

An Investigation into the Consequences of Performing Emotional Labour in Mental Health Care

by

Andrea Dawn Dick

A thesis

presented to the University of Waterloo

in fulfillment of the

thesis requirement for the degree of

Master of Science

in

Health Studies and Gerontology

Waterloo, Ontario, Canada, 2011

© Andrea Dawn Dick 2011

## AUTHOR'S DECLARATION

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

## ABSTRACT

*Background:* Previous emotional labour literature has focused on various occupations over the past two decades, including health care professionals. However, there is limited data available in regard to mental health workers, particularly within Canadian research. This limited data reveals a large gap in the literature regarding how mental health workers perform emotional labour, and the potential consequences associated with performing emotional labour on a daily basis among these specialized health care professionals.

*Objectives:* Based on the limited data available, there were three main objectives for this research study: (1) to identify which method of performing emotional labour was most frequently used by mental health workers when interacting with patients; (2) identify the consequences associated with performing emotional labour for those in the mental health field- including burnout, job satisfaction and perceived stress; and (3) identify which of these explanatory and responses variables, as mentioned above, predict the health and well-being of mental health workers.

*Methods:* Over 2,000 mental health workers were contacted via email to participate in an online survey in regard to occupational stress. Of the 397 respondents, 296 were useable for data analysis. Data was collected in the Spring of 2010.

*Measurements:* Standardized and non-standardized measures, including the Emotional Labour Scale (ELS), Maslach Burnout Inventory- Health Service Survey (MBI-HSS), Minnesota Satisfaction Questionnaire (MSQ), and the General Health Questionnaire (GHQ-12), were

combined into a larger battery. Demographic, health, work and stress management data were also collected.

*Data Analysis:* Pearsons product moment correlation coefficient (Pearson's  $r$ ) and stepwise multiple regressions were used for hypothesis testing. Univariate analysis, mean comparisons, and cross tabulations were used to investigate the demographics of the sample. Cronbach  $a$ 's were run in order to test the measurements reliability and validity used within this study. Additionally, mean comparisons were run to further investigate the possibility of response bias by comparing the responses of each scale items with one's working knowledge of the overall scales and measurements.

*Results:* For the first study objective, the analysis revealed mental health workers engage in hiding emotions with patients more often than faking emotions or deep acting. For the second and third study objectives, several of the hypothesized relationships among the variables were identified. The analysis revealed that faking and hiding emotions predicted emotional exhaustion and perceived stress; hiding, faking, gender and age predicted depersonalization; faking, deep acting, hiding, and age predicted personal accomplishment; while faking, age and deep acting predicted job satisfaction. Additionally, only perceived stress predicted psychological distress, while perceived stress, emotional exhaustion, and job satisfaction predicted physical symptoms. Findings also suggested differences among mental health workers in emotional labour performance, and the associated consequences, by occupational title, age, gender and years of practice. No differences were identified among those with working knowledge of the scales used

in this study to those without any in regard to scale responses. With two exceptions (depersonalization: .64, and GHQ-12: .57), all measures had  $\alpha$ 's of .70 or higher.

*Conclusions:* The results of this study were supported by previous literature. However, Lee and college's (2010) more recent findings of the relationship between hiding emotions and physical symptoms were not supported, as no relationship among mental health workers were found. Furthermore, not all of the hypothesized associations were supported, including the association between deep acting and the MBI-HSS dimensions- (i.e. personal accomplishment), or between the predictors and the health and well-being variables. Further research is needed into the 'black-box' of the emotional labour process, as the impact on the health and well-being of mental health workers remains unclear.

## ACKNOWLEDGEMENTS

I would like to give my deepest gratitude to the following individuals who provided me with the support and advice to complete this thesis:

- First I would like to thank Dr. Philip Bigelow, my thesis supervisor, for his continuous support and guidance on this project. I appreciated your time with me and answering any questions that I had. Also, thank you for always being positive throughout this whole process.
- I would also like to thank my committee members, Dr. Paul McDonald and Dr. Paul Stolee for their time and advice on this project. Thank you both for making this process less stressful overall.
- A special thank you goes out to Dr. Raymond T. Lee for giving suggestions for my thesis topic, and advice, as well as providing information on the appropriate measurements for this study.
- Additionally, special thanks go out to Dr. Carol McMaster and Laura Both for providing me with a great reference for my Masters.
- I would like to thank my parents, Ellen and Bill Dick, for their love, support and financial aid throughout the years.
- Also, thank you to my extended family, Helen and Tom Jurkovic for always being proud of my achievements as well as making sure I was always well fed.
- And last but not least, I would like to thank Paul Jurkovic, my partner in crime, for all of your love, support, and patience throughout this whole process.

## DEDICATION

This thesis is dedicated to my partner, Paul Jurkovic, and to my parents, Ellen and Bill.

