC work group ....................................................................... 32
10. PTSD rates by MDOC work group .............................................................................................. 34
11. Alcohol Abuse rates by MDOC work group ............................................................................... 35
12. Suicidal Ideation rates by MDOC work group ........................................................................... 36
13. Suicide rates by MDOC work group .......................................................................................... 37
14. Clinical disorder rates by MDOC work group .......................................................................... 39
15. Simplified socio-ecological model of large-scale programming .............................................. 43
16. Sample program-mapping template ......................................................................................... 47

List of Tables
1. Summary of measures and data sources ..................................................................................... 21
2. Weighted comorbidity estimates for all MDOC staff ................................................................. 38

List of Acronyms
DWCO: Desert Waters Correctional Outreach
MCO: Michigan Corrections Organization
MDOC: Michigan Department of Corrections
INTRODUCTION

Overview

The well-being of correctional professionals is a national concern, given the instrumental role these professionals have in the criminal justice system (Ferdik & Smith, 2017). The Michigan Department of Corrections’ (MDOC) understands this role and continues its path to staff wellness in its latest strategic plan defining the first goal to invest in employees by establishing a wellness unit to address employee well-being (Strategic Plan 2019-2022) (see Figure 1 for an overview of the wellness path). This goal, among others aimed at supporting employees, builds on the prior inaugural Strategic Plan covering 2014-2018 that included hiring, training, equipping, supporting, and mentoring high quality staff who are held to the highest professional standards (Strategic Plan, 2014-2018). Having high quality staff able to perform at the highest professional level necessitates them being well. This report expands on a 2016 study of Michigan Corrections Organization (MCO) members’ health and functioning in relation to occupational stressors by performing a study inclusive of all correctional employees working for MDOC. This study focuses on the effects of working in the correctional setting and the impact on staff’s health and functioning.

Figure 1. Continuing Path for Staff Wellness by Michigan Department of Corrections

The interrelationships between workplace health, employee well-being, and important workplace outcomes such as employee retention and productivity are well-documented. Efforts to support employee well-being are most effective when they are tailored to specific work settings and when they account for employees’ baseline well-being. To that end, this study assesses current employee well-being levels using replicable methods, as well as estimations of fiscal impacts.

Desert Waters Correctional Outreach (DWCO) led the design and creation of this report with input from Michigan Department of Corrections (MDOC) regarding the study’s primary goals, capacities, and time frame. Technical support for survey methodology and data analysis was provided by Gallium Social Sciences (GSS).

Audience

The primary audience for this report includes: MDOC, the Governor’s office, the Michigan Senate and House of Representatives, and corrections employee unions (Michigan Corrections Organization and AFCSME). The secondary audience is well-being program leaders and coordinators, and MDOC employees. Both the Effective Process Improvement and Communication (EPIC) teams and Field Days podcast may benefit from information in this report.
Use

In 2018, the Michigan Department of Corrections (MDOC) sought to expand upon a 2016 study conducted by DWCO. The 2016 study examined aspects of health and functioning of Michigan Corrections Organization (MCO) members (corrections officers and forensic security assistants) in relation to occupational stressors. For this present study, MDOC requested that correctional MDOC employees of all job roles, positions and ranks be included in a survey, not just custody staff.

The focus of the MDOC study is the effects of aspects of corrections work on correctional staff’s health and functioning, and related fiscal impacts. MDOC specifically requested that the study inquire about Post-Traumatic Stress Disorder (PTSD), depression, substance abuse, suicidal ideation, home and work life stress, the quality of staff’s professional social relationships, and related fiscal impacts.

MDOC stated that the findings of the study will be used to: (a) educate all stakeholders about outcomes of concern regarding MDOC staff health and functioning, (b) help identify factors that contribute to these areas of concern, and (c) help make data-driven decisions about actionable steps to mitigate the effects of occupational stressors on staff’s health and functioning, and to guide the development of staff well-being programs.

MDOC BACKGROUND

The MDOC, founded in 1953, employs 12,281 staff (according to anonymous records MDOC provided during this study). The total population managed by MDOC is comprised of a prison population under 39,000—the lowest rate since 1993, with the lowest recidivism rate in state history (28.1%) (Strategic Progress Report, 2019). MDOC’s Correctional Facilities Administration oversees 30 prison facilities. The supervision of the parole and probation population in the state of Michigan is conducted by the Field Operations Administration in 131 offices. This population is composed of 12,520 parolees and 43,483 probationers, for a total of 56,002 probationers/parolees (2017).

PRIOR STUDIES

In 2016, Desert Waters Correctional Outreach and Michael D. Denhof LLC (Consultant) conducted a research study of Michigan Corrections Organization (MCO) members’ health and functioning in relation to occupational stressors. The purpose of the study was to provide estimates of prevalence of Post-traumatic Stress Disorder (PTSD), Depression, and Suicide Risk in MCO members, and the magnitude of MCO members’ occupational exposure to potentially traumatic incidents. The relationship between magnitude of exposure to work-related events involving violence, injury and death, and several health conditions was examined. Differences in rates based on Security Level, Gender, Military status, and Years Corrections Experience were also explored.

PTSD and Depression rates were found to be substantially elevated relative to rates typical in the general population and for other public safety professions, and 4.6% of the respondents scored in the High Suicide Risk range (see Figure 2). Statistically significant relationships were found between level of work-related exposure to violence, injury, and death events and mental health condition scores. Security Level and Years of Corrections Experience were found to moderate health condition rates significantly, with more years of corrections experience and higher security levels being associated with higher mental health condition rates. Pre-corrections Military Experience and Gender showed little to no effect upon mental health condition rates. These findings reinforce a growing perspective among researchers that COs suffer health detriments due to high stress and potentially traumatic occupational experiences comparable to those more widely known to occur for police officers, firefighters, and combat military personnel.
These findings indicate that there are substantial behavioral health concerns among MDOC custody employees, specifically in the areas of PTSD, clinical depression, and suicide risk. It would be important to examine to what degree non-custody employees in prison facilities and in the community (probation and parole) may also be affected by their employment in corrections, and in what ways. It would also be important to determine if the findings about the estimated prevalence of PTSD and clinical depression can be replicated among MDOC custody staff.

**STUDY BACKGROUND**

**Study Questions**

The core research questions for this study were:

1. What are MDOC employees’ current well-being levels?
2. What contributing factors might be facilitating or impairing well-being?
3. What impacts might employee well-being have on MDOC fiscal considerations?

**Purpose**

The purpose of this study is to provide MDOC with actionable information to support employee well-being and achieve its vision and overall mission. We examined both Outcomes (well-being indicators) and Contributing Factors (skills, resources, and conditions that may either support or detract from employee well-being).

Figure 3 depicts the relationship between Outcomes and Contributing factors. This study emphasizes Outcomes to identify areas of well-being that are currently most in need of support: physical health, mental health, family health, work health, and social relationships, as well as several fiscal impacts associated with employee well-being.
The Contributing Factors offer the benefit of providing detailed information about potential intervention points without unnecessarily complicating the research. The included Contributing Factors in this study are amount of voluntary overtime worked, amount of mandatory overtime worked, traumatic exposure, length of time worked in corrections, job role, and facility security level.

Figure 3. Associations between Contributing Factors and Outcomes

**Indicators**

**Well-being Outcomes**
The well-being Outcomes measured for this study were:

1. **Mental health**: Symptoms of clinical depression, Generalized Anxiety, Post-traumatic Stress Disorder (PTSD), alcohol abuse, and suicidality; also includes life satisfaction
2. **Physical health**: Diagnoses acquired since starting work in a correctional setting
3. **Work health**: Work dissatisfaction, demoralization, and exhaustion rates
4. **Family health**: Family strain and unhealthy family behaviors.
5. **Social health**: A focus on social relationships at work, including with direct supervisors, coworkers, and offenders

**Michigan DOC Fiscal Impacts Outcome**
Poor employee well-being can have dramatic fiscal effects on organizations. We examined a limited set of fiscal impacts for which MDOC provided anonymous, aggregated data:

1. **Fiscal impacts**: Projected fiscal impacts to MDOC in sick leave use, FMLA, and Worker’s Compensation claims.

**Contributing Factors**
Contributing Factors that are work-related can be influenced and accounted for in programming by MDOC are the focus of this study. The list of Contributing Factors for this study is:

1. Amount of voluntary overtime worked (for prison staff)
2. Amount of mandatory overtime worked (for prison staff)
3. Traumatic exposure
4. Length of time worked in corrections
5. Working Group (described in next section)
6. Facility security level (for prison staff)
Working Groups
To provide more detailed analyses and better understand employees’ support needs, we used employees’ Working Group as their job role. These Working Groups were identified in conjunction with MDOC, and they are designed to capture groups of employees with similar roles who may face similar Contributing Factors. The Working Groups used in this study were:
1. Women’s facility, custody staff
2. Women’s facility, non-custody staff
3. All other facilities, custody staff
4. All other facilities, non-custody staff
5. Field Operations Administration, parole and probation agents and Absconder Recovery Unit investigators
6. Field Operations Administration, all other staff
7. Headquarters, managers/supervisors
8. Headquarters, support staff (all other staff)

Scope
The study examined the well-being of all current MDOC employees. Data were gathered between December 2018 and January 2019.

Stakeholder Engagement
The following MDOC staff were involved in the study’s planning: Joanne M. Bridgford, J.D., EEO Administrator, MDGS/MDOC, Cheryl Groves, Manager, EPIC Section, Office of Executive Affairs, and Lisa Lehnert, Buyer, Michigan Department of Corrections. These three individuals: explained to the researchers the goals for the study; described working conditions of concern (e.g., the use of mandatory overtime); described the work groups that MDOC wanted to be contrasted in the study; requested that the data of staff working at the Women’s prison be analyzed separately and why; discussed ways to promote the survey in order to maximize staff participation; and described and explained the nature of a number of possible fiscal impacts related to health conditions. Additionally, the following MCO staff were involved: Andy Potter, Executive Director, and Anita Lloyd, Communications Director. These two individuals assisted with the promotion of the survey among MCO members by sending out emails to them and posting information about the survey on social media.

Cultural Responsiveness
Cultural responsiveness efforts focused on ensuring that survey questions were relevant to all positions within MDOC, were suitable for female and male respondents, and captured a robust set of demographics. However, survey questions about overtime work (mandatory or voluntary) applied only to custody staff (working groups 1 and 3), and questions about security level of the facility where staff work applied only to facility staff (custody and non-custody, working groups 1, 2, 3 and 4). To ensure that survey questions were relevant to all positions within corrections, DWCO gathered feedback between August and October 2018 from 42 current and former corrections professionals residing in states other than Michigan with expertise in the experiences of staff in multiple career roles.

Another potentially influential aspect of cultural responsivity is attitude bias within corrections employees, public misperceptions, and political scrutiny. Corrections employees may overly identify with an attitude that views requests or receipt of assistance as a sign of weakness (Ferdik & Smith, 2017). Relatedly, the public, through stereotypical depictions of COs in media outlets as physically or sexually abusive towards the offenders they manage, or as corrupt--introducing forbidden items inside correctional facilities for personal gain--may carry negative views of COs, and not appreciate the value
and demands of correctional work. Public officials, also responsible to the broader public, may face additional challenges or pressures in pursuing policy support. Promoting awareness that this type of attitude bias likely exists is a first step toward creating transparency and overcoming any impacts on future study efforts.

Budget
The complete budget for this study was $50,000.

Study Team
Dr. Caterina Spinaris of Desert Waters Correctional Outreach (DWCO) led the design and creation of this report. Dr. Spinaris has approximately 35 years of clinical and research experience focused on trauma. The most recent 20 of those years have focused on corrections settings, including treating corrections staff and their significant others for psychological trauma and other occupational stressors; offering trainings nationwide to thousands of corrections staff; and having discussions with hundreds of staff and some family members on occupational stressors and wellness issues.

Technical support was provided by Gallium Social Sciences (GSS). Dr. Nicole Brocato provided methodological expertise in the survey and data analytic methods used. Michael E. DeWitt, Jr., provided data analytic assistance. Dr. Lacy Fabian assisted with the integration and documentation of findings.

Potential conflicts of interest
None of the team members has any affiliations or financial involvement that conflicts with the material presented in this report.

STUDY DESIGN
Conceptual Framework
Correctional employees’ wellness is pivotal to the fulfillment of correctional agencies’ mission through the safe performance of operations and the effective delivery of services in correctional facilities and in the community.

Understandably, it is exceedingly difficult for correctional employees to continue performing well at work if they themselves were not well. Wellness deficits of correctional employees can be expected to decrease the safety of operations performed, and the quality of offender management and rehabilitation efforts. Support for this notion is found in studies which showed that higher physician burnout was associated with lower-quality healthcare and reduced patient safety (Salyers, Bonfils, Luther, et al., 2017).

Given the “mission critical” importance of correctional employees’ wellness, in recent years there has been a notable increase in research on the toll of the job on correctional employees, especially COs. This increase parallels administrators’ and other stakeholders’ concerns about the health and functioning of correctional employees in relation to occupational stressors.

These concerns were clearly articulated in a 2017 resolution of the American Correctional Association, the ACA Resolution Supporting Correctional Employee Wellness 2017-1 (ACA, American Correctional Association Resolution Book). ACA recognized that even though correctional employees may be exceptionally resilient and resourceful, correctional agencies must reckon with occupational stressors, as they constitute a formidable, enduring and multi-faceted foe. The ACA resolution states that the adverse impact of the job on correctional employees’ wellness is a critical issue which has reached crisis proportions, and that the unique inherent risks correctional employees are exposed to
result in increased health risks. It adds that the nature of the correctional environment can be a causative factor in high-risk behaviors, such as alcohol abuse, and that traumatic events in a correctional environment may result in employees experiencing health conditions, such as Post-traumatic Stress Disorder (PTSD).

A recent synthesis of the health and well-being of COs in the United States found that the profession has the third highest non-fatal and fatal injury rate behind police officers and security guards relative to the 115 professions surveyed (Ferdik & Smith, 2017). COs face work-related dangers (e.g., disruptive inmate behavior and inmates with infectious diseases), institution-related dangers (e.g., extended hours and understaffing), psychosocial-social dangers (e.g., work/family conflict and media/political/scrutiny), mental health risks (e.g., stress and burnout), and physical health risks (e.g., physical injuries and death). These dangers and risks differently impact the well-being and health of corrections employees, as well as their professional performance. The consequences, among others, include increased stress levels; decreased professional performance; increased use of sick leave, turnover and absenteeism; poor physical health; and high-risk, self-destructive behaviors, like substance misuse and suicide. Although the link between the impact of perceptions of the dangers and risks on well-being and health is less researched in corrections employees, these dangers and risks likely impact corrections employee's perception of their workplace well-being and safety. In other fields there is a significant impact of perception on professional performance, including resignation, that suggests that even efforts to affect employee perception (like painting murals on prison walls) can have beneficial impacts (Ferdik & Smith, 2017).

Corrections Fatigue

Correctional occupational stressors can be conceptualized as falling in three major categories—operational, organizational, and traumatic stressors. These stressors occur repeatedly, and at times simultaneously, throughout correctional employees' careers. In the year 2000 Dr. Spinaris coined the term Corrections Fatigue to connote the cumulative negative changes over time of correctional staff's personality, health and functioning, and of the correctional workplace culture. Corrections Fatigue is expected to occur when coping strategies of individual employees or correctional organizations are unhealthy or insufficient, and/or when available resources are insufficient, unhealthy or underutilized. Figure 4 describes the components and process of Corrections Fatigue.
Operational stressors refer to technical aspects of 24/7 operations, including offender overcrowding; understaffing; shift work; mandatory overtime; equipment issues; noise; unclean space; temperature extremes; high work load; low job autonomy; and low job variety.

Organizational stressors refer to psychosocial aspects of correctional work—managing people, be it staff or offenders, and interacting with offenders’ families and victims. Organizational stressors include supervisor-subordinate conflict; staff-offender conflict; low quality teamwork; lack of input into policy making; perception of unfair disciplinary, evaluation, investigation, or promotion practices; perception of insufficient support by supervisors or administrators; perception of harassment; negative public image; interactions with the judicial system; and unclear or changing organizational goals and policies.

Traumatic stressors refer to incidents of physical or sexual violence, injury, death, or threats of such. Traumatic exposure is either direct or indirect. Direct traumatic exposure involves having such events happen to oneself (such as being assaulted or threatened), or witnessing, in real time, the occurrence of such events happening to others. Indirect traumatic exposure involves learning about such events at a later time—such as by reading about them, viewing them electronically, or being told about them. Both direct and indirect traumatic exposure are endemic in correctional work. It is important to note that the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, recognizes that indirect traumatic exposure that is work-related, including electronically or though pictures, can result in the development of Post-traumatic Stress Disorder (PTSD).

Moreover, these three types of stressors at times interact. For example, the probability of a violent incident increases due to short staffing (operational stressor). Such an incident (traumatic stressor) is followed by investigations, perhaps staff discipline, conflict among staff, and increased tension between staff and offenders (organizational stressors). These outcomes may lead to further short-staffing and mandatory overtime (operational stressor) due to staff taking “mental health days” or sick days to recover from injuries. They may also lead to increased risk of another violent incident occurring (traumatic stressor).
The term Corrections Fatigue seems more suitable for capturing the entire spectrum of occupational challenges of correctional employees compared to the construct of burnout, because burnout addresses effects of operational and organizational stressors, but not traumatic stressors. And because it is difficult to parcel out outcomes of these three types of correctional work stressors, Corrections Fatigue is conceptualized as an all-encompassing, “umbrella” term that captures the cumulative and interacting negative effects of operational, organizational and traumatic stressors on individual staff, and also collectively on the correctional workforce culture.

Although Corrections Fatigue is not a clinical term, the more severe ends of the continuum of Corrections Fatigue signs may involve physical and psychological health conditions. Corrections Fatigue can result in three major areas of change:

1. **Personality changes**, such as becoming highly irritable, impatient, prone to unprovoked anger outbursts, aggressive, mistrusting, emotionally numb, or exhibiting negative mood.

2. **Decline in health and functioning**, as exemplified by overweight or obesity, high blood pressure, sleep disturbances, anxiety, depression, PTSD, abuse of alcohol and other substances, difficulty enjoying leisure time, feeling emotionally distant from others, neglecting one’s significant relationships or one’s dependents, neglecting one’s personal responsibilities, and not performing well at work.

3. **Development of dysfunctional core beliefs and behaviors**, such as harboring negative views about the world, others or oneself, blaming others or oneself for event outcomes to an extreme or irrational degree, dehumanizing those different from oneself or from a group a person closely identifies with, denying the effects of traumatic exposure, believing that seeking help is a sign of weakness, and engaging in high-risk behaviors.

Such changes erode staff’s self-care practices and social support systems, thus leading to possible loss of health and of key relationships, which in turn elevate the possibility of further maladaptive coping.

When a sufficiently large number of employees at a correctional facility or office are experiencing these negative changes, the health of the organizational culture begins to suffer. As staff who exhibit Corrections Fatigue signs interact with others in the workplace, they “infect” one another. Like a contagious virus, these attitudes spread among employees, eventually possibly “contaminating” the entire workforce culture. The impact on the culture is studied in this current research project under Social Health and Work Health.

Brief summaries of research findings supportive of the concept of Corrections Fatigue are presented in the Mental Health section of the Study Findings later in this report.

**Data Sources**

The study gathered data from (a) a survey of MDOC employees, and (b) a limited request for MDOC records pertaining to Fiscal Impacts and a small set of Employee Well-being indicators. Table 1 provides a summary of the data sources used to evaluate the topics included in this study.
Table 1. Summary of measures and data sources

<table>
<thead>
<tr>
<th>DATA SOURCE</th>
<th>Employee self-report survey</th>
<th>MDOC records</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demographics (age, gender, etc.)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Outcomes: Employee well-being</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental health</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Suicide rates</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Physical health</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Work health</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Family health</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Social health</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Outcomes: Fiscal impacts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sick leave use</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>FMLA use</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Worker’s compensation claim rates</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Contributing Factors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traumatic exposure</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Voluntary overtime hours</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Mandatory overtime hours</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Length of corrections career</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Job role, offender population, &amp; facility security level</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Survey of employees

Detailed information about the measure used in the employee survey is available in Appendix A. The employee survey is the primary source of data for this study. Most of the measure content was developed by DWCO prior to this study. Drawing on extant research literature and Dr. Spinaris’s extensive experience, the measure was designed to evaluate corrections professionals’ mental, physical, work, and psychosocial health. The measure was also designed to evaluate factors that contribute to corrections professionals’ well-being in those dimensions.

The measure was refined based on feedback gathered between August and October 2018 from 42 current and former corrections professionals who reside in states other than Michigan with expertise in the experiences of staff in multiple career roles. Those professionals provided feedback about the clarity of the items, their relevance to professionals in all corrections roles, and the potential utility of the items.

MDOC records

Because of the limited timeframe available for this study, we requested from MDOC a limited set of records:

1. Outcomes: Employee mental health
   a. Suicide rates for the past three years, per year, recognizing that these rates may be estimates
2. Outcomes: Fiscal impacts for the past fiscal year
a. FMLA use
b. Voluntary overtime hours
c. Mandatory overtime hours

Records provided by MDOC were cleaned, conditioned, and marked with employees’ position as agreed upon with DWCO. All records provided by MDOC were anonymous.

Data Collection Methods

Survey administration methods
The employee survey was administered using an online survey platform for completion in a single sitting (SurveyGizmo). Because corrections employees often have strong concerns about data security, the survey platform did not collect any identifying information about respondents such as email address or IP address, ensuring that the data gathered were completely anonymous.

In prior similar studies, we have found that participation rates are improved if employees are able to complete the survey at work. Employees were provided with at least 45 minutes at work to complete the survey, which included time for employees to leave their post, travel to a computer, complete the survey, and return to work. Employees were able to re-start the survey, but only from the beginning, if they were unable to complete it in one sitting. The completely anonymous data collection method meant that respondents could not stop the survey and later continue from that same stopping point. Because some employees can be more confident in data security if they can complete the survey at home, participants were also allowed to complete the study at home.

To minimize missing data due to attrition (i.e., people quitting the survey before they were finished), we randomized the central portions of the survey sections. The survey sections that were not the demographics or the final, open-ended comment item were divided into blocks of similar items. Those blocks were presented to respondents in random order.

Survey participation was monitored weekly to ensure necessary participation and monitor the effectiveness of data collection procedures.

Survey opportunities were advertised by MDOC upper management at MDOC facilities and offices using email. MCO advertised the study to its members using email.

Timeline
The survey was available to employees between December 5, 2018, and January 12, 2019.

Data management
Because all data gathered in the survey or provided to us by MDOC were anonymous, minimum data security protocols were required to protect respondents’ data confidentiality. These data did not require the use of PHI-compliant security methods.

At the completion of the study, all data collected are the property of MDOC. DWCO destroyed all copies after this final report was submitted and approved. DWCO will not use copies of the data for unauthorized publication, presentation, analysis, or distribution.

Data Analysis
The data collection anonymity required for this study presented data analytic challenges. We first describe those challenges and then describe our data analytic methods. Additional data analysis details are provided in Appendix B, Appendix C, and Appendix D.
Data Analytic Challenges

The requirement of collecting completely anonymous data prevented us from tying individual respondents’ survey data to their MDOC records. We were therefore unable to conduct many of the analyses that would allow us to draw causal inferences, for instance, linking type or severity of negative work attitudes to documented sick leave use or disciplinary records.

These difficulties in identifying causal associations from disconnected, anonymous data sources were confounded by a necessary reliance on cross-sectional data (i.e., data gathered at only one time point and not repeatedly over an extended timeframe). With access to only cross-sectional data, we could only identify potentially contributing factors, and cannot guarantee that any factor is definitely, causally connected. Determining that a contributing factor has a definite, causal impact requires additional, long-term research. That research needs to collect and retain the identities of the study participants, which poses significant threats to data security and could drastically reduce employees’ participation.

Between-Groups Method

As an alternative to long-term research and the use of identified (i.e., non-anonymous) data, we aggregated data by Working Groups of respondents that are likely to differ in their Contributing Factors. This approach is essentially a process of “connecting” the data sources across small groups of employees instead of across individual employees. While this between-groups method is not as powerful or as accurate as using identified data that are linked across data sources, it does have the benefit of identifying potentially causal factors that MDOC can control, provide supports for, and then re-measure, all while maintaining complete data anonymity and maximum rates of employee participation. We used the eight Working Groups used to capture employees’ job roles.

Statistical modeling methods

The core of our statistical analyses was a path model of all the major variable associations. Path models link multiple variables to each other in a single model. These models have two strong benefits when multiple variables are being analyzed: parsimony and accuracy (see Figure 5).

Path models are parsimonious because they return one set of modeling results rather than returning a long list of associations between smaller sets of variables. As a result, path models are easier to interpret and provide a more comprehensive picture of many variables’ associations with each other. Second, because path models estimate many associations simultaneously, they are more statistically accurate. When multiple variables are related to each other, including only some of them in a model can artificially inflate the effects of included variables.

We performed dimension-reduction modeling prior to estimating the path model because we had a limited sample size. With a larger sample, we would have been able to combine scale scoring and path modeling into one
model (i.e., in a latent variable framework). The dimension-reduction modeling combines information from multiple items into a single score. We first performed dimension reduction on the scales that were intended by their authors to form scores. We then performed a second round of dimension reduction by combining those scores with additional items to form a single score for each outcome studied. Details of the dimension reduction procedures are provided in Appendix B.

Statistical software
All analyses were performed in R via the Rstudio. We used the following packages throughout all the analyses: tidyverse (Wickham, 2017), here (Müller, 2017), janitor (Firke, 2018), fs (Hester & Wickham, 2019), broom (Robinson & Hayes, 2018), readxl (Wickham & Bryan, 2018), and survey (Lumley, 2004, 2019). We cite packages used for specific analyses with those analyses.

Path model
Complete path modeling methods are described in Appendix C. We began with the model depicted in Figure 6.

Our estimation of this path model included all the direct effects as well as the several sets of indirect effects for Social Health. Direct effects are the paths between only one variable and only a second variable, for instance the path between Social Health and Mental Health. Indirect effects are the association between two variables that occur via other variables, for instance the indirect effects of Social Health on Mental Health via Work Health. We do not discuss the indirect effects further or provide results from them because they were small and/or better explained by direct effects.

After estimating this initial path model, we removed from the model (a) paths that were not statistically significant (i.e., had p values that were greater than .05) and (b) paths that had very small structural coefficients. The determination of “small structural coefficients” is subjective to some extent. Typically, paths need to have standardized structural (path) coefficients of at least .2 to be stable (i.e., not disappear in analyses conducted with a different sample). In models as complex as this, where the constructs are complicated and multiply determined, a standardized structural coefficient of .3 is considered robust. Standardized path coefficients larger than .4 are rare.
Figure 6. Initial path model

<table>
<thead>
<tr>
<th>Path model components</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal inputs</td>
<td>Highest security level worked, gender, age, race/ethnicity, years worked in corrections, MDOC-reported average salary for working group, self-reported total trauma exposure, overtime, whether respondents work in a custody role</td>
</tr>
<tr>
<td>Social Health</td>
<td>Sum of: means from scales for supervisor-staff relationships, staff-staff culture, and staff-offender culture. Positively valenced; higher scores = better Social Health</td>
</tr>
<tr>
<td>Work Health</td>
<td>Sum of: factor scores from 3 Work Morale scales: Dissatisfaction, Demoralization, and Exhaustion. Negatively valenced; higher scores = lower Work Health</td>
</tr>
<tr>
<td>Mental Health</td>
<td>Sum of: PCL-5 factor score, PHQ: Depression factor score, GAD-7 factor score, reverse-scored SWLS factor score, summed CSSR score, summed PHQ: Alcohol score. Negatively valenced; higher scores = lower Mental Health</td>
</tr>
<tr>
<td>Fiscal Impacts</td>
<td>Sum of: MDOC-reported average leave for respondent’s working group, self-reported sick leave, self-reported FMLA leave, and self-reported Worker’s Compensation leave</td>
</tr>
<tr>
<td>Physical Health</td>
<td>Sum of: self-reported health diagnoses for HEALTH1 item</td>
</tr>
<tr>
<td>Family Health</td>
<td>Sum of: factor scores for three Home Life subscales: Withdrawal, Unavailability, and Trauma. Negatively valenced; higher scores = lower Family Health</td>
</tr>
</tbody>
</table>
Descriptives
In the Study Findings section, we supplement reports on the path model results with descriptives about the path model components. Descriptives were calculated using a Bayesian hierarchical linear model in the brms package (Bürkner, 2017). We estimated the intercepts for the path components using the working groups as hierarchical component. We used this method to create descriptive statistics because Bayesian models tolerate missing data well (e.g., do not automatically delete cases with missing data) and because a hierarchical model allowed us to compare the variables across the 8 working groups.

We also calculated descriptives using weighted cross-tabs calculations. These cross-tabs calculations count how many survey respondents met certain clinical scoring criteria. Weighted versions of these cross-tabs allowed us to correct for survey non-response bias and estimate how many people in MDOC might meet those clinical scoring criteria. Weighting was based on MDOC-provided demographics for race (simplified into two categories of White and non-White), gender, and numbers of people in each of the 8 Work Groups evaluated in this study. Weighting cannot correct for all sources of non-response bias.

Qualitative descriptives
The survey included an option for respondents to provide comments about any topic of their choosing. A total of 952 (25%) survey respondents provided substantive comments beyond a thank you or greeting. The open-ended comment item was at the end of the survey, and so many survey respondents did not complete enough of the survey to reach that item. We provide sample comments throughout the Study Findings and include in Appendix E comments organized by the Outcomes discussed as part of study findings.

Data Conditioning & Sample Size
Several data conditioning methods were used in order to ensure that the survey responses were valid and appropriately representative of the each MDOC work group. Those methods are detailed in Appendix D. A total of 4,551 individual samples responses were captured. The data conditioning steps resulted in a final sample size of 3,502 units representing a 29% response rate out of the total possible sample size of 12,281 (per demographic information provided by MDOC).