## TABLE OF CONTENTS

AUTHOR'S DECLARATION .....	ii
ABSTRACT .....	iii
ACKNOWLEDGMENTS .....	vi
DEDICATION .....	vii
TABLE OF CONTENTS .....	viii
LIST OF TABLES .....	xii
LIST OF FIGURES .....	xiv
1.0 INTRODUCTION .....	1
2.0 LITERATURE REVIEW.....	5
2.1 What is Emotional Labour? .....	5
2.2 Previous Research Findings .....	7
2.3 Consequences of Performing Emotional Labour .....	8
2.3.1 Burnout .....	8
2.3.2 Job Satisfaction .....	11
2.3.3 Perceived Stress .....	12
2.3.4 Health and Well-Being .....	14
3.0 WORKING MODEL .....	16
4.0 METHODS .....	18
4.1 Procedures .....	18
4.2 Respondents .....	20
4.3 Inclusion Criteria .....	21
4.4 Exclusion Criteria .....	21



4.5 Measures .....	21
4.5.1 Emotional Labour Scale (ELS) .....	22
4.5.2 Maslach Burnout Inventory-Health Services Survey (MBI-HSS) .....	24
4.5.3 Minnesota Satisfaction Questionnaire-short form (MSQ-short form) .....	28
4.5.4 Perceived Stress Scale (PSS) .....	29
4.5.5 Health and Well-Being Measures .....	32
4.5.5.1 General Health Questionnaire-12 (GHQ-12) .....	32
4.5.5.2 Physical Symptoms Checklist .....	34
4.6 Explanatory Variables .....	36
4.7 Response Variables .....	36
4.8 Demographic and Control Variables .....	36
4.9 Data Cleaning .....	38
4.10 Data Analysis .....	38
4.10.1 Statistical Software .....	38
4.10.2 Pre-Analysis .....	39
4.10.3 Outliers and Missing Data .....	39
4.10.4 Analysis of Sample .....	39
4.10.5 Measurement Analysis .....	40
4.10.6 Hypothesis Testing .....	41
4.10.6.1 Pearson Product Moment Correlation Coefficient.....	41
4.10.6.2 Multiple Linear Regression Analysis .....	41
5.0 RESULTS .....	43
5.1 Response Rates .....	43

5.2 Demographic Statistics .....	47
5.3 Work Statistics .....	50
5.4 Health Statistics .....	53
5.5 Stress Management Statistics .....	55
5.6 Program/Seminar Participation Statistics .....	57
5.7 Scale Knowledge or Use among Sample .....	59
5.8 Emotional Labour Performance of Mental Health Workers .....	62
5.9 Burnout among Mental Health Workers .....	63
5.10 Job Satisfaction among Mental Health Workers .....	65
5.11 Perceived Stress of Mental Health Workers .....	66
5.12 Health & Well-being of Mental Health Workers .....	66
5.13 Correlation Matrix .....	70
5.14 Cronbach Alpha's .....	72
5.15 Multiple Regression Results .....	73
5.15.1 Predicting Emotional Exhaustion.....	73
5.15.2 Predicting Depersonalization .....	73
5.15.3 Predicting Personal Accomplishment .....	75
5.15.4 Predicting Job Satisfaction .....	76
5.15.5 Predicting Perceived Stress .....	77
5.15.6 Predicting Psychological Distress .....	78
5.15.7 Predicting Physical Symptoms .....	79
5.16 Findings of Test Hypotheses .....	81
6.0 DISCUSSION .....	83
6.1 Sample .....	83

6.2 Scales and Measures .....	87
6.3 Correlations .....	88
6.4 Interpretations and Findings .....	88
6.5 Limitations and Implications .....	90
6.6 Recommendations for Future Research .....	92
6.7 Recommendations for Real World Applications .....	93
7.0 CONCLUSION .....	95
REFERENCES .....	96
APPENDIX A .....	104
Pre-Notification Email.....	105
Survey and Contest Email .....	106
First Follow-up Email .....	107
Second Follow-up Email.....	108
Thank You Email .....	109
Survey .....	111
APPENDIX B .....	122
Table 28 <i>Description of AAPOR ‘Final Disposition Codes for Interview Surveys of Specifically Named Persons’</i> .....	123
Table 29 <i>Means, Standard Deviations, Reliability Estimates, and Correlations among the Variables (N = 296)</i> .....	124
Table 30 <i>Compared Means of Mental Health Workers by Occupational Title</i> .....	125
Table 31 <i>Compared Means of Mental Health Workers by Gender</i> .....	126
Table 32 <i>Compared Means of Mental Health Workers by Age (&lt;50 years, 50≥ years)</i> .....	127
Table 33 <i>Compared Means of Mental Health Workers by Years in Practice (&lt;20 years, 20≥ years)</i> .....	128