Limitations
All studies have various limitations that affect the interpretation of the results. This study is affected by common limitations to similar survey studies such as a reliance on self-report from a limited pool of responders. Access to additional MDOC records to support findings with alternate data sources was also limited. Unique to this group of survey participants were comments suggesting concern for privacy despite assurances of anonymity. Respondents also perceived an inconsistent message that promotes efforts to “invest in staff” (as outlined in the latest MDOC Strategic Plan) and recent negatively viewed benefits changes. Ultimately, these types of limitations help us identify where and how we should exercise caution in interpreting these findings, and they also suggest opportunities for future studies.
STUDY FINDINGS

In this section of the report, we present the final path model, discuss the findings for each of the summary Outcome variables, and present additional descriptive statistics for the path model components.

Overall Path Model

The final path model is presented in Figure 7 with standardized structural coefficients. As described in the Statistical Modeling Methods section (and the associated Appendices), we edited the initial path model to retain only those paths that were statistically significant at the .05 level and had standardized path coefficients of at least .2. Because the sample size was large enough, path coefficients were sometimes statistically significant even if they were very small (e.g., some path coefficients were statistically significant but only had values of .06).

Figure 7. Final path model

In the final path model, we can see that not all the variables from the original model were retained. The Fiscal Impacts variable is no longer present, and many of the Universal Inputs were removed. In place of the Universal Inputs variable are two of its components: whether respondents worked in a custody role (i.e., in Working Groups 1 or 3), and the total number of traumatic events.
exposed to in the last month. We also see that several paths have been removed. There are no longer paths from the Universal Inputs to Mental Health or Family Health, and the path from Social Health to Mental Health has been removed.

The most striking feature of this model is that the most important Outcome variable is Work Health which taps into staff’s morale, job satisfaction and energy level in relation to work. Its effects are far larger than any other variable. The effects of Work Health are notably larger than the effects of exposure to traumatic events or working in a custody role, which means that the overall quality of the working environment has a greater impact on mental and physical health than exposure to danger or trauma. Work Health captures respondents’ feelings of job dissatisfaction, demoralization, and exhaustion at work. As Work Health deteriorates, Mental Health, Family Health, and Physical Health deteriorate. As Social Health improves (that is, as the quality of interactions with supervisors, coworkers and offenders improve), Work Health improves; and then in turn Mental Health, Family Health, and Physical Health improve. The results of this path model are consistent with published research: this type of organizational-related effect (e.g., lack of input into decision-making or inadequate employment benefits), is recognized in the field as posing greater risk to mental health than physical risks (e.g., injuries or even death; Ferdik & Smith, 2017).

Work Health and Social Health are factors that can be remedied through improved working conditions, resources, and evidence-based staff training that aims to improve staff well-being and the health of the workforce culture. While evidence-based wellness programs designed for corrections staff are limited, the prevalence of employee assistance programs is increasing (Ferdik & Smith, 2017). Given the strong association between Social Health and Work Health, improving social relationships at work with supervisors, coworkers, and offenders could be a powerful intervention point for improving work health and, therefore, mental, physical, and family health. Comments made by some survey participants at the end of the survey described highly stressful interactions with supervisors and coworkers. Comments also referenced the need for balance between work and home life, with lack of such balance contributing to work-home conflict due to the toll of the job “including shift work, dual roles at work and at home, chronic fatigue, cynicism, pessimism, sarcasm, flattened drama/stress response and exposure to trauma and other disturbing behaviors” (Brower, 2013). The recent efforts underway at MDOC through the EPIC teams and widespread rollout of Motivational Interviewing in dealing with offenders may be one approach to facilitate this type of improvement in social relationships at work.

In the sections that follow, we detail findings for each of the variables in the model across the eight working groups of:

1. Women’s facility, custody staff
2. Women’s facility, non-custody staff
3. All other facilities, custody staff
4. All other facilities, non-custody staff
5. Field Operations Administration, parole and probation agents and Absconder Recovery Unit investigators
6. Field Operations Administration, all other staff
7. Headquarters, managers/supervisors
8. Headquarters, support staff (all other staff)
Mental Health

As we see in the path model in Figure 7 above, the only variable with effects on Mental Health is Work Health. The association between Mental Health and Work Health is one of the largest in the path model, and it demonstrates that as Work Health deteriorates, Mental Health deteriorates. **The association between Work Health and Mental Health is the second-largest in the model.**

In the remaining sections of this segment, we provide descriptive information about each of the variables that comprised Mental Health: depression, generalized anxiety, post-traumatic stress disorder (PTSD), suicidal ideation and completion, and alcohol abuse. For all variables except life satisfaction, we are able to compare MDOC’s reported rates to national rates. Because national prevalence rates are not available for life satisfaction, we do not provide a separate analysis of that variable.

We remind readers of the caution presented in the Dimension Reduction (Appendix B) section: **Because the clinical scoring in this report is not diagnostic, we urge that interpretations and reports of these study results do not make claims that people have conditions unless they were self-reported in HEALTH1.**

Prior research studies of correctional employees report findings consistent with Mental Health concerns for this population, and also support the concept of Corrections Fatigue. A study of COs and supervisors found that noise, clutter or dirty space, and lack of privacy in correctional facilities were associated with increased psychological symptoms of anxiety and depression, and higher alcohol and tobacco use (Bierie, 2012). COs were found to suffer from clinical depression (Obidoa et al, 2011; Denhof & Spinaris, 2016), PTSD (Denhof & Spinaris, 2016) or multiple symptoms of depression, PTSD and anxiety (Lerman, 2017). These rates were several times those of the national averages for the general population. Corrections employees of multiple job roles, both facility-based and community-based, were similarly found to report symptoms and meet criteria for moderate to severe depression, PTSD and anxiety (Denhof & Spinaris, 2013; Spinaris et al., 2012). Correctional employees who met PTSD criteria reported higher alcohol and tobacco use than those who did not meet PTSD criteria (Spinaris et al., 2012). Similarly, COs were found to have an elevated risk for suicide (Denhof & Spinaris, 2016; Violanti, Robinson & Shen, 2013) or rate of suicide (New Jersey Police Suicide Task Force Report, 2009; Stack & Tsoudis, 1997), and high rates of thoughts of suicide (Lerman, 2017).

Depression

In the path model, we included the factor score for the PHQ: Depression scale, a valid screening instrument. Factor scores are continuous and therefore provide more information for modeling. Here, we report results from the clinical scoring criteria for Major Depressive Disorder on the PHQ: Depression scale, which categorized people by whether they reported symptoms consistent with Major Depressive Disorder. Major Depressive Disorder is a severe condition that dramatically impairs functioning and increases people's risk for suicide completion. Major Depressive Disorder is not the only type of depression. Other forms include subclinical depression and persistent depressive disorder (dysthymia). Scoring the PHQ: Depression for Major Depressive Disorder rather than symptoms of depression or lower symptomatologies is a stricter application of this measure and means that fewer people meet the scoring criteria.
15% (n = 514) of survey respondents in all 8 Work Groups met scoring criteria for Major Depressive Disorder. Applying survey weights to this count, we estimate that if every individual in MDOC had completed this survey, a similar rate of 16% (n = 1977), just under 1 in 6, would report symptoms that are consistent with Major Depressive Disorder. Major Depressive Disorder symptoms include feeling down or hopeless, having difficulty concentrating, feeling tired or without energy, having difficulty enjoying activities, experiencing increased restlessness or slowed down physical movement, and thinking that one would be better off dead.

One can see how depressive symptoms can negatively affect staff’s professional and personal functioning, due to having little energy to address challenging situations or execute tasks, and possibly leading to making mistakes due to forgetting details, or having difficulty concentrating.

Figure 8 displays MDOC survey respondents’ rates of depression (weighted) relative to national rates of Major Depressive Disorder. Sources for these national rates can be found in the References section. Estimates of national prevalence vary greatly across sources. We searched for sources that provided current rates rather than lifetime rates. Because national rates are only estimates and vary across sources, we encourage readers to interpret these estimates with an understanding that all data provided are estimates only and may vary from year to year and source to source.

In Figure 8, rates of depression vary a great deal across the 8 working groups. Working Group 3 (all other facilities, custody staff) has a Major Depressive Disorder rate (24%) approximately 3 times the national average (6.7%). Their rates are also higher than depression rates among first responders (21.4%).

Other groups that greatly exceed the national average are Working Group 1 (13%; women’s facility, custody staff) and Working Group 8 (12%; Headquarters, support staff (all other staff)).

Depression rates for COs (custody staff, the equivalent of Working Group 3 in this study) in the MCO 2016 study was found to be 36% (just over 1 in 3), whereas in this study it is 24% (just under 1 in 4). This difference can be due to the fact that in the MCO 2016 study a cut-point of 10 or higher was used for the PHQ-9 (Moderate to Severe depression), whereas in this study a cut-point of 12 or higher was used (Severe depression). Both studies show extremely high depression rates among custody staff, which is of grave concern, given the severe consequences of depression on health and functioning.

“Stop talking about depression as being a choice. It's an illness. The brain is an organ. When it’s sick, it's sick. People can't just talk depression away. A person with depression needs medical attention.”
—Corrections Employee
Generalized Anxiety Disorder

In the path model, we included the factor score for the GAD-7 scale, a valid screening instrument. Factor scores are continuous and therefore provide more information for modeling. Here, we report results from the clinical scoring criteria for the GAD-7 scale, which categorized people by whether they exhibited symptoms consistent with Generalized Anxiety. Generalized Anxiety can be a crippling condition in which people feel chronically anxious about many things. Generalized Anxiety is not the only type of anxiety. Other forms include social anxiety and phobias.

47% (n = 1640) of survey respondents reported medium or high anxiety levels, both of which are consistent with Generalized Anxiety Disorder. Applying survey weights to this count, we estimate that approximately 49% (n = 5963) of the general MDOC employee population, just under 1 in 2, has medium or high levels of anxiety according to GAD-7 clinical scoring guidelines.

GAD symptoms include experiencing excessive anxiety and worry that are difficult to control, feeling on edge, having trouble relaxing, having difficulty sitting still due to restlessness, becoming easily annoyed or irritable, and fearing that something awful might happen in the future. These symptoms can interfere with functioning effectively on and off the job, perhaps due to making mistakes while distracted by the “inner chatter” of worrisome thoughts or overreacting and snapping at people due to being irritable, resulting in interpersonal conflict.
In Figure 9, we see rates of Generalized Anxiety symptoms that are many times above national rates. National rates of Generalized Anxiety range between 3% and 5% for civilians and military. We were unable to locate comparable rates for first responders (i.e., that were not for lifetime prevalence or a different form of anxiety). Rates of Generalized Anxiety symptoms at MDOC range between 32% and 60%, between 10- and 20-times national rates. It is possible that some of the extremely high rates seen in this survey are due to the measurement method used: the GAD-7 was designed to measure Generalized Anxiety, but also captures symptoms of other disorders such as Social Anxiety and PTSD. The national rates of include only Generalized Anxiety. It is therefore possible that the disparity between MDOC’s rates and national rates is not as large as what is depicted here, but it is unlikely that these estimates are grossly incorrect.

As we will see in other sections of this report, Working Groups 1 (51%; women’s facility, custody staff) and 3 (60%; all other facilities, custody staff) again have much higher symptom rates than other working groups, with more than half reporting symptoms of medium to high anxiety.
**Post-traumatic Stress Disorder (PTSD)**

In the path model, we included the factor score for the PCL-5 scale, a valid screening instrument. Factor scores are continuous and therefore provide more information for modeling. Here, we report results from the clinical scoring criteria for the PCL-5 scale, which categorized people by whether they exhibited symptoms consistent with Post-Traumatic Stress Disorder (PTSD). Like Major Depressive Disorder, PTSD is a severe condition that dramatically impairs health and functioning and increases people’s risk for suicide completion. PTSD is one of several Trauma and Stressor-related Disorders.

*People can exhibit severe impairments to functioning with symptom levels below what is required for a diagnosis of PTSD. We therefore suggest that rates of trauma-related functional impairment may be higher than what is suggested by these results.*

Using clinical scoring guidelines for the PCL-5, 22% (n = 775) of survey respondents in all 8 Working Groups reported symptoms consistent with PTSD. Using weighted survey statistics, we estimate that approximately 24% (n = 2999), just under 1 in 4, of all MDOC personnel would receive similar scores and meet criteria for PTSD on the PCL-5.

PTSD symptoms include changes in arousal and reactivity (e.g., irritability, unprovoked anger outbursts, aggression, sleep disturbances, hypervigilance); negative changes in thinking and mood (e.g., negative worldview, difficulty experiencing positive emotions); avoidance of distressing stimuli/“triggers” associated with traumatic events (be it external stimuli in one’s physical environment, or internal stimuli, as in one’s thoughts); and intrusive symptoms (involuntary and distressing re-experiencing of aspects of traumatic events). It is not difficult to speculate how such symptoms can adversely impact correctional employees’ interactions in both their professional and personal lives, possibly increasing the risk for strained relationships or excessive use of force at work, and social withdrawal or interpersonal conflict at home.

In Figure 10, we again see very high rates of PTSD relative to the national averages. PTSD rates are approximately 3.5% in the general population, 2.5% in the military (all personnel, not active-combat), and 10% in first responders. *Every single MDOC working group reported PTSD rates as high or higher than rates of first responders.* Working groups 1 (women’s facility, custody staff) and 3 (all other facilities, custody staff) again have higher symptom rates than other working groups, with PTSD rates of 31% (just under 1 in 3) and 41% (about 1 in every 2.5) respectively, approximately 3 and 4 times higher than those of other first responders. The rates found in this current study for custody staff are comparable to the 34% estimated PTSD rate reported in the MCO 2016 study, but are even higher than the 2016 study for custody staff in male facilities. Most importantly, however, both studies found alarmingly high PTSD rates among MDOC custody staff, which is of great concern, especially given how debilitating a disorder PTSD can be.
Alcohol abuse
In the path model, we included the sum score for the PHQ: Alcohol scale, a valid screening instrument. Sum scores are continuous and therefore provide more information for modeling. Here, we report results from the clinical scoring criteria for the PHQ: Alcohol scale, which categorized people by whether they exhibited drinking behaviors consistent with Alcohol Abuse. Alcohol Abuse is characterized by bouts of excessive drinking that can impair daily activities. Other forms of alcohol-related disorders include Binge Drinking (less severe) and Alcohol Dependence (more severe). When combined with other mental health challenges such as Major Depressive Disorder or PTSD, Alcohol Abuse can increase the risk for suicide because it exacerbates mental health symptoms while impairing behavioral inhibition.

According to scoring criteria for the PHQ: Alcohol scale, 18% (n = 614) of survey respondents reported symptoms of alcohol abuse. Using weighted survey statistics, we estimate that approximately 19% (n = 2372), about 1 in 5, of all MDOC employees exhibit similar symptoms. Alcohol abuse includes behaviors such as consuming alcohol even after being advised by a medical professional to stop drinking alcohol due to health conditions, consuming alcohol or being intoxicated or hung over while at work or while taking care of dependents or personal responsibilities, missing work or being late for work or other engagements due to consuming alcohol or being hung over, driving a vehicle after having consumed several alcoholic drinks, and experiencing interpersonal conflict while engaging in the consumption of alcohol.

In Figure 11, we see MDOC rates of alcohol abuse relative to national rates. The national rates are for alcohol abuse, not alcoholism, dependence, or other alcohol-related disorders. Alcohol abuse

Figure 10.
PTSD Rates by MDOC Work Group

National Rates
- First Responders
- Military
- National

Using Weighted Survey Data
90% Confidence Intervals

“I drink every day.”
–Corrections Employee

In Figure 11, we see MDOC rates of alcohol abuse relative to national rates. The national rates are for alcohol abuse, not alcoholism, dependence, or other alcohol-related disorders. Alcohol abuse
rates are about 7% in the general population, 1.5% in all military personnel (i.e., not just combat military), and 9% among first responders. We once again see that MDOC is showing self-reported rates of alcohol abuse that are higher than the national rates for all working groups. Working group 3 (all other facilities, custody staff) has the highest reported rate of alcohol abuse at approximately 26%, which is nearly three times the rate reported by first responders. The next highest rates are in Working Groups 7 (headquarters, managers/supervisors) and 1 (women’s facility, custody staff), both of which report rates of 16%.

**Figure 11.**

Alcohol Abuse Rates by MDOC Work Group

Suicidal ideation and completion

We measured suicidal ideation with an adapted version of the CSSR, a valid screening instrument, which yields scores between 0 and 6. Scores of 2 or higher are indicative of suicidal ideation and a need for immediate mental health supports. A score of 6 is associated with active plans to complete suicide.

The CSSR Scale includes both passive suicidal thinking items (e.g., wishing one was dead or wishing one could go to sleep and not wake up), and active suicidal thinking items (e.g., having thoughts of killing oneself with or without intent to carry these thoughts out, or having started to work out details as to how to kill oneself).
In the path model, we used the sum score. Here, we report rates from the cutoff scores of 2 and 6. Of the survey respondents in all 8 Working Groups 8% (n = 274) reported CSSR scores of 2 or more. Figure 12 plots the scores of 2 or more across the eight working groups. Using weighted survey estimates, we estimate that approximately 9% (n = 1046) of all MDOC employees would report similar scores.

Figure 12.

Suicidal Ideation Rates by MDOC Work Group

A total of 33 (1%) survey respondents reported they are currently and actively planning to complete suicide (CSSR score = 6). Using weighted survey statistics, we estimate that approximately 1.1% (n = 139) of all MDOC employees are currently and actively planning to complete suicide. There have been three known completed suicides of MDOC staff in 2019 to date; all three were male COs working in male facilities (Working Group 3).

Using data provided by MDOC, between 3 and 7 employees died by suicide every year from 2016 – 2018, for an average of 4.7 known suicide deaths per year or a rate of .038%. Although these numbers may seem small, they are several times national averages. The national average rate of death by suicide completion is 15.6 per 100,000 people. Extrapolating from MDOC’s average rate of 4.7 deaths per 12,281 employees per year, MDOC has an average rate of death by suicide completion of 38.27 per 100,000, which is 2.45 times the national average. Figure 13 provides MDOC’s suicide rates by Working
Group relative to national averages. Work Groups 1 and 3 (custody staff in the women’s facility and all other facilities) and 8 (headquarters – support staff) have the highest known suicide completion rates.

**Figure 13.**

Suicide Rates by MDOC Work Group

Anticipating that there may be staff who take the survey who might be battling suicidal thoughts, and since the data collection was anonymous (preventing researchers from tracing respondents to offer them assistance), each page of the survey footer included the following information: *Some of these items ask about difficult experiences you may have had. It is not unusual for people to feel distressed when reflecting on topics such as those mentioned in those questions. At any time, you can talk to the Suicide Prevention Lifeline at 800-273-8255, Safe Call Now at 206-459-3020, or your agency’s Employee Service Program at 800-521-1377.*

The average MDOC employees’ rate of death by suicide completion is extremely high, in line with prior findings (New Jersey New Jersey Police Suicide Task Force Report, 2009; Frost, 2019; Stack & Tsoudis, 1997). Using the CSSR, .9% of the survey respondents were found to be at very high risk for suicide by indicating that they were currently and actively planning to complete suicide. Using weighted survey statistics, this number translated to 1.1% of the entire MDOC employee population. Using a different measure to assess suicide risk, the MCO 2016 study found that 4.6% of COs (custody staff only) were at high risk for suicide.
Comorbid diagnoses rates

To estimate the number of respondents who met scoring criteria for more than one of the symptom sets discussed above, we calculated weighted crosstabs based on clinical scoring guidelines. These weighted crosstabs provide estimates of how many staff in MDOC might display these symptoms. Because those crosstabs are weighted and because the crosstabs calculations cannot tolerate missing data, the exact counts in the crosstabs will vary from the exact counts in the previous sections. Prior studies have found that comorbidity greatly increases the negative impact of mental health disorders on correctional employee health and functioning (Denhof & Spinaris, 2013). As Table 2 below shows, 1 in 5 of the custody employees met criteria for both Major Depressive Disorder and PTSD, and just under 1 in 5 met criteria for both these disorders plus Generalized Anxiety. Dealing with only one of these sets of symptoms can greatly impair quality of life and functioning. Experiencing the combined burden of these three disorders can be truly debilitating, perhaps even life-threatening (in terms of suicidal thinking and behaviors).

Table 2. Weighted comorbidity estimates for all MDOC staff

<table>
<thead>
<tr>
<th></th>
<th>Custody staff % (n)</th>
<th>Non-custody staff % (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression &amp; PTSD</td>
<td>20% (1303)</td>
<td>5% (302)</td>
</tr>
<tr>
<td>... &amp; Generalized Anxiety</td>
<td>18% (1203)</td>
<td>5% (279)</td>
</tr>
<tr>
<td>... &amp; Alcohol Abuse</td>
<td>8% (515)</td>
<td>1% (71)</td>
</tr>
<tr>
<td>... &amp; Active suicide plans</td>
<td>&lt; 1% (61)</td>
<td>&lt; 1% (6)</td>
</tr>
</tbody>
</table>

Summary

Several variables in the Universal Inputs were not retained because their effects on Mental Health were not large enough, including gender (-.04), and highest security level worked (< .01). This lack of effect indicates that Mental Health does not significantly differ across gender or highest security level worked. However, that lack of effect does not mean that different genders or people working in different security levels would benefit from the same treatment modalities. Men and women may need different treatments for the same levels of Mental Health because the causes for their levels may differ, they may have different coping mechanisms available to them (biologically, by preference, due to social pressures, etc.), and they may express Mental Health symptoms differently. Similarly, people working in different levels of security may have different available coping mechanisms, if for no other reason than the different safety and procedural contexts in which they work.

Figure 14 provides a summary of the results provided in previous sections. As was discussed in those sections, rates of most disorders are highest in Working Group 3 (all other facilities, custody staff), followed by Working Group 1 (women’s facility, custody staff). Data such as these are a cause for deep concern to anyone who reads them. Rather than being used in an alarmist or exclusionary manner, we strongly encourage readers to treat these figures as a call to action to develop healthier, more supportive working environments. Those healthier, more supportive working environments begin with communications and employee support strategies like those we provide in the Recommendations section.
Figure 14.
Clinical Disorder Rates by MDOC Work Group

Physical Health

Work Health and Mental Health were both impactful on Physical Health. The association with Mental Health was small (.20), and the association with Work Health was strong (.35). In the original path model, Fiscal Impacts were treated as an outcome of Physical Health. However, the association between Physical Health and Fiscal Impacts was smaller than our cutoff criteria, and so the association was removed from the model.

Physical Health was primarily measured through HEALTH1 survey variable, which provided respondents with 22 health diagnoses (physical and mental) they could endorse for diagnoses they received after starting their corrections employment. 2377 respondents (68%) reported at least one diagnosis. The maximum number of diagnoses reported was 21. Among the group reporting a diagnosis, the average number of diagnoses was 4.

In prior research, COs were found to suffer from overweight or obesity, and high blood pressure at rates higher than those for the general population (Morse, Dussetschleger, Warren, & Cherniack, 2011). Noise, clutter or dirty space, and lack of privacy in correctional facilities was also found to be associated with increased rates of physical symptoms among COs and supervisors, such as headaches, stomachaches, and back pain. These working conditions were also found to be associated with higher sick leave use (Bierie, 2012). Increased rates of PTSD and depression were also found to be associated with more self-reported health conditions (Denhof & Spinaris, 2013; Spinaris et al., 2012), and poor or insufficient sleep (Lerman, 2017).

"Being an older officer, 12 to 16 hrs. on my feet is physically draining! Coming in on my shift sleep deprived and off my medication schedule makes me unfit for duty, but if I call in sick, I get counselled for using sick leave! This needs to be addressed and a solution found that is in our favor! Why should I be punished for being an older worker??”

–Corrections Employee
Work Health

As stated above, the most influential variable in the path model was Work Health. Work Health had several robust impacts on other variables in the model. The strength of other variables' impacts on Work Health was more modest. The strongest association was from Social Health, which was assumed to affect Work Health with a strong structural coefficient (-.34). Social Health and Work Health are valenced opposite to each other, so as Social Health improves, negative Work Health experiences decrease. Stated somewhat differently: as Social Health improves, Work Health improves.

Work Health was also modeled to be impacted by trauma exposure (.27) and whether respondents work in a custody role (.21; i.e., Working Groups 1 or 3). The associations with these variables was modest and positive indicating that as respondents’ exposure to traumatic events increases, negative Work Health experiences increase. Respondents who worked in a custody role were more likely to report negative Work Health experiences. Although trauma exposure and working in a custody role both impact Work Health, it is important to note that the effects of Social Health on Work Health are stronger than the effects of either trauma exposure or working in a custody role.

Several variables in the Universal Inputs were not retained because their effects on Work Health were not large enough, including gender (-.01), and highest security level worked (-.01). This lack of an effect indicates that Work Health does not significantly differ across gender or highest security level worked. However, that absence of effect does not mean that different people of different genders or people working in different security levels would benefit from the same programs or treatment modalities. Men and women may need different resources or treatments for the same levels of poor Work Health because the causes for their low Work Health levels may differ, they may have different coping mechanisms available to them, or they may express poor Work Health differently. Similarly, people working in different levels of security may have poor Work Health for different reasons or have different available coping mechanisms, if for no other reason than the different safety and procedural contexts in which they work.

Prior studies have been conducted on the impact of job characteristics on job burnout for custody staff, as measured by emotional exhaustion, depersonalization (cynical attitudes), and perceived ineffectiveness at work. Lower job autonomy and lower job variety were found to contribute to increased emotional exhaustion, depersonalization, and perceived ineffectiveness at work in COs (Griffin, Hogan & Lambert, 2012). Correctional staff’s perceptions that their employer addressed justice issues with fairness and integrity were associated with increased life
satisfaction (Lambert & Hogan, 2011). Correctional organizations’ unclear goals and policies, COs’ lack of decision-making ability, COs’ lack of support from the organization, and perceived lack of organizational justice were found to be most consistently associated with CO job stress and burnout (Finney et al., 2017). And a study of COs reported high rates of lack of work engagement and organizational commitment, with a high percentage of respondents indicating that they would immediately accept an offer from a job outside of corrections if it had similar salary or benefits (Lerman, 2017).

**Family Health**

The strongest association in the path model was the association between Work Health and Family Health (.51). The relationship was unusually large for any model of constructs as complex and multiply-determined as those in the current study. Work Health and Family Health are both negatively valenced. As negative Work Health experiences increase, negative Family Health experiences increase.

In prior research studies, depression scores of custody staff were found to be strongly and positively correlated with work-family conflict (“work coming home”) and also with family-work conflict (home life affecting work), with the former having a bigger impact than the latter (Obidoa, et al, 2011). Another study also reported negative impacts of correctional work on COs’ family life (Lerman, 2017).

**Social Health**

In the original path model, Social Health was theorized to have an impact on Work, Mental, and Family Health, and to be impacted by the Universal Inputs. After removing associations that did not meet cutoff criteria, Social Health retained its impact on Work Health (described above) and was only affected by whether respondents worked in a custody role (i.e., Working Groups 1 or 3). The association with custody role was negative (-.22), meaning that respondents in custody roles reported poorer Social Health outcomes.

Because Social Health has a strong impact on Work Health—which in turn is so impactful on other important Outcomes such as Mental Health, Family Health, and Physical Health—Social Health plays an important role in this model. The Social Health outcomes in this study focused on relationships at work with direct supervisors, other staff, and offenders.

In prior research, supervisors who were perceived by their subordinates to be uncaring, distant, “closed,” and unavailable to them were found to contribute to increased depersonalization (cynical attitudes) in COs (Griffin, Hogan & Lambert, 2012). COs in high social isolation/low social support and high strain jobs, and with the longest years of service, showed higher levels of strain and more negative emotional experiences than did COs who worked in high social isolation/high strain jobs for shorter periods (Dollard & Winefield, 1998), indicating that the negative effects of high social isolation and high strain work are cumulative.
Fiscal Impacts

The Fiscal Impacts variable was removed from the path model and further examination because we did not find support for our hypothesized relationships with Work, Mental, or Physical Health. The absence of these findings could be due to several explanations. Comments made by survey respondents indicate that one reason may be that employees are not able to use available sick leave because of job demands. Another reason may be that employees use available leave to care for their children, resulting in them not having enough days for personal use.

“Your called to the office if you use a sick day.”
—Corrections Employee

CONCLUSIONS & RECOMMENDATIONS

Conclusions

This study of MDOC’s employees’ wellness has yielded much valuable and actionable information. The data indicated serious levels of mental health difficulties among most Working Groups in comparison to national data for the general population, the military and first responders. Of the 8 Working Groups studied, custody staff at male facilities exhibited the highest rates of mental health disorders, lower Social Health (quality of professional relationships with direct supervisors, coworkers and offenders) and lower Work Health (demoralization, exhaustion, and job dissatisfaction).

The data also showed that Work Health was the most influential Outcome, impacting Physical Health, Mental Health and Family Health. Because Work Health was impacted by Social Health, correctional staff’s quality of professional relationships with direct supervisors, coworkers and offenders influences their morale, physical and emotional energy levels, and job satisfaction. Fiscal impacts examined were not found to be associated with any of the studied variables.

*These findings lead to the conclusion that system-wide programs designed to improve employees’ Social Health and Work Health are foundational and impactful next steps as MDOC to continues to pursue ways to increase employee well-being (MDOC Strategic Plan 2019-2022).*

Development Process

The following program recommendations are based on survey data of this report, existing scientific literature, DWCO’s experience with offering staff wellness assessments and specialized training programs to promote staff wellness, and MDOC’s requests.

Program Recommendations

This report has pointed to a need for improvements to employees’ Work Health, Social Health, Mental Health, Physical Health, and Family Health. Each of these areas is deserving of its own rich set of multi-level programming at the environmental, interpersonal (between-people), and intrapersonal (within-the-person) levels. For instance, Social Health can be supported at the environmental level through the development of policy that creates equitable and transparent relationships among workers, at the interpersonal level by supporting communication practices that are respectful and timely, and at the intrapersonal level by teaching coping, self-regulation, communication, and problem-solving skills.