## LIST OF TABLES

Table 1	<i>Categorization of MBI-HSS Scores for Mental Health Workers According to Maslach &amp; Jackson's Sample (n = 730).....</i>	27
Table 2	<i>MSQ Cut-Off Scores Indicating Levels of Job Satisfaction .....</i>	29
Table 3	<i>24-Items from the Physical Symptom Checklist .....</i>	35
Table 4A	<i>Description of Email Campaign Reports .....</i>	45
Table 4B	<i>Description of Exclusion Criteria .....</i>	46
Table 5	<i>Demographic Statistics .....</i>	48
Table 6	<i>Work Statistics .....</i>	52
Table 7	<i>Health Statistics .....</i>	54
Table 8A	<i>Stress Management Statistics .....</i>	55
Table 8B	<i>'Other' Stress Management Statistics .....</i>	56
Table 9	<i>Compared Means of Stress Management by Gender .....</i>	57
Table 10	<i>Program/Seminar Participation Statistics .....</i>	59
Table 11	<i>Compared Means of MBI Responses by MBI Knowledge/Use .....</i>	60
Table 12	<i>Compared Means of ELS Responses by ELS Knowledge/Use .....</i>	61
Table 13	<i>Compared Means of MSQ Responses by MSQ Knowledge/Use .....</i>	61
Table 14	<i>Compared Means of PSS Responses by PSS Knowledge/Use .....</i>	61
Table 15	<i>Compared Means of GHQ-12 Responses by GHQ-12 Scale Knowledge/Use .....</i>	62
Table 16	<i>MBI Cut-Off Score Comparisons .....</i>	65
Table 17	<i>Compared Means of Perception of Overall Health by Sick Days in Past 12 months .....</i>	68
Table 18	<i>Compared Means of Perception of Overall Health by Minutes of Exercise Per Day .....</i>	69

Table 19	<i>Compared Means of Perception of Overall Health by Smoking Habit Per Day</i> .....	69
Table 20	<i>Compared Means of Perception of Overall Health by Units of Alcohol Consumption Per Week</i> .....	69
Table 21	<i>Stepwise Regression Analysis for Variables Predicting Emotional Exhaustion</i> .....	73
Table 22	<i>Stepwise Regression Analysis for Variables Predicting Depersonalization</i> .....	74
Table 23	<i>Stepwise Regression Analysis for Variables Predicting Personal Accomplishment</i> .....	76
Table 24	<i>Stepwise Regression Analysis for Variables Predicting Job Satisfaction</i> .....	77
Table 25	<i>Stepwise Regression Analysis for Variables Predicting Perceived Stress</i> .....	78
Table 26	<i>Stepwise Regression Analysis for Variables Predicting Psychological Distress</i> .....	79
Table 27	<i>Stepwise Regression Analysis for Variables Predicting Physical Symptoms</i> .....	80

## LIST OF FIGURES

<i>Figure 1</i>	Model of the Hypothesized Relationships .....	17
<i>Figure 2</i>	Drop Out Percentage (N= 397) .....	46
<i>Figure 3</i>	Description of Incomplete Scales .....	47
<i>Figure 4</i>	Description of Respondents' Degree/ Certification .....	49
<i>Figure 5</i>	Specialization of Psychologists (n = 208) .....	50
<i>Figure 6</i>	Does your place of work provide any programs/seminars for reducing stress? .....	58
<i>Figure 7</i>	Percentage of Scale Knowledge or Use among Sample .....	60
<i>Figure 8</i>	Description of GHQ-12 Cut-off Scores .....	67

## 1.0 INTRODUCTION

Emotional expression and restraint are required for a variety of occupations. For instance, those within the service and health care industry, in which personal interaction with clients or patients are apart of one's job-role, are expected to express certain emotions while repressing others. Due to these daily interactions, several organizations and health care facilities have implemented written and non-written rules and regulations concerning appropriate conduct. For instance, 'service with a smile', or 'bed-side manners' are prime examples of the expectations placed on the employees by the employers of how to conduct oneself when working with others. These restrictions, however, places a great strain on the employees and can potentially lead to negative consequences for both the individual and the organization. This is especially true for those whose felt emotions differ from the emotions they are expected to portray. This is referred to as *emotional dissonance*, which has been the primary focus of *emotional labour* studies.

While the next section explains in greater detail the definition and underlying process of emotional labour, simply, it refers to the management of emotions and emotional expression in order to conform to organizational requirements and job-role expectations. The task of controlling felt emotions during patient sessions becomes increasingly demanding over time, and has been linked to several negative psychological and physiological outcomes (Yang & Chang, 2008). Findings suggest that emotional labour can lead to emotional dissonance, cognitive dissonance, maladjustment, low self-esteem, sleep disorders, depression, substance abuse, general dysfunction, and burnout (Taylor, 2006). In addition, several clinical trials have linked emotional labour to ulcers, asthma, insomnia, muscle contractions, tension headaches, migraines, hypertension, and coronary heart disease (CHD) (Taylor, 2006).

Not only is emotional labour psychologically and physiologically costly for individuals, but it is also economically costly for organizations and employers. Several findings have linked emotional labour with burnout (Maslach, 1982; Fortener 1999; Tolich, 1993; Prosser et al, 1996; Mehta 2007; Lee et al, 2010) and stress (Brotheridge & Grandey 2002; Grandey 2000; Mann & Cowburn 2005; Ogresta et al, 2008; Rutter & Fielding, 1988; Sonnentag & Frese, 2003; Zapf, 2002), which in turn has been linked with decreased job satisfaction (Taylor, 2006; Hochschild, 1983; Adelman, 1995; Wharton, 1993; Abraham, 1998; Morris & Feldman, 1996; Kruml & Geddes, 2000; Persing, 2000; Rutter & Fielding, 1988), increased absenteeism (Maslach, 1982a), decreased self-efficacy (Maslach, 1982a; Brotheridge & Grandey, 2002) and lower productivity (Maslach, 1982a; Brotheridge & Grandey, 2002). Therefore, the primary goal of this study is to identify the consequences associated with performing emotional labour, such as burnout, job satisfaction, perceived stress, and how these consequences may be related to one's overall health and well-being.