These multi-level programming opportunities are often summarized in socio-ecological models. Socio-ecological models depict the complex interactions between people and the world around them. Many variations of these models exist. A simple version can be found in Figure 15. Socio-ecological
models can be extremely helpful to MDOC by providing a clear structure for planning programming in each of the Outcome areas studied in this report. As will become obvious in the remainder of this section, MDOC has many choices for evidence-informed programming in each of the Outcomes. At the end of this section, we will use this model as a suggestion for structuring and systematizing those choices.

![Socio-ecological model of large-scale programming](image)

**Figure 15. Simplified socio-ecological model of large-scale programming**

**General recommendations**

Policies often must account for limited resources with which to implement new policies, procedures and practices (e.g., regarding mandatory overtime, “mental health” days, staff investigations, staff disciplinary practices, types of food available to employees at work), and programs (e.g., Employee Assistance Programs that specialize in the treatment of correctional staff and their families). New policies should be based on the latest scientific information available, such as research on the effects of insufficient sleep. Policy efforts are needed to continue promoting awareness of the well-being and safety of correctional employees before researchers, administrative officials, and correctional systems. Policies that support specific programming reduce the associated stigma regarding use of these resources. In addition to Employee Assistance Programs (EAP) for correctional employees, the following programs are also being implemented nationwide: peer support programs, mental health treatment programs, critical incident stress debriefing units that provide on-the-job debriefing and counseling to correctional employees, staff Chaplains services, and other strategies to promote well-being (e.g., maintaining a healthy body weight like the MDOC Central Office Weight Loss Challenge reported in the April, 2019 issue of Corrections Connection). Research efforts are called for that explore: the contextual factors associated with workplace injuries; psycho-social stressors like work-family conflict and a negative public image; programs aimed at mitigating the impact of occupational stressors on correctional employees’ well-being and mental health; ways to increase correctional employees’
resilience; and the impacts of occupational dangers on correctional employees’ physical health, perceptions of safety, and on their personal social environment.

The absence of the effects of gender and security levels throughout the findings presented in this report does not mean everyone will benefit from the same treatment, increases in resources, or changes to work culture. It instead means that these variables are not causing differential effects on other variables. Programming modality differences might be very helpful practically because they can address differences in available coping mechanisms (because of personal preference, biological availability, social desirability, socially available resources, what can be safely done in security level 1 facilities vs. 5), different expression of symptoms (“feeling sad” may look different in men and women), and different causes for symptoms (employees in higher security levels may need more transparency around changes to safety protocols, women and men may experience marginalization at work around different policies, etc.).

As a general recommendation, comprehensive employee wellness initiatives must be bi-directional, involving both top-down (organizational) efforts AND bottom-up (individual) involvement. Studies show that both approaches are effective in reducing occupational burnout, with systemic, organizational efforts, such as policy changes, being more effective than strategies which train individuals in the use of resilience-promoting skills, such as mindfulness training (Panagioti et al., 2016; West et al. 2016).

In MDOC’s Strategic Plan, Goal 1 is investing in employees. As stated in the plan, meeting this goal requires action steps, such as the establishment of a Wellness Unit. Additional strategies to meet Goal 1 may involve investing in employees through the provision of certain types of employee benefits and the limiting of mandatory overtime. Comments left by survey participants indicated high levels of demoralization and job dissatisfaction due to the loss or anticipated loss of employee benefits, and—for custody staff—the extent of mandatory overtime. Mandatory overtime can severely interfere with healthy sleep habits. Research links insufficient sleep to negative impacts on physical and mental health and neurocognitive functioning (Grandner, 2017), and to increases in depressed mood, hopelessness, anger, anxiety, desire to self-harm, functional problems, and thoughts of suicide, with the risk for these symptoms increasing with each additional night of insufficient sleep (Ramsey, Athey, et al., 2019).

**Work Health & Social Health**

The strong effects of Social Health on Work Health coupled with the strong effect of Work Health on other health outcomes indicates that programs designed to improve both Social Health and Work Health are essential and vital starting points to any staff wellness improvement efforts. Given survey participants’ comments about negative interactions with supervisors and coworkers, two suitable starting points are the training of supervisors to communicate and interact more supportively with subordinates, and programs that target the quality of teamwork and the workforce culture. These initiatives may include policies, practices and procedures regarding staff investigations and staff discipline. These types of programs require a department’s long-term commitment, planning, evaluation, and data-driven adjustments to how these programs are delivered.

Improving staff’s Social Health and Work Health is critical for another critical reason. In their efforts to improve employee wellness, several correctional and other law enforcement agencies nationwide offer their employees peer support teams, chaplain services, and EAP services. Effective implementation of these resources, as measured by degree of use by staff, hinges on one issue: trust. Common obstacles that corrections agencies must overcome is their employees’ lack of trust, their fear that what they communicate to EAP providers, peer supporters or chaplains will not be held in confidence, and that it may be used against them, in terms of punitive consequences (e.g., discipline or retaliation). Employees may also fear that, because of what they disclose, they might be deemed unfit for duty and lose their job (Lerman, 2017). Even though our survey was anonymous, participants
commented that they were worried about retaliation due to statements they made. This type of apprehension is likely to be much increased when a person is identifiable to MDOC or other State employees with whom they are sharing personal information during their use of EAP, peer support or chaplain services. This fear could result in underutilization of these services, or in staff not being truthful or not fully disclosing aspects of their distress. That is why extensive efforts must first be made, and continue to be made on an ongoing basis, towards the earning of staff’s trust, through the improvement of Social Health and Work Health. And very clear guidelines must be communicated to staff in advance as to when shared information will not be held in confidence.

**Mental Health & Physical Health**

With an improvement in trust and general working conditions, programs to support Mental Health and Physical Health become more feasible because employees will have greater trust that they will be allowed to engage in healthy well-being skills without professional cost or social ridicule. Mental Health and Physical Health can both be conceptualized as part of an employee-facing umbrella program for improving employees’ well-being skills. Many large-scale programs for supporting mental and physical health can be found through resources like DWCO, CDC.gov, and HealthyPeople.gov.

An option often considered by large organizations faced with significant well-being needs is the use of peer support programs. These programs are often not as helpful as promised because they increase the stress of the peer counselors, who are often facing similar stressors as their peers and have similarly limited abilities to ameliorate the underlying causes. Another common solution is EAP, but EAP providers are often not versed in the specifics of the correctional workforce culture, and the number of sessions allowed annually through EAP are typically very small, often 4-6. Factors that can make peer support programs successful include: careful selection, ongoing training, debriefing, and clinical supervision of peer supporters; clear guidelines as to why, when, where and how peer support is to be accessed (e.g., after critical incidents only or whenever distressed for any reason while at work); and clear guidelines about records, privileged communication, and confidentiality and its limits. Factors that can make EAP programs successful include: educating clinicians in correctional staff workforce culture, mental health and family issues; and providing an ample number of EAP sessions annually (for example, 10 per issue). Additionally, corrections organizations can consider compiling a list of behavioral health providers in the community who are educated in the areas of clinical issues of correctional staff and particulars of their workforce culture. Another potential resource for locating effective programs comes from the field of policing. Adapted programs would need to recognize the uniqueness of the corrections profession and adjust accordingly (e.g., periodic interactions with unpredictable citizens in the case of police officers vs. constant interactions with inmates in the case of correctional employees). The American Psychological Association recognizes police psychology as a discipline by providing board certification, which is increasing research in this area.

**Family Health**

There is a strong possibility that as Social, Work, Mental, and Physical Health improve, so will Family Health. The employee-facing umbrella program for improving employee well-being skills mentioned in the Mental Health and Physical Health recommendations can include specific support for Family Health skills that are unique to corrections staff. For instance, staff in corrections settings face unique threats to safety and an unusually high rate of exposure to violence (either directly or through secondary sources like records and discussion). Helping staff understand that they may incorrectly believe that these threats are common in their non-work settings may help them be less vigilant, controlling, and restrictive in their interactions with their families. Helping staff recognize stress and trauma symptoms in themselves and others can help staff better recognize the source of their feelings and help them develop skills for communicating about and coping with those feelings at home.
Similarly, programs designed to support Work and Social Health can also incorporate elements of intrapersonal-level skills that can be used in the home. Helping staff develop distinct conflict-resolution skills for their work and non-work environments may reduce conflict at home. As staff learn more effective and sophisticated communication skills at work, that training can include helping staff distinguish between communication techniques that are helpful at work and at home to again help reduce conflict at home.

**Implementation**

Sustainable and systematic implementation Wellness initiatives must not be introduced as if they are another “flavor of the month” or with haphazard programming that benefits some employees while neglecting others. Here we discuss two strategies that can help with both sustainable and systematic implementation.

MDOC already has one necessary component of sustainable implementation: an explicit statement of upper-level administrative support built into its Strategic Plan. This upper-level support is imperative for securing the time, personnel, funding, and other resources needed to implement large-scale programming. The other key and necessary component is developing participatory support from employees. Participatory support has two benefits. First, unless employees believe that the programming is truly for their benefit, they will not participate and will instead see the programming as a manipulative effort to somehow benefit MDOC administration. Second, participatory support is an invaluable tool for MDOC to improve the efficiency and effectiveness of its programs. In many ways, employees can be the best evaluators of their programming needs and which programs are helpful. If MDOC incorporates ongoing participatory feedback, they will greatly reduce the amount of time and funding necessary to identify and implement effective programming. Both upper-level and participatory-level support are needed if well-being is to become a regular part of the workforce culture and to prevent it from being treated as a passing fad or something unacceptable for “real” corrections staff to engage in.

Systematic implementation is made possible through the use of program-mapping. Many program-mapping techniques exist. Some of those techniques involve the mapping of specific programs’ components, and some focus on mapping the types of programs available. As we described at the very beginning of the Program Recommendations section, MDOC has opportunities for improving its employees’ Social, Work, Mental, Physical, and Family Health Outcomes. Within each of those Outcomes, there is a wealth of possible evidence-supported programs for improving factors at the environmental, interpersonal, and intrapersonal levels. Further, MDOC has already noted that they would like to ensure that programs are tailored to their employees’ specific demographic and cultural needs. In the presence of so many options, programming could easily become unbalanced by inadvertently favoring some outcomes, levels, or groups of people while neglecting others.

To prevent that unbalanced implementation, we recommend a program mapping grid like that in Figure 16. Figure 16 is by no means complete, and not all contents may be accurate for MDOC’s needs. Instead, Figure 16 is meant to be an example. The example in Figure 16 includes only a few ideas for mapping programs across all systems levels (intrapersonal, interpersonal, environmental), all Outcomes (Social, Work, Mental, Physical, and Family Health), and specific groups’ needs, such as for specific job roles and demographics. We suggest adding programs that are already in place, and then adding possible new programs. Wherever possible, the unique needs of specific job roles and demographics should be accounted for. The survey items can be used to identify possible new programming areas. Many publicly available resources exist to help with program-mapping and other program development activities, such as NationalService.gov, wkkf.org/resource-directory, and re-aim.org. Other helpful tools include stakeholder engagement, logic models, and program evaluation (in general, and the RE-AIM framework in particular).
### Figure 16. Sample program-mapping template

<table>
<thead>
<tr>
<th></th>
<th>Social Health</th>
<th>Work Health</th>
<th>Mental Health</th>
<th>Physical Health</th>
<th>Family Health</th>
</tr>
</thead>
</table>
| **Intrapersonal level**| Communication skills  
- For specific job roles (custody, non-custody, management, etc.)  
- For specific demographics | Help employees identify specific things they like and dislike about work and what they can do to improve them  
- For specific job roles  
- For specific demographics | Help employees learn healthy coping and self-regulation skills  
- For specific job roles  
- For specific demographics | Help employees learn behaviors that support physical health  
- For specific job roles  
- For specific demographics | Help employees distinguish between problem-solving skills that are helpful at work and those that are helpful at home  
- For specific job roles  
- For specific demographics |
| **Interpersonal level**| Make positive communication a regular practice  
- For specific job roles (custody, non-custody, management, etc.)  
- For specific demographics | [Most of these will be captured under Social Health] | Develop positive interpersonal supports around mental health  
- For specific job roles  
- For specific demographics | Develop positive interpersonal supports around physical health  
- For specific job roles  
- For specific demographics | Develop clear guidelines for how to talk about and request help with family needs  
- For specific job roles  
- For specific demographics |
| **Environmental level**| Create clear, transparent policies that support healthy interactions and limit punitive interactions for staff  
- For specific demographics | Ensure that the working environment is safe, clean, and comfortable | Create a positive culture around mental well-being  
Create policies that support the use of positive well-being skills | Create a positive culture around physical well-being  
Create policies that support sufficient sleep, healthy eating, and limited substance use | Implement clear, transparent policies that support healthy family lives, such as leave use  
Create positive social norms about healthy family behaviors |
Future Study Recommendations

In building toward future studies, the information in this report can be tailored to different audiences to for various outreach needs. For example, creating single page fact sheets can raise awareness of the findings with leadership and staff. This type of outreach can demonstrate the value of these types of studies. It can also be used in future survey promotions to enhance the response rate and, ultimately, the conclusions that can be drawn from the data.

Future studies that expand the current findings include:

1. The examination of additional possible Contributing Factors, such as leadership styles, training practices, promotional practices, investigation practices, disciplinary practices, performance evaluation practices, and workplace support for self-care. Studying these factors can require lengthy evaluation of MDOC policy and human resources data, which were beyond the timeline and budget for this study.
2. Survey of the employees’ families
3. Survey of specific work policies (e.g., health care benefits, resources, etc.) and communications around the same
4. Study of anonymous MDOC records pertaining to all the Contributing Factors to be studied, Fiscal Impacts, and several Employee well-being indicators
5. Study of the impact on wellness of multi-phase evidence-based training of MDOC employees on the effects of chronic high stress and psychological trauma on individuals and on workforce cultures, and evidence-based strategies to counter these effects at both the individual employee and at the workforce levels

The between-groups model that was used in this study can also be used over time to evaluate the effectiveness of any programs or supports that MDOC implements. As MDOC makes changes to the Contributing Factors across those groups, re-evaluation of the Outcomes will provide further evidence that specific factors are having definite, causal effects. Additionally, as MDOC implements programs that impact influential Outcomes (such as Social Health and Work Health), re-evaluation of these Outcomes and their consequences can provide further evidence for the importance of these variables.

Any future studies would benefit from a longer and more cooperative period for the recruitment of study participants. A number of survey participants left comments stating that they were mistrustful of the survey and suspected that participants would be traced and punished. Employees would benefit from extended periods of advertisement prior to and during the study that explain the purposes and methods of the study, along with multiple opportunities to ask questions. With greater trust and a longer recruitment period, future studies can gather data from larger samples, have capacity for more complex analyses, and be increasingly confident in the accuracy of the data.

Ideas for Consideration

Given the findings of this study, the key question facing correctional administrators and individual correctional employees is what to do about the “mission critical” matter of employee wellness, so that the correctional workforce can regain and then maintain its health.

Policies

Wellness-promoting policies would address the presence of conditions known from research studies to affect staff health, such as the regular use of mandatory overtime (which affects amount of sleep staff can get on a regular basis), the type of foods available to staff working in correctional
facilities, the degree of social support provided by supervisors to subordinates, or staff-on-staff harassment.

Education
Education goals for the pursuit of correctional employee wellness include:
1. Increasing staff’s awareness of possible occupational hazards, starting with new employees at the Training Academy;
2. Countering the stigma and shame—the culture of toughness—among corrections personnel about experiencing emotional distress or seeking professional help;
3. Educating family members about correctional occupational hazards, effective supportive practices, and their own effective self-care;
4. Equipping staff with resilience-promoting skills through trainings that are evidence-based, and which include actionable skills-based behaviors to “inoculate” employees against stressors (prevention) and to facilitate positive resolution of symptoms post-exposure (intervention);
5. Reinforcing these skills through repeated and multi-faceted review of their application in the workplace, so they become an intrinsic part of the correctional workforce culture; and
6. Educating retirees about healthy ways to transition from correctional work to their retirement in “normal society.”

Educational materials that address aspects of these issues include Kevin Gilmartin’s training “Emotional Survival” which has been designed for police officers. DWCO provides corrections-specific trainings (for staff at correctional facilities, probation and parole) that address individual staff issues as well as evidence-informed ways to improve the corrections workforce culture. These trainings include the courses “From Corrections Fatigue to Fulfillment,” and “True Grit: Building Resilience in Corrections Professionals.” DWCO also offers corrections-specific wellness booklets that can be used to help drive workforce culture changes, and to assist staff in their personal and family lives.

Evaluation
1. The effectiveness of programs to be implemented should be assessed, to render administrators’ future decisions about staff wellness efforts data-driven. This can be accomplished by gathering quantitative and qualitative data prior to and following programming.
2. For quantitative data, agencies can first collect baseline measures of key behaviors they want to impact. Following the program, these measures can be re-assessed to evaluate the amount of impact. What is measured and how must be carefully determined, so that evaluation attempts will be meaningful, relevant, and valid.
3. For qualitative data, employees can be asked to comment anonymously on occupational stressors or on their experiences with wellness-related topics, programs, or resources. Emerging themes are then studied, and conclusions drawn.
4. Wellness initiatives must be holistic, addressing the various dimensions of wellness and related issues pertinent to the whole person, and for both custody and non-custody employees at facilities and for community-based probation and parole agents, managers and support staff.
5. Similarly, agencies can set up internal wellness committees to “keep their finger on the pulse” of staff wellness needs at their institution or office, while also keeping wellness
efforts at their agencies relevant by addressing identified staff needs. Agencies can also seek funding to further study identified needs.

**Return on Investment**

Employee support activities require a considerable investment of time, energy and funds, and the question becomes what could the return on investment (ROI) be for such efforts?

At the very least, wellness efforts can improve Work Health (employee morale), as aiming to increase staff wellness is greatly appreciated by correctional employees and their families. This study has shown that Work Health is pivotal to how MDOC employees’ function on and off the job.

Targeted wellness efforts can also help improve staff’s Social Health (professional relationships), which has a strong effect on Work Health.

Additional ROI can include increased use of EAP, Peer Support and/or Chaplain services (so health and functioning issues are addressed in a timely fashion and appropriately), and consequent decreased sick leave use, decreased errors, reduced incidents of policy violations and staff misconduct on and off the job, and decreased turnover.

Some ROI will be less tangible, but at least as important. Administrators will never know how many employees chose not to call in sick on certain days; how many chose not to leave the agency; how many were helped by seeking professional help outside of EAP; how many family conflict incidents and divorces were averted; how many DUIs did not happen; or how many suicide attempts or completed suicides were prevented.
REFERENCES

American Correctional Association Resolution Book.
http://www.aca.org/ACA_Prod_IMIS/docs/GovernmentAffairs/ACA_RESOLUTIONS_BOOK.pdf?WebsiteKey=139f6b09-e150-4c56-9c66-284b92f21e51&=404%3bhttp%3a%2f%2fwww.aca.org%3a80%2fACA_Prod_IMIS%2fACA_Member%2fdocs%2fGovernmentAffairs%2fACA_RESOLUTIONS_BOOK.pdf


**R, RSTUDIO, AND R PACKAGES USED**

**R platforms**


**Packages**


SOURCES FOR NATIONAL STATISTICS

https://adaa.org/understanding-anxiety/generalized-anxiety-disorder-gad
https://www.cdc.gov/mmwr/volumes/67/wr/mm6722a1.htm?s_cid=mm6722a1_w
https://www.phoenix.edu/about_us/media-center/news/uopx-releases-first-responder-
mental-health-survey-results.html

https://www.military.com/daily-news/2019/01/30/active-duty-military-suicides-near-record-
highs-2018.html
https://www.pdhealth.mil/sites/default/files/images/mental-health-disorder-prevalence-
among-active-duty-service-members-508.pdf
http://swampland.time.com/2013/11/05/anxiety-disorders-on-the-rise-in-the-ranks/
https://en.wikipedia.org/wiki/Trauma_and_first_responders
https://www.samhsa.gov/sites/default/files/dtac/supplementalresearchbulletin-
firstresponders-may2018.pdf
https://en.wikipedia.org/wiki/United_States_military_veteran_suicide
https://www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/alcohol-facts-and-
statistics
https://www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5632782/
https://www.psychiatry.org/patients-families/ptsd/what-is-ptsd
APPENDICES

Appendix A: MDOC survey instrument

The original measure was developed by DWCO and is the intellectual property of DWCO. Items cannot be used or re-administered without express, written permission. The original version of the measure is available on DWCO’s website.

To ensure that the measure met MDOC’s research goals, we added a number of custom and additional items to the measure. The complete list of items used is available in the codebook provided with the de-identified survey data.

Out of considerations for length, the complete list of items is not available in this document. Instead, this section provides a summary of the measure.

The survey included measures of:

1. Demographics, e.g., age, gender, race/ethnicity, time in corrections, etc.
2. Outcomes: Employee well-being
   a. Mental health: Symptoms of generalized anxiety, clinical depression, suicidality, post-traumatic stress disorder (PTSD), and alcohol abuse. Mental health also includes indicators of overall subjective well-being as measured by life satisfaction
   b. Physical health: Diagnoses acquired since beginning corrections career
   c. Work health: A range of positive and negative morale indicators, such as intent to quit, career pride, and disengagement
   d. Family health: Perceptions of family strain and the rate or absence of unhealthy family behaviors
   e. Social health: A focus on social relationships at work, including with direct supervisors, coworkers, and offenders
3. Outcomes: Fiscal impacts
   a. Self-reported sick leave use
   b. Self-reported Family and Medical Leave Act (FMLA) use
   c. Self-reported rates of worker’s compensation claims
4. Contributing Factors
   a. Self-reported amount of voluntary overtime worked
   b. Self-reported amount of mandatory overtime worked
   c. Traumatic exposure
   d. Length of time worked in corrections
   e. Employee position and facility
   f. Facility security level: 1, 2, 4, 5

These items were written so that they are appropriate for all staff, including custody, non-custody, parole, probation (including absconder recovery unit), administration, and senior leadership.

The survey measures were authored by various entities:

1. Supervisor-staff relationships
   • Written by DWCO
2. Staff-staff culture
3. Staff-offender culture
   - Written by DWCO
4. Work morale: Dissatisfaction, Demoralization, and Exhaustion
   - Written by DWCO
5. Trauma exposure
   - Written by DWCO
6. PTSD symptoms from the PCL-5
   - Weathers, Litz, Keane, Palmieri, Marx, & Schnurr (2013)
7. The depression scale from the Patient Health Questionnaire (PHQ)
   - Spitzer (1999)
8. The alcohol scale from the PHQ
   - Spitzer (1999)
9. Generalized Anxiety Disorder scale (GAD) – 7 item version
   - Spitzer, Kroenke, Williams, Löwe (2006)
10. Satisfaction with Life Scale (SWLS)
    - Diener, Emmons, Larsen, & Griffin (1985)
11. Adapted version of the Columbia-Suicide Severity Rating Scale (CSSR)
    - Posner, Brown, Stanley, Brent, Yershova, Oquendo...Mann (2011)
12. HEALTH1 (from the Physical Health items)
    - List of 22 physical health diagnoses; written by DWCO
13. Home life items: Withdrawal, Unavailability, and Trauma
    - Written by DWCO

Appendix B: Dimension reduction methods

Before estimating the path model, we conducted dimension reduction for each of the Outcomes in this study. We used several different methods, depending on the nature of the items. We performed two sets of dimension reduction. In the first set, we scored scales that were intended by their authors to be scored. In the second set of dimension reductions, we combined scores from the first set with additional items to form the scores for each Outcome dimension.

We used four methods to create scores for the items: principal components analysis (PCA), confirmatory factor analysis (CFA), clinical scoring guidelines (where applicable), and sums. Table B1 summarizes the scoring methods used in this first step. When scales were scored in more than one way (e.g., CFA and Clinical), we used the different score formats in different analyses. **Because the clinical scoring in this report is not diagnostic, we urge that interpretations and reports of these study results do not make claims that people have conditions unless they were self-reported in HEALTH1.** We created summary scores for each of the 6 Outcomes in this study and used them in the path model.
Table B1. Dimension reduction (scoring) methods used for scorable scales

<table>
<thead>
<tr>
<th></th>
<th>PCA</th>
<th>CFA</th>
<th>Clinical</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Supervisor-staff relationships</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Staff-staff culture</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Staff-offender culture</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Work morale</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>5. Trauma exposure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. PCL-5</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>7. PHQ: Depression</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>8. PHQ: Alcohol</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>9. GAD-7</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>10. SWLS</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>11. CSSR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. HEALTH1</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>13. Home life items</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

**Scoring of the scales that were intended by their authors to be scored**

PCA was used to score scales when the items were designed to measure similar content, but they were not measuring symptoms of an underlying hypothetical process or construct. CFA was used when items were intended to measure an underlying hypothetical process or construct. Underlying hypothetical constructs are constructs that we are reasonably sure exist as unique entities, but which we cannot see. Examples include: depression, IQ, and personality. Items that measure these constructs are attempting to summarize the extent to which a person has that construct. In contrast, PCA is designed to measure items that evaluate similar content but are not caused by an underlying hypothetical construct. As an example, socioeconomic status (SES) can be measured by a range of factors: how much money a person has, how expensive their house is, how many assets they have, and so forth. However, there is no underlying quality within the person that causes them to be of a certain socioeconomic status. Instead, SES is a summary indicator of features that are due to many factors: education, family history, institutionalized racism, luck, and so forth. PCA and CFA are mutually exclusive methods. One or the other is appropriate—but not both—because they are conceptually opposed to each other: either the items measure a single underlying hypothetical construct (CFA) or they do not (PCA).

PCA was used with supervisor-staff relationships, staff-staff culture, and staff-offender culture. These three sets of items each measured content that was associated with a coherent theme, but none of these item sets could be said to be caused by a single underlying construct. These items are instead reflective of many features that contribute to culture and relationships in corrections settings. To conduct the PCAs, we used the `princomp` function in base R and the `factoextra` package (Kassambara & Mundt, 2017) to assist with factor score extraction for each respondent. The first factor for each of the three scales explained between 65% and 72% of the variance in the items for all three scales. Because the data had a high amount of missingness and the `princomp` function cannot handle missing data, we used mean values for each of the scales instead of using PCA scores. PCA is a dimension reduction method that uses all item variance, with the result that the PCA scores and observed scores (e.g., sums, averages) were correlated at least .98 for all three scales. We calculated the mean values to ignore missingness (using `na.rm = TRUE`), and we reverse-coded items where applicable. Using means instead of sum scores allowed participants with missing data to have scores on the same scale as participants.
with complete data; had we instead used sums, participants with missing data would have had artificially deflated scores.

Responses to the Trauma Exposure, PHQ: Alcohol, CSSR and HEALTH1 items were summed. These responses were summed because our analytical interests included the number of items endorsed for each.

CFA was used with the remaining scales. We used the lavaan package (Rosseel, 2012) to conduct the CFA analyses. To account for the missing data and non-normality of the item distributions, we used the MLR estimator and the missing = “ML” function. Bartlett scoring was used to extract factor scores for each respondent. For most CFAs, standardized pattern coefficients (i.e., item-factor loadings) exceeded .71, the minimum value necessary for at least 50% of an item’s variance to be explained by a latent factor. However, not all items fit this well, which meant that not all models met the typical fit index criteria of RMSEA <= .05, SRMR <= .05, CFI >= .95 (Hu & Bentler, 1999; Kenny & McCoach, 2003; Yu, 2002).

The factor scores for the PCL-5, PHQ: Depression, GAD-7, and SWLS were formed from the entire set of each scale’s items. The Work Morale and Home Life items each formed several factors. The Work Morale items formed three factors: Dissatisfaction, Demoralization, and Exhaustion. The Dissatisfaction items measured respondents’ job pride, desire to quit, and overall job satisfaction. The Demoralization items measured respondents’ job motivation. The Exhaustion items measured the extent to which respondents feel mentally and physically exhausted after work. Five of the Home Life items did not successfully fit in any factor. Those non-fitting items measured satisfaction with home life, getting negative feedback from family members about a corrections career, and having trouble with childcare. The remaining items formed three factors: Withdrawal, Unavailability, and Trauma. The Withdrawal items measured the extent to which respondents reported social withdrawal at home such as irritability, not wanting to interact, and having little energy for family. The Unavailability items measured the extent to which respondents felt that a corrections career took time away from family, including scheduling conflicts and not having time for family activities. The Trauma items measured the extent to which respondents reported enacting trauma symptoms at home, for instance being overly concerned about safety, treating family like offenders, and being untrusting of family.

Four of the scales were published with clinical scoring guidelines: PCL-5, PHQ: Depression, PHQ: Alcohol, and GAD-7. These clinical scoring guidelines resulted in binary variables indicating whether people met the clinical criteria. Clinical scoring criteria are not sufficient to provide a formal diagnosis of any disorders screened for in this study. These clinical scoring guidelines can only determine whether people have a certain number of symptoms that are consistent with that disorder. Diagnosis requires several other activities that can only be completed by a licensed professional, including obtaining a full health history and ruling out other conditions that might explain some or all of the symptoms. Because the clinical scoring in this report is not diagnostic, we urge that interpretations and reports of these study results do not make claims that people have conditions unless they were self-reported in HEALTH1.

Creation of the Outcome scores for entry in the path model
In this section, we discuss the creation of the summary scores for each of the 6 Outcomes in this study. We used these summary scores to create the path model.

For the Mental Health score, we summed: the PCL-5 factor scores (from the CFA model), the PHQ: Depression factor scores (from the CFA model), the GAD-7 factor score (from the CFA model), a reverse-scored factor score from the SWLS, the summed CSSR score, and the summed score for PHQ: Alcohol. We did not use clinical scores for the Mental Health score because we wanted to maximize the available variance in the score. Using binary scores would have reduced the range of the variable. This
summary Outcome score is negatively valenced, meaning that higher scores are associated with poorer mental health.