The method in which emotional labour is measured has also seen a major shift in its approach over the past few years. Brotheridge and Grandey (2002) conceptualized emotional labour in two ways: *job-focused approach* and *emotional-focused approach*. The job-focused approach refers to the levels of emotional demands placed on an individual based on their current job-role, and has been measured in terms of the frequency, intensity and variety of emotional display, as well as the duration of interaction with patients/clients. The emotional-focused approach, on the other hand, refers to the process or experience of regulating one's emotions at work, and has been measured in terms of deep acting and surface acting. Recently the trend in emotional labour research has begun to focus more on the emotional-focused approach (Wharton, 1993). This will be discussed in more detail later on. However, for the purpose of this



study, the emotional- focused approach, or emotional labour performance, as some have referred to this phenomenon as, will be the primary focus. Furthermore, new evidence suggests that the two dimensions of surface acting, which are hiding emotions and faking emotions, produce different results in the consequences associated with emotional labour performance. Therefore, hiding emotions, faking emotions and deep acting will be used as the primary measures of emotional labour performance within this study.

Among the occupations previously studied, there are gaps in the literature regarding mental health workers, especially within Canada. Mental health workers, like most caring professions, require monitoring emotions as part of the job requirement. However, there is limited data on the subject. Ontario has one of the largest populations of mental health workers in Canada<sup>\*</sup>, however, little is known about their daily activities in regard to emotional labour performance, or the consequences of engaging in such behaviours. Therefore, this study will include Ontario mental health workers, such as psychologists, psychiatrist and psychological associates.

Mental health workers are required to provide and administer mental health services for individuals, families, and groups in the community. This may include confidential counseling, referrals for treatments, providing support for families with members suffering from mental illness, or providing education in communities with high risk groups. Due to the conditions in which these tasks are performed, uncontrollable, external and internal consequences arise from the physical, mental, and environmental demands that are associated with this type of work.

Some of these demands mental health workers face on a daily-basis may include, but are not restricted to, crisis situations, irregular hours, time- and stress- management, exposure to

---

<sup>\*</sup> Based on the estimated number of Psychiatrists in Ontario (n = 1,821) from the Canadian Medical Association (CMA) Masterfile 'Number of Physicians by Province/Territory and Specialty, Canada, 2009.'

illness, unsanitary conditions, and working with potentially threatening clients/patients. Part of the responsibility of caring for others comes with the cost of also having to care for one's own mental and physical health and well-being. These demands have been associated with other negative consequences, including fatigue and stress. However, more research is required to understand these associations.

Understanding the emotional labor process and how it can result in negative consequences for employees is the first steps in attempting to improve the negative aspects of mental health care and helps to reduce the related personal and organizational costs within Canada. Therefore, the aim of this research study is to identify how mental health workers perform emotional labour on a daily basis, in order to understand how performing emotional labour through hiding emotions, faking emotions or deep acting are associated with burnout, job satisfaction, and self-perceived stress. Additionally, this research will identify how performing emotional labour and the associated consequences predict psychological distress and physical symptoms. By doing so, this research will uncover the emotional, physical and mental demands placed on Canadian mental health workers. These results will not only shed light on the subject, but also add to the current literature, as well as serve as information for future programs and policies for reducing risk by identifying the underlying consequences mental health workers are faced with in their line of work. The rationale for the hypotheses of this study, and the predicted linkages which are graphically shown in Figure 1, are discussed in further detail later on (see 2.3.1 to 2.3.4).

## 2.0 LITERATURE REVIEW

### 2.1 What is Emotional Labour?

Consensus regarding the definition and conceptualization of emotional labour has, as of yet, not been reached (Bono & Vey, 2005; Glomb & Tews, 2004). Several studies involving emotional labour have differing opinions of the definition. According to Hochschild (1983), emotional labour is defined as an “exchange value of work which is sold for a wage” and involves “the management of feelings to create a publicly observable facial and bodily display”. Many of the theorists who followed Hochschild believe the latter was the best definition because “expressive behaviour” is what is considered “organizationally desired and relevant” in the study of emotional labour (Taylor, 2006). For instance, Ashforth and Humphries (1993) defined emotional labour as “the act of displaying appropriate emotion”, the implicit and explicit rules set out by the company or organization. Bailey (1996) defined emotional labour as “the work role requirements concerning the display of appropriate emotions to create an impression as desired by an employer”. Mann (2004), on the other hand, combined many previous theories, defining emotional labour as ‘people work’, and those involved in it are expected to engage in a great deal of emotional management in order to convey ‘appropriate emotions’. These appropriate emotions, as Mann (2004) suggested, are needed in order to gain or keep a client or customer, while at the same time suppressing any inappropriate emotions that might lose business. While most of these definitions have been used to describe those within service industries, such as flight attendants and servers, these definitions can also apply to those in the health care industry, including mental health.

Mental health professionals work in a variety of settings, including public and private sectors, hospitals, government agencies, universities/schools, etc. These different work

environments have specific rules and regulations as to how to interact with patients or clients. However, those in private practices, in which they are their own managers, the situation is slightly different in that they do not have to conform to certain expectations set out by a company. Instead these individuals must conform based on the Canadian code of ethics for conducting mental health care, as well as their own expectations. However, further research is needed to understand how work environments may effect how one performs emotional labour.

Regardless of the differing opinions regarding the nature of emotional labour, general agreement falls on the premise that emotional labour consists of “the management of emotions and emotional expression” (Van Dijk & Kirk-Brown, 2009). The characteristics of emotional labour include face-to-face or voice-to-voice interactions with customers, or in this case, patients (Hochschild, 1983). According to Hochschild (1983), we perform emotional labour either through surface acting or deep acting.

Surface acting involves conforming to display rules by simulating emotions that are not actually felt through the process of modifying and controlling one’s emotional expressions (Yang & Chang, 2008). For instance, mental health workers may need to fake positive emotions in order to provoke desirable responses from their patients (Mann, 2004; Lee et al, 2010; Zapf, 2002). In turn, mental health workers may need to suppress negative emotions during consultations or treatments in response to patients’ emotional expression or behaviour (Lee et al., 2010). Therefore, hiding certain emotions may actually protect both the patient and mental health worker when negative emotions arise (Lee et al., 2010). Over time, “non-authentic” surface acting may lead to feelings of detachment from one’s true feelings and from the feelings of others (i.e. emotional dissonance) (Yang & Chang, 2008).

Deep acting, on the other hand, is the attempt to actually experience or feel the emotion(s) required for the job-role. It is defined as “individuals trying to influence what they feel in [order] to becoming the role they are asked to play” (Grandey, 2000; Yang & Chang, 2008). For someone to express deep acting, one must make an effort to invoke thoughts, images and memories in order to produce the desired emotion[s] (Ashforth & Humphrey, 1993; Yang & Chang, 2008). Therefore, deep acting involves directly focusing on one’s inner feelings (Ashforth & Humphrey, 1993; Mann, 2004). For instance, one must treat patients as those who deserve “authentic expression”, which in turn produces positive feedback and reinforces one’s personal efficacy (Yang & Chang, 2008).

## 2.2 Previous Research Findings

Over the past three decades focus on emotional labour performance has gained popularity in sociological, psychological and occupational research. From its first introduction in the 1980’s by sociologist Arlie Russell Hochschild, who first coined the term in “The Managed Heart: Commercialization of Human Feeling”, thousands of research papers have been published on the topic. Previous studies of emotional labour have focused on a variety of occupations, but few have included mental health workers as the primary focus of study. The limited research that is available has either focused on specific fields of mental health care, such as registered clinical nurses (Yang & Chang, 2008), psychologists (Cushway & Tyler, 1994; Fortener, 1999; Hann, 1999; Persing, 2000), consultant psychiatrists (Mears et al, 2007), social workers (Maslach & Jackson, 1981) or has grouped these individual occupations among other “caring” or “helping” professions, such as physicians, nurses and service workers (Deary et al., 1996; Abbott 1988;

Freidson 1988; Smith 1992; Smith & Kleinman 1989) . This study however, focused on mental health workers alone, including psychiatrists, psychologists, and psychological associates.

In the study of emotional labour, several consequences have been identified over the years. However, inconsistencies in the findings and the lack of research among mental health workers regarding the association between performing emotional labour and these consequences as stated above, makes this area of research a great starting point for identifying these associations. These consequences are further discussed below, with the study hypotheses.

### 2.3 Consequences of Performing Emotional Labour

Several studies have identified a number of consequences associated with performing emotional labour include reduced job satisfaction, increased stress, psychological distress and manifestation of physiological symptoms. According to Tolich (1993), the most cited negative outcome associated with performing emotional labour is burnout.

#### *2.3.1 Burnout*

According to the Conference Board of Canada, employee burnout costs Canadian businesses an estimated \$12 billion per year in health claims, lost productivity and absenteeism. Mental health workers are a high-risk group for burnout (Onyett, et al.1997). Up to 40% of US mental health workers have reported high levels of burnout at least once during their careers (Fortener, 1999; Maslach, 1982a). In addition, 47% of UK psychologists indicated a high likelihood of leaving their jobs due to burnout (Mehta, 2007). However, far less research emphasis has been placed on the possible consequences of burnout among Canadian mental health workers.

Like emotional labour, burnout has no standard definition, however, there is a consensus regarding the core dimensions that make up the experience of burnout, which includes emotional exhaustion, depersonalization and reduced personal accomplishment (Maslach et al., 2001). In more general terms, burnout is “a state of emotional, mental, and physical exhaustion caused by excessive and prolonged stress” (Maslach, 1982b).

Emotional labour has consistently been associated with burnout, particularly emotional exhaustion – a stress-related reaction to emotional labour. “Emotional exhaustion is the experience of feeling drained of all energy” (Maslach, 1982b). When individuals begin to experience emotional exhaustion they may try to reduce the emotional stress of working with other people through depersonalization (Maslach, 1982b). Depersonalization involves negative, cynical attitudes and feelings about one’s patients or clients (Maslach, 1982b).

Consequently, individuals begin to maintain an emotional distance from others and begin to view others as either objects or numbers (Maslach, 1982b). Another common response to job burnout is the attempt to reduce one’s workload, which is known as reduced personal accomplishment (Maslach, 1982b). This may include avoiding work, absenteeism, doing the bare minimum, avoiding certain tasks that are stressful and spending more time doing other tasks that are considered less stressful (Maslach, 1982b). Burnout has also been linked to physiological and affective outcomes, as well as to several organizational consequences, such as high turnover, negative work attitudes and reduced levels of performance (Brotheridge & Grandey, 2002). Overall, the consequences of burnout are potentially very serious for workers, clients, and the organizations. Mental health workers constant interaction with patients on a daily basis makes this particular population vulnerable to emotional exhaustion, which is reflected in the statistics for employee retention and stress related insurance, and workers’ compensation claims.

Several findings have suggested that emotional labour overall has no relationship to emotional exhaustion, however, the two mechanisms of emotional labour, surface acting and deep acting, have been positively and negatively associated with emotional exhaustion. In other words, it is not emotional labour itself that results in emotional exhaustion, but rather how emotional labour is performed (Wharton, 1993).

According to Kruml and Geddes (2000) employees who engage in surface acting are more emotionally exhausted than those who adhered to display rules by way of deep acting. This positive association between surface acting and emotional exhaustion suggests that simply “faking it” is detrimental to individuals’ health and well-being (Kruml & Geddes, 2000). Additionally, the negative association between deep acting and emotional exhaustion indicates that it is better for individuals to actually feel the required emotion for the situation based on the occupational display rules when the required emotion is conflicting (Kruml & Geddes, 2000). In other words, feeling the appropriate emotion for the situation reduces the experience of emotional exhaustion.

Previous research has found differential associations among the dimensions of burnout and emotional labour. For instance, several studies have reported positive associations between surface acting and emotional exhaustion, and depersonalization, and a negative association between surface acting and personal accomplishment (Brotheridge & Grandey, 2002). Additionally, deep acting has been positively associated with personal accomplishment (Brotheridge & Grandey, 2002). However, new evidence suggests that this may not be the case, especially among health care professionals.

In a recent study of Manitoba physicians, deep acting, hiding and faking emotions were differentially related to the Maslach Burnout Inventory (MBI) dimensions- emotional



exhaustion, depersonalization and personal accomplishment. The findings suggested that hiding emotions was related to emotional exhaustion and more frequently used than deep acting, which was unrelated to any of the burnout dimensions of the MBI (Lee et al., 2010), contrary to previous findings. While the exact reasoning was unclear, the question remains as to whether or not these findings are likely to occur in a cohort of mental health workers. Based on these new findings, we posit that:

*Hypothesis 1a.* The ELS dimension- hiding emotions will be associated with the MBI-HSS dimension- emotional exhaustion.

*Hypothesis 1b.* The ELS dimension- faking emotions will be associated with the MBI-HSS dimensions- depersonalization and personal accomplishment.

*Hypothesis 1c.* The ELS dimension- deep acting will *not* be associated with any of the MBI-HSS dimensions- emotional exhaustion, depersonalization, or personal accomplishment.

### *2.3.2 Job Satisfaction*

According to Locke (1976), job satisfaction is "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences". Job dissatisfaction, therefore, refers to an "unpleasurable emotional state resulting from an appraisal of one's job as frustrating or blocking the attainment of one's values" (Yang & Chang, 2008).

Like burnout, job dissatisfaction can lead to reduced quality of work, absenteeism and turnover (Taylor, 2006). These trends have been found to reduce the efficiency of health care services, including mental health care. Some studies have suggested that surface acting often produces mistakes and dissatisfaction during work, while deep acting can produce satisfaction

(Hochschild, 1983). Overall, the research regarding the association between performing emotional labor and job satisfaction has found both positive (Adelmann, 1995; Wharton, 1993) and negative relationships (Abraham, 1998; Morris & Feldman, 1996). For instance, surface acting may lead to feelings of “inauthenticity” and consequently job dissatisfaction (Kruml & Geddes, 2000). In contrast, “deep acting may lead to feelings of personal accomplishment and by extension, job satisfaction” (Kruml & Geddes, 2000). In support of these findings, one study found job satisfaction declined when surface acting was used during patient encounters, while deep acting increased one’s sense of personal accomplishment (Persing, 2000). Therefore, we hypothesized:

*Hypothesis 2a.* The ELS dimensions- hiding emotions and faking emotions will be associated with the MSQ-short form dimension- ‘lower’ or ‘moderate’ job satisfaction.

*Hypothesis 2b.* The ELS dimension- deep acting will be associated with the MSQ-short form dimension- ‘higher’ job satisfaction.

### 2.3.3 Perceived Stress

Stress literature indicates that both job characteristics and individual characteristics play a role in the reported levels of stress (Brotheridge & Grandey, 2002). Stressful life events are *not* in and of themselves the primary cause of pathology or illness behaviour (Cohen & Williams, 1988). Rather, it depends on the individual’s *appraisal* of their situation as potentially threatening, or challenging in light of their availability of coping resources (Cohen & Williams, 1988). Three components consistently found to be the ‘central components’ of the experience of stress include the appraisal of life as *unpredictability*, *uncontrollable*, or *overloaded* (Cohen et al,

1976; Cohen & Spacapan, 1978; Cohen & Williams, 1988; Lazarus, 1966; Lazarus & Cohen, 1977). Findings suggest that stressful life events appraised as threatening or demanding, with the addition of limited coping resources, have been associated with increased risk of disease, among other consequences (Cohen et al, 1986).

Occupational stress in “helping professions” have been associated with several manifestations including emotional exhaustion, depersonalization of patients, absenteeism, and poor physical health and reduced personal accomplishment (Ogresta et al., 2008). Additionally, as stress increases, one begins to lose interest and motivation in one’s current occupation. Findings also suggest that stress causes an increase in psychomatic diseases and psychological distress, and reduced productivity (Sonnetag & Frese, 2003).

According to Statistics Canada (1999), stress costs Canada up to \$33 billion a year in health claims and missed work due to disability and illness. Additionally, the cost of stress-related absenteeism in Canada is estimated, receptively, at \$12 billion annually (Statistics Canada, 1999). For employers, it has been estimated to cost companies \$3.5 billion each year (Duxbury & Higgins, 2001).

Absenteeism due to stress has increased 316% since 1995 (Statistics Canada, 1999), and is expected to rise and continue to inflict its harmful and expensive repercussions on both the economy and population if interventions are not implemented (Statistics Canada, 1999).

Field and emotional regulation lab studies have demonstrated that the processes of surface acting and deep acting are related to employee stress-reactions and overall well-being (Grandey, 2000; Zapf, 2002). For instance, a study conducted by Rutter and Fielding (1988) found that among prison officers the perceived need to suppress emotions in the workplace was positively associated with overall stress, and negatively with job satisfaction. Mann and

Cowburn's (2005) study of mental health nurses found a positive relationship between emotional labour and daily stress. While no direct link has been found between the dimensions of performing emotional labour and one's self-perceived stress, we posit that:

*Hypothesis 3a.* The ELS dimensions- hiding emotions and faking emotions will be associated with the PSS dimension- perceived stress.

*Hypothesis 3b.* The ELS dimension- deep acting will *not* be associated with the PSS dimension- perceived stress.

#### *2.3.4 Health and Well-Being*

According to the World Health Organization (WHO), "health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." Well-being is defined as "the mental, psychological, or emotional aspects of workers as indicated by emotional states and epidemiological rates of mental illnesses and disease" (Danna & Griffin, 1999). For the purpose of this study, both definitions will be used when health and well-being are mentioned.

Based on qualitative data, Hochschild argued that showing emotions "not felt at that moment" would lead to alienation of one's feelings, which leads to distress and poor psychological health (Greenglass & Nash, 2008). As mentioned earlier, emotional labour can lead to emotional dissonance, cognitive dissonance, maladjustment, low self-esteem, sleep disorders, depression, substance abuse, general dysfunction, and burnout (Taylor, 2006). Additionally, emotional labour has also been linked to ulcers, asthma, insomnia, muscle contractions, tension, headaches, migraines, hypertension and CHD (Taylor, 2006).

Lee and colleagues (2010) found an association between hiding emotions and physical symptoms in their sample of physicians. As mentioned above, the three dimensions of emotional labour performance have been linked to other factors, that in and of themselves, have been linked to positive, or negative health issues. For instance, emotional exhaustion and stress have been linked to poor health. Additionally, low job satisfaction has been linked to psychological distress, while personal efficacy has been linked to positive psychological health. Therefore, these consequences as mentioned above have been included in the analysis for identifying the factors associated with poorer health and well-being among mental health workers.

However, as acknowledged by de Jonge and colleagues (2008), further investigation into the “black box” of the emotional labour process needs to be further addressed, as the impact on the health and well-being of health care workers remains unclear. Thus, we posit that:

*Hypothesis 4a.* The ELS dimension- hiding emotions; all three burnout dimensions from the MBI-HSS- emotional exhaustion, depersonalization and personal accomplishment; the MSQ-short form dimension- job satisfaction; and the PSS dimension- perceived stress will be associated with the GHQ-12 dimension- psychological distress.

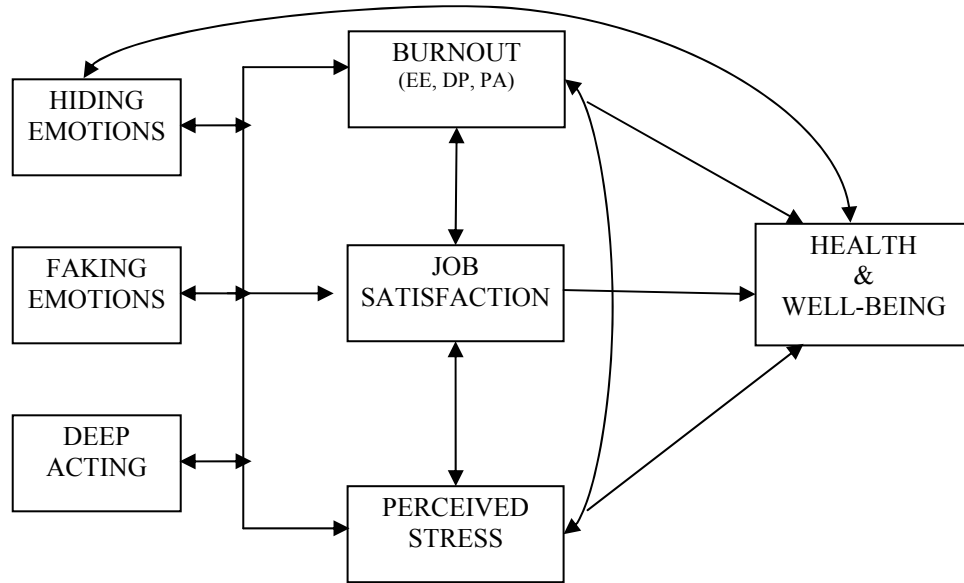
*Hypothesis 4b.* The ELS dimension- hiding emotions; all three burnout dimensions from the MBI-HSS- emotional exhaustion, depersonalization and personal accomplishment; the MSQ-short form dimension- job satisfaction; and the PSS dimension- perceived stress will be associated with the physical symptoms reported from the Physical Symptoms Checklist.

### 3.0 WORKING MODEL

Figure 1 represents the visual example of the working hypotheses. The components for the framework are based on some recent and previous findings obtained from emotional labour literature.

The purpose of this study was to first identify the associations between the explanatory variables (hiding emotions, faking emotions, and deep acting) and response variables (emotional exhaustion, depersonalization, personal accomplishment, job satisfaction, and perceived stress). The next step was to identify how the associations between the explanatory variables and response variables mentioned above predict mental health workers' health and well-being (psychological distress and physical symptoms).

Figure 1. Model of the Hypothesized Relationships



Note: EE- emotional exhaustion; DP- depersonalization; PA- personal accomplishment.

## 4.0 METHODS

### *4.1 Procedures*

Several organizations from across Ontario that specialized in some form of mental health care were contacted and asked to act as recruiters for this project. As a recruiter, organizations were asked to provide membership lists in order to contact their members either directly by the researcher, or through the organizations via email, or through monthly news letters. However, ethics clearance was not given for use of monthly news letters and therefore not used.

Among the organizations contacted, three organizations were interested in assisting in this study: the College of Psychologists of Ontario (CPO), the College of Physicians and Surgeons of Ontario (CPSO), and the Canadian Federation of Mental Health Nurses (CFMHN). While interest was initially given, several issues prevented co-operation from two of these organizations. However, before delving into the detail of these issues, the reason for choosing these organizations in the first place are explained below.

First, the CPO was chosen to participate in this study as it “is the governing body for *Psychologists and Psychological Associates in Ontario*” (The College of Psychologists of Ontario, 2010). Additionally, its membership includes close to 5,000 members. Respondents of the CPO were selected from the ‘Public Register-Membership Search’ available on the CPO’s website ([https://members.cpo.on.ca/members\\_search/new](https://members.cpo.on.ca/members_search/new)). Members were selected if they spoke and read English, and provided a valid email address. Email addresses, with no other personal information or identifiers, were collected by the researcher.

Second, the CPSO was selected as its membership currently includes over 2,200 psychiatrists from across Ontario (The College of Physicians and Surgeons of Ontario, 2010). The CPSO was contacted via email and by phone and ask to provide their membership list.



However, due to cost of obtaining the list and limited contact information (i.e. only fax numbers), the CPSO did not assist in the recruitment process. Instead, an online search was conducted using key terms “*psychiatrist, psychiatry, mental health, and Ontario doctors*” in order to collect psychiatrists’ email addresses from across Ontario. Again, email addresses were collected by the researcher with no other personal information or identifiers.

Third, the CFMHN was selected due to its large membership of mental health nurses, which currently includes over 1,000 members (Canadian Federation of Mental Health Nurses, 2010). The CFMHN was contacted via email and asked to participate in the recruitment process, by providing members’ email addresses. However, the researcher was informed that the process would take several weeks for approval by the CFMHN’s board, providing ethics approval by the University of Waterloo. Due to delayed ethics approval, working with the CFMHN was abandoned, and mental health nurses were excluded from the sample.

Data were collected from June 7, 2010 to June 28, 2010. Questionnaires were sent out to respondents through email using Campaigner™, an International company that specializes in email blasting. Within the emails a separate URL link for the survey and contest draws were included. The survey itself was created using SurveyMonkey™, a US survey provider. Ethics approval was given by the University of Waterloo’s ethics board.

Pre-notification were sent out to the respondents one week prior to the study start date which included the following information; survey timeline, information concerning respondents’ confidentiality and right to withdraw, contact information, and information about the draw (see Appendix A).

The second email blast included the same information as provided in the pre-notifications, but with the survey and contest links with passwords included (see Appendix A). Passwords

were given for both the survey and contest links to ensure