   For the Physical Health score, we used the summed HEALTH1 score. Higher scores indicate more physical health diagnoses.

   For the Work Health score, we summed the factor scores from the three Work Morale subscales: Dissatisfaction, Demoralization, and Exhaustion. This summary Outcome score is negatively valenced, meaning that higher scores are associated with poorer work health.

   For the Family Health score, we summed the factor scores from the three Home Life subscales: Withdrawal, Unavailability, and Trauma. This summary Outcome score is negatively valenced, meaning that higher scores are associated with poorer family health.

   For the Social Health score, we summed the means from the measures of supervisor-staff relationships, staff-staff culture, and staff-offender culture. This score is positively valenced, meaning that higher scores are associated with better social relationships at work.

   For the Fiscal Impacts score, we summed the MDOC-reported average leave for respondents’ working group, self-reported sick leave during the last 2 months (DEM9), self-reported FMLA leave over the last year (DEM11), and self-reported Worker’s Comp leave over the last year (DEM12).

Appendix C: Path modeling methods

Readers are referred to Kline (2016) for a thorough review of best practices in SEM and path modeling. Path modeling was conducted with the **lavaan** package (Rosseel, 2012). We began with the model in Figure 6. That model includes the Outcome scores for Mental Health, Physical Health, Social Health, Work Health, Family Health, and Fiscal Impacts described in the previous section.

Also included in that model is a set of Universal Inputs. These Inputs include variables that we have discussed elsewhere in this report as potentially being associated with differential rates in the Outcomes of interest. They include: highest security level worked by the respondent (DEM6), the respondent’s gender (DEM1), the respondent’s age (DEM2), the respondent’s race/ethnicity (DEM3), respondent’s self-reported years worked in corrections total (including MDOC and all prior agencies; DEM4), the average MDOC-reported salary for respondents’ working group (weighted for MDOC-reported rates of each salary level’s frequency), self-reported rates of trauma exposure in the last month (TEXP1-TEXP16), and a composite overtime variable (sum of DEM7, DEM8, average MDOC-reported overtime for that working group), and whether respondents work in a custody role (i.e., were in Working Groups 1 or 3).

We included in that model all associations between the variables that (a) were reasonable given prior research in this field or (b) were included among the study’s research questions. Note that this model does not include all possible associations between the variables. We do not include all possible associations between all variables because many of those associations are not actionable or do not make sense. For instance: we have included an association between physical health and fiscal impacts where physical health is considered a precursor to fiscal impacts. This association makes sense when one considers the possibility that poorer physical health can lead to employees taking more sick days or needing more disability leave. Estimating the magnitude of the reverse association makes less sense: in what ways do increased costs to MDOC from sick and disability leave lead to changes in employee health?

Appendix D: Data conditioning & missingness rates

Data conditioning

Several data conditioning methods were used in order to ensure that the survey responses were valid and appropriately representative of the each MDOC work group. A total of 4,551 individual
samples responses were captured. As the survey does not allow for participants to resume earlier sessions, these raw responses were then checked for duplicates (e.g. if a participant started a survey and later re-started the survey, both records would appear in the raw data). These duplicates were then removed from the raw data. Additionally, if a participant did not answer any questions, these records were removed. Given this data treatment, there were a total of 3,502 unique participants representing a 29% response rate. Finally, if a participant did not answer one or all the items regarding gender, race, and/or workgroup, the record was removed. As a result, 300 records were removed, though the missingness rate of these records were very high (90%), so there was little information lost. These data conditioning steps resulted in a final sample size of 3,502 units representing a 29% response rate out of the total possible sample size of 12,281 (per demographic information provided by MDOC).

Missing data rates
The average survey participant answered 73% of the survey (e.g. 73% of the response options were completed). Additionally, the range of responses were from a minimum of 3.5% of the items answered to a maximum of 95% of the items answered.

Appendix E: Survey comments
A total of 952 respondents (27%) left 1281 comments that were more substantive than “thank you” or a greeting. In this Appendix, we provide samples of those comments, organized by content in this report, and with potentially identifying information removed.

Mental health
In this section we are providing comments about MDOC employees’ mental health difficulties. These comments are important because they illustrate the level of staff’s frailty and vulnerability in this very critical area of health.

1. “I’ve lost my family to this job, I’ve lost my health to this job, and I feel like I am losing my sanity to this job among other things. The powers that be do not care about me. They have directly told me that the inmates mean more than I do... If I don't receive help in the form of quality of life and equalization of home life and work life, I'm afraid something awful is going to happen........”

2. “I have worked for the MDOC for nearly XX years. I suffer from anxiety, depression and PTSD. I feel the department could do more to deal with these situations and provide more help for those in need. When incidents occur, such as deaths, we are left to deal with them on our own. This includes suicide of fellow employees. I would never recommend anyone under the age of 25 to begin a career with the MDOC. I was XX when I started and it has severely impacted my life and personality.”

3. “After being assaulted occupational health doesn’t care about your mental health after the situation. They want you to go back to work. It is like pulling teeth trying to get days off to mentally collect yourself. I was off XX days after being assaulted. I wanted more, but they refused to give it to me. I am currently attending counseling to help me deal with the anxiety I still have from the assault. It is sad how we are treated after an incident like this.”

4. “Corrections is a strange mix of anger, despair, sadness and some comic relief all on the same work day. The use of mental health days might be a good idea for staff as there are days when I took sick leave for that purpose.”
5. “This job has changed me!!!! I'm not happy and I want to be done with this chapter of my life. I take leave from work almost every week. I'm in lost time for my sick leave use!!! I have X more years to work before I can retire. I don't know how I'm going to make it. It is affecting my home life. My hobbies don't make me happy anymore. I have no energy and I only sleep about 4 hours a day. My body feels bad and I don't feel good. Please help.”

6. “The MDOC has ‘sick’ leave that we can use for doctor's appointments, children's sickness, etc. I wish that we could use it for MENTAL health as well, since sometimes we just need a day off due to stress/anxiety! Yet I feel like if I were to actually put that down as the ‘reason’ (we HAVE to put down the reason for sick leave usage), it would be a ‘red flag’ and not be acceptable as a reason to use the sick leave. So we just put ‘headache’ or ‘stomachache’ . . . . It's like any kind of mental health issue or reason is taboo, yet we're under more stressful conditions than the average worker.”

7. “I don't feel like there is enough ‘safe’ support when we're struggling emotionally and there definitely isn't any understanding or enough time given off when we're going through a tough time. As a single parent that has zero annual or sick time due to sickness, surgeries and family issues/trauma, I can't take the time I need to heal without worrying about losing my job or pay. They don't even make any accommodations to adjust our schedules or allow us to work from home.”

Depression

In this section we are providing comments about MDOC employees’ struggles with feelings of depression. These comments are important because they shed light on a topic that correctional employees rarely talk about publicly. They are also important because severe depression increases the risk of suicide, and as was stated earlier, suicide rates among MDOC employees are extremely high.

1. “Approximately XX years into my career I was taken off work and diagnosed with clinical depression. I was lashing out at family members (wife, daughter, mother) as well as strangers, and was having severe issues trying to control my anger/temper, which was never much of an issue prior to hiring into the MDOC in XXXX. After XX weeks off work and receiving counseling I began to get better and have more control over my emotions.”

2. “I've been on anti-depressants for over 2 years.”

3. “Staffing issues are causing severe depression amongst staff. Mandatory overtime is becoming a serious issue. Resolutions need to be sought to combat these issues.”

4. “Administration causes most of the anxiety, sadness, and depression that most Officers feel.”

Generalized Anxiety Disorder

In this section we are providing comments about MDOC employees’ struggles with anxiety. These comments are important because they describe what employees experience, what they attribute their anxiety to, and how they may be attempting to deal with it.

1. “A petty investigation that was initiated by a level XX who had no idea what was going on at the facility and didn't bother to ask questions prior to filing an investigation caused me severe anxiety for several months. I have never experienced anything like it and it forever changed my rather jovial work life. I was completely exonerated, but no one ever came to me and asked what happened.”

2. “The stress, expectations and work load cause severe stress and anxiety daily. Supervisor is very condescending and often does not understand what I do as a job. She is very critical and her expectations are over the top.”
3. “Most of my stress and anxiety the past few months was due to my wondering if I would be able to get a summer vacation so I could spend time with my family and whether or not I'm going back on the mandate list (that I worked and looked forward to getting off of). Instead I have to worry about all this in an already stressful environment.”

4. “I developed Anxiety, depression, and helplessness when working at another corrections facility. I felt that was the worst job I had ever worked due to my direct boss being a micromanager and very unprofessional. She used bullying and lies. I tried to report it, but it kept coming back on me as my fault. This created much fear and daily upset for me. I went to work unhappy every day and this caused my health to go down.”

5. “Occasional panic attacks in crowded/busy places.”

6. “The Offenders have never been the true problem, that's the easy part, the feeling of abandonment from the employer has been the worst of my anxiety. It feels as if we do not matter to the State of Michigan, as an employee and person.”

7. “I am single, straight, HIV positive, have anxiety attacks, feel untrusted by my administration, and can't sleep more than 4 hours at a time. This is due to the profession I have chosen. How does that do for your survey?”

8. “Sexual harassment occurs daily by male prisoners towards female staff, which is draining. Constant worry (which you learn to bury deep inside) about being assaulted as there are way more prisoners than staff and they are younger and in far better physical health.”

Post-traumatic Stress Disorder and traumatic exposure

In this section we are providing comments about MDOC employees’ struggles with the effects of traumatic exposure and PTSD. These comments are important because they vividly illustrate the nature of traumatic exposure that is inherent to working in corrections, and how staff may be affected by it.

1. “I truly believe I have PTSD from the job. I wake up punching, kicking, wife in headlock, etc. This happens on several occasions per month. I do have several days I can't sleep or sleep very little.”

2. “I worked at ___ and saw things that happen to inmates and staff that no one should have ever seen. The nightmares are about them and not the current joint. In the past I have taken my firearms to places to store them, so they weren't in my house. Somedays are scarier than others.”

3. “I have worked at many prisons. I have seen a lot of violence in prisons throughout my career. The things I have seen and been exposed to are not normal to the general public. It’s hard trying to live a normal life working for the Department.”

4. “Due to my career in corrections I can vividly see the faces of prisoners I could not save. Examples are Prisoner XXX the day I had to push in his barricaded door the day he cut his own throat. Comforting and holding prisoner XXX's head still the day he was stabbed in the back of the neck and paralyzed. The prisoners I have performed CPR on who have hung themselves. The prisoners who have attempted to assault me. The prisoners who I have stepped between as they were trying to kill each other.”

5. “Try doing CPR on a dead body and tell me how easy my job is.”

6. “Over my career I have seen so much blood that I'm desensitized to it. Same goes for staff or prisoner assaults.”

7. “I have been spat on, feces thrown in my face, had my XXX broken and nearly ripped off responding, assisted with assaultive prisoners and cell extractions, seen prisoners cut themselves and pull their guts out. Been through a riot where I saw my coworkers bloodied.”

8. “I've been in corrections for XX years. In that time, I have witnessed more prisoner on prisoner assaults than I can even count, have held direct pressure on stab wounds and administered first
aid to many inmates. Not to mention cutting inmates down that were attempting to hang
themselves. All this, and I have had a serious assault on myself by an inmate who cut me with a
razor and then spit on me to try and give me his disease (AIDS). I have had feces and urine
thrown on me. This is not a sob story, but unfortunately, this is the story of many Correctional
Officers here in Michigan who, just like me, are trying to make a living.”

9. “In my career I have dealt with so many suicide attempts that I have received awards for my life
saving performances. I have had just as many blood exposures from various events and have
been assaulted twice. Not to mention the X disturbances I have personally been involved
with....”

10. “I have PTSD from staff assaults and the violence.”

11. “PTSD needs to get addressed immediately. I would tell you guys some real stuff if I thought the
state really wanted to address this issue, however I don’t believe them.”

12. “Our job is extremely stressful, as a sergeant I have seen prisoner and staff end their lives. We
get little credit for the job we do and for our position in the Law Enforcement community. PTSD
runs in high numbers in this profession and no one cares, we are told you can be replaced
tomorrow.”

13. “PTSD is very apparent in corrections professionals after a short period of time in service.”

14. “Staff suffer from PTSD. NO ONE CARES.”

Alcohol Abuse

In this section we are providing comments about MDOC employees’ struggles with alcohol
misuse. These comments are important because they illustrate the severity of the problem. Some of the
comments also show that some staff have taken steps to stop their alcohol abuse.

1. “Work weekends and holidays all the time. You miss out on a lot of family time. That causes
divorce and heavy drinking.”

2. “I don’t think I will ever recover from this job mentally. I pray to GOD he has some life for me
left when I can get out. I just want a few years of happiness and I would be satisfied. I don’t
know what happiness really feels like anymore besides drinking to find it, and that is not the
answer and I know that, but it gives me a little euphoria before and during, but then after the
booze wears off it is the same miserable day, day in day out. Get Saturday off to be hung over
only to start thinking about work on Sunday because you got to go back Monday morning. Sad
time.”

3. “I have life changing injuries from my job. I stopped drinking 18 months ago to save my family.
Overwhelming anxiety. Job contributed to my drinking. Praying to make retirement intact!!!!!!!”

4. “In regard to the question on alcohol use in the past six months, I had to answer ‘no’ because I
have not consumed alcohol in XX years. However, it was because of my job that turned me into
an alcoholic and I was given an ultimatum by my wife in June of XXXX. Therefore, I quit drinking
alcohol to keep my family intact.”

Suicide

In this section we are providing comments about MDOC employees’ struggles with suicidal
thoughts. These comments chillingly illustrate the severity of some of the employees’ hopelessness.

1. “This job is the reason I drink and hate my life to the point of suicide.”

2. “If I was to go home tonight and put a gun to my head and pull the trigger I would be replaced
immediately. There have been numerous suicides over the years, yet still no one is focusing on
what matters. ... The department doesn't care that I am on the verge of a divorce and that I have
contemplated suicide on numerous occasions. ... Well, to whoever looks at this hope you have a
good night, weekend, day or whatever. Maybe I’ll be here tomorrow, maybe I’ll just finally
follow through and end it all. Take care.”

3. “I have always been able to remain positive and prided myself in a strong work ethic. I only do
now the bare minimum to not get fired. I have never been this depressed or even once thought
about killing myself before I had this job. If I didn’t have a wife and kids, I would have killed
myself years ago. Not that anyone reading this cares, because it is just a show to pretend that
someone actually cares about us. We are just a number that can be easily replaced. But I had
some time to kill, I guess so here it is. Have a good day. Maybe I will be here tomorrow or maybe
I will finally get fed up and kill myself. Who knows, and really who actually cares.”

4. “We are made to work whether we want to or not. I have seen my co-workers/friends commit
suicide, murder-suicides, have had suicidal thoughts of my own. I guess we all are only a step
away from that event sometimes.”

5. “I used to take pride in my career. We are now treated like complete s*#t as officers. I have had
several partners commit suicide and this job has taken its toll on all of us. You can only push a
human being so far before they react to the stresses that have been bestowed upon them.”

Physical health
In this section we are providing comments about MDOC employees’ physical health problems.
These comments are important because they illustrate the level of staff’s difficulties in this area.

1. “We need better medical benefits. Many of us have more medical problems because of the
conditions we have to work in now. Half of us are having to work sick all of the time.”

2. “I stress eat. I have gained a lot of weight and I am trying to lose it the right way.”

3. “My health has declined since working for corrections I used to be a good athlete. Now I can
barely run, and my heart rate is abnormal. The stress in corrections makes my life hard to live.”

Work health
Suggestions for improving work conditions
In this section we are providing comments that are suggestions for improvement of work
conditions or to help counter job stress. These comments are important because they are actionable
and based on years of experience.

1. “Would like a weight room or exercise classes offered during lunch.”

2. “Allow field offices to have work-out facilities, job-sharing, more alternative work schedules, and
work from home options.”

3. “There needs to be a committee of veteran employees who give advice and share with people in
Lansing as to why things are done the way they are inside facilities.”

4. “Due to the high level of stress in corrections, much of the focus needs to be directed towards
appropriate mental health treatment for staff to address their needs. So many times I see PTSD
in corrections officers, but administration just brushes it off. There needs to be debriefing after
and ongoing after a stressful situation. Administration needs to be more helpful and less
judgmental. We need more appropriate mental health treatment for staff.”

Exhaustion
In this section we are providing comments about staff feeling exhausted by the job emotionally
and/or physically, demoralized, and disengaged. These comments are important because they offer us a
glimpse in the employees’ inner world, as they share thoughts and feelings that are not often shared with others.

1. “This is an exhausting career for which the corrections professionals are underpaid and definitely overworked. We are absolutely underappreciated by the public and even upper management for all the work and extras we do.”

2. “Even working in an office setting for corrections can be more stressful than most other office settings. We are still exposed to terrible/violent things. And we see the effects that it has on custody staff which is also very hard to deal with.”

3. “I regret hiring in to this department because of how it has affected my personality, my health, my confidence and caused me to become so negative. It saddens me to answer these questions this way. I don’t feel like myself anymore.”

4. “There is no pride in this job. The state has beat the employees down to the point there is no reason to stay here. Everything that was a benefit to working here, (pensions, vacations, benefits) the state has been taking away from the employees. There is no benefit for new employees to stay here, when there are other jobs with less pay, but better benefits and no inmates. The morale here is non-existent, it is staff against staff, inmates against staff, and supervision staff do not back staff when it comes to issues with inmates. In this environment we as a facility need to be able to trust each other. That does not happen. What will it take for the state to open its eyes and see that they have put corrections staff in a very dire situation?”

**Employee benefits**

In this section we are providing comments about loss of benefits or expected loss of benefits, such as pensions, vacation days, or exemption from mandatory overtime. These comments are important because they address employee concerns and suggest opportunities for benefit messaging.

1. “The state government changes contractual agreements that have been set up for years without any say from us. Officer shortages are pushing more of us to the brink of quitting because of mandates for overtime. It feels like no one cares about us anymore and that the whole state wants us gone. ... I don't wish this job on anyone ... EVER. Oh, and to add to it all we have the possibility of being murdered on a daily basis. So to recap, the state hates us, our administration hates us, our supervisors hate us, and the inmates hate us. Imagine going to a job where you are hated by everyone, every day.”

2. “This job used to be better but, with all the benefits being taken away and the constant threat of more prison closures, it just isn’t worth working here anymore. If I could find another job with about the same pay and benefits I would leave immediately. I would even consider taking a substantial pay cut just to not have to work here anymore. Most days we are treated just like an inmate. Inmates get more given to them, and we get more taken from us.”

3. “This job has lost almost all its benefits. I wouldn't recommend this job to anyone whatsoever. We deal with a ton of stressful events that take place daily. So to take away all of the benefits is absolutely the wrong action.”

4. “All the state does is take and take and take. The state wonders why they can’t hire or keep anyone. I see no benefit to staying here. You’re basically taking my future from me and my family year after year.”

5. “There was a time when I trusted the administration to ‘have our back’ against the worst of society & their constant attacks, but not anymore. Cameras are now used more against staff than prisoners, there is no longer room for human error. We shake ourselves down prior to entering the prison every day, however, people aren't perfect, sometimes you miss something (a cellphone, a pen that isn't see-through, nail clippers, whatever) & you catch it as you go
through the metal detector. In the past you would simply take it back out to your car. But that is no longer the case, they are quick to put you on stop order. Human error is now considered to be intentional behavior. We are treated as an offender.”

6. “There's nothing to look forward to except a mediocre paycheck. There's no pension, healthcare package and now I will never get off the mandate list. Thanks Civil Service. I never see my family or friend because of my sh##&y schedule and working every holiday and weekend. I am looking for a new job.”

7. “Makes no sense that there is a survey concerned about my wellness when the days off I've earned to get away and work on my personal wellness can't be used due to civil service rule changes.”

8. “Nothing is being done to keep me or any staff to stay or hire new staff. If the state keeps taking, no one will stay, and the state will have to figure out who's going to work in the prison.”

9. “I honestly wish I could start all over and never would have applied for this job. The State of Michigan is constantly taking more and more away from us and we are left with the bare minimum for benefits. Our Union is being crushed by the Civil Service Commission and therefore we are extremely low staffed. ... It is sad to see the promises that aren't kept by the State of Michigan.”

10. “Now the state or civil service is taking everything away from us C/Os, charging more for stuff and eliminating comp time into formula for days off. It's not fair to people especially with seniority that have worked their way up to it. When I had no time in I got nothing given to me, but the longer I worked and better seniority I got the better things were. Nowadays new employees come in and the state just gives them everything and seniority counts for nothing except a vacation pick maybe. They started by getting rid of the pension years ago, and are doing away with bid jobs, making vacation picks with prime and none prime weeks. Word has it everyone is going on the mandate list as of January 1, 2019. That's just wrong. My facility closed down and I have a one-way drive of XX miles to work. What happens when I get mandated? That's an automatic sick call there. I am ready to go on stress leave. I can't take this, and my life has really changed the last month and getting worse by the week. ... The state is chasing people out of the department with their horrible decisions.”

11. “This was the worse ‘career’ choice. I could go in there and be assaulted or killed, and have to deal with diseases, and when my ‘career’ is all over what do I get out of it? No pension, no health care.”

12. “I worry I can never retire under the defined contribution retirement plan, and if I am alive, I will still have to work to survive.”

13. “Over the last 20 years we have consistently lost benefits, and with civil service changing union negotiated items, the State has proven they don't care about career employees, so we have started to not care about them. Sick leave and FMLA leave will continue to rise due to people not being dedicated to the job anymore. I never thought I would be one of them, but enough is enough.”

14. “As a single parent that has zero annual or sick time due to sickness, surgeries and family issues/trauma, I can't take the time I need to heal without worrying about losing my job or pay. They don't even make any accommodations to adjust our schedules or allow us to work from home.”

15. “You get called to the office if you use a sick day.”

16. “Half of us are having to work sick all of the time.”

17. “I feel the department needs to start punishing employees for abusing their sick and FMLA time. This is causing so many mandates and stress on the younger staff.”
18. "Mandatory OT continues to rob me of being there to see my children grow up. I miss their
citals, and parent teacher conferences because of being mandated to work. Central
office doesn’t care because they get every weekend and holiday off, and never have to work
over 8 hours. Vacation time is extremely hard to get now because of the new annual leave
process which makes it next to impossible to enjoy any kind of vacation with my kids unless I
take them out of school. Because of MOT my wife continually has to find a baby sitter or take
over my part of the home duties to keep everything flowing smoothly. It’s hard to hear from my
young children that ‘I never get to see you any more daddy.’”

**Employee satisfaction**

In this section we are providing comments made by employees who are satisfied by their job
and happy to be working for MDOC. These comments are important because they offer encouraging
comments of employees’ appreciation of their job and satisfaction with their employer.

1. “I like my job, the benefits, the flexibility to promote or not, and pay and job security are better
than most.”
2. “MDOC is a good place to work.”
3. “I would work for the MDOC again. I am near the end of my career and at this time satisfied.”
4. “I love my job.”

**Family health**

In this section we are providing comments about ways in which “work goes home” at the end of
employees’ workday. These comments are important because they provide insight into how corrections
work can infiltrate and undermine employees’ most critical support system—their family relationships.

1. “This job has weighed my home life down so much that my best friend in my whole life, my wife,
waits a divorce. There seems to be no changing her mind and it makes my life feel like it’s
falling apart.”
2. “I oftentimes wake up in cold sweat and worry that I might have enforced the rules or told the
wrong offender ‘No!’ Therefore, that offender is coming to get me, so I have purchased home
alarms and cameras. I fear my X-year old daughter could get hurt, because I am following and
enforcing institutional rules by doing my job.”
3. “Lack of separation between work and home/family/personal life. FOA Managers at 15 level and
above have been told they’re to be available by state cell 24/7, weekends, holidays, no matter
what else they have to do. This is for emergencies, but that term can be applied if desired to
almost anything ... Sometimes feels like I'm never off duty and I feel anxiety about doing things
for myself even if nobody's calling because of the pressure to always be available. I'm checking
my state phone constantly on weekends, before I go to bed, when I wake up, get out of the
shower, do work around the house. Any moment my family is occupied is an opportunity to
check the phone .... My spouse actively searches for job opportunities for me in hopes I will
quit.”
4. “Since working in MDOC I am much more worried about my children being harmed. I am always
on the lookout and extra vigilant.”
5. “I signed up for this but knowing offenders may be able to get to my family is the hardest part.”
6. “I was the victim of sexual assault by a prisoner .... This job and these events have had a HUGE
impact on my family life.”
7. “I have missed out on the past 4 years of my children's lives. Something needs to be done.”
8. “There is no flexibility for non-custody staff on hours or anything. When you’re alone with responsibilities, it would be great to have more flexibility. Be able to work 4 10's or 12's or anything that gives us time to make doctor appointments, etc. for us and our kids. I don't get to use my leave time for fun/relaxing, I have to save it for regular appointments and things for my kids.”

9. “The biggest issue I have regarding prisoners is the repeated sexual gestures toward me. It has affected my sexual life at home.”

Social health

In this section we are providing comments about effects of supervisor and coworker relationships on staff wellness. These comments are important because they provide insight into how social interactions at work can undermine employees’ sense of belonging to a team, possibly leading to increasing frustration, discouragement, and eventual disengagement.

1. “Administration and second line supervisors cause much more stress than prisoners ever do. Way too much micro management from administration.”

2. “Corrections is just a cutthroat occupation. Most of the time you have to beware of those co-workers that only want to rise in the ranks and will stab their co-workers in the back to achieve their goals. This is just a very 'old boy' network full of people with their own agendas.”

3. “Very negative environment with staff back biting one another, some like to start and spread rumors and talk about each other in front of inmates.”

4. “Agents are not held to the same standard and the agents that cannot perform basic work duties are never disciplined; instead their work load is reduced, and the agents that are capable or don't complain, are left to pick up the slack. This is prevalent in this office and causes animosity towards supervisors and coworkers. In turn, the 'good' agents are transferring out of the office and the quality of work is suffering.”

5. “I don't like how people in the department treat and the way they talk to each other.”

6. “Senior officers treat those with less time like they're garbage.”

7. “The State of Michigan and the MDOC treat the Prisoners better than Employees. We are constantly understaffed and told to do more with less. We have been cut to the bare bones as facilities and they keep taking more. The Assault Rates and Violence are at an all-time high, you can literally find drugs and weapons on multiple Prisoners every day. Gang Activity is everywhere, and we don't have the resources to combat the problem. Prisoners use the Federal PREA mandate to manipulate false charges on staff to get them moved for doing their jobs. The Warden at my Facility stated he does not care if there is no evidence. All investigations must state insufficient evidence, not no evidence, because that stays in the employee’s records. Work related issues that used to be handled by verbally speaking with staff are now sent for discipline for suspensions and terminations. Sergeants are not allowed to use their own judgement and training anymore or they face being disciplined as well. If an employee tries to bring forward any issues or seek help, they get targeted by the Administration and the write ups begin. I feel like I'm drowning every day.”

8. “Management does not effectively communicate with staff and is not truthful.”

9. “My problem is the racist environment that is overwhelming here at my facility. It is impossible to do your job and feel appreciated.”

10. “There are many issues with my supervisor. He causes the majority of his staff more anxiety than any other part of the job.”

11. “The failing of Administration to provide me with a safe and non-hostile work environment involving co-workers has been the cause of my health and wellness issues.”
12. “My coworkers are 90% of my stress. They are extremely lazy. I have to go behind them to make sure the duties are done, and they have very poor attendance. I cannot count on most of them to help me in an extreme emergency. I feel like I am working alone most days even when they are on shift!”

13. “In my XX-year career there is not a day that goes by that I don't completely agree that supervision/administration causes more stress than the offenders.”

14. “The atmosphere in our office has become more confrontational and ‘CYA’ than cooperative. ... Supervisor discourages communication between agents and clerical. Clerical work is distributed unequally, which is causing resentment. Clerical input is not valued. As a result, those who once took initiative are becoming discouraged and cowed and are less willing to help.”

15. “Chain of Command is a joke in FOA, because no one follows it. Supervisors are blamed for whatever our staff does not do or forgets to do.”

16. “Recently had a new supervisor hired in our office which greatly affected the answer to most of the questions. For the XX months prior to new supervisor I had used over XXX hours of leave and would stress excessively about coming into work. I was not the only one having issues and prior supervisor clearly only cared about herself and did not care anything about the office.”

17. “The disciplinary process here is very disheartening. It’s very discouraging and lowers the staff morale. There is absolutely no compassion for the black and gray here. EVERYTHING is a disciplinary conference as opposed to giving verbal and written reprimands. ... Constant gunning down for such minor things that can be corrected with a verbal or written reprimand is so mentally taxing. Watching co-worker after co-worker go into a conference knowing that the outcome has been decided despite the overwhelming evidence that the decision made is wrong. The number of people with plans to leave is unbelievable!! If the administration would just back their staff for once it would give some kind of indication that the black and gray staff matter. The prisoners get treated better. Show some type of love for those who put their lives on the line for once other than a ‘good job’ email. Stop nailing everyone to the cross and train the staff to be better. They would find that the staff would do just about anything, and probably go above and beyond if they felt appreciated.”

18. “The most stressful thing is the amount of rules they keep adding on and then putting people on investigation for any minor infraction. There is no forgiveness or mercy. New ways of dealing with infractions would greatly decrease the stress. Investigations leave one hanging for 6+mo and that stress is unbearable. You don't know if you will lose your job and house and everything; unsure if you should look for another job. The stress from that is the killer. THIS MUST STOP!!!!!!!!!! They have a hard time keeping staff. Guess why??? They treat us like criminals!!!”

19. “I worry more about unwarranted discipline from my agency than I do the risks of dealing with violent offenders.”

20. “You expect offenders to be violent and aggressive, you don't start out expecting to fight supervision and administration, but they quickly become worse than the prisoners. At least you know who the prisoners are.... Having been stabbed several times I also know that they treat you like you're the criminal. Even if everything is completely on video, from multiple angles. I trust the people I work with. I don't trust the people I work for.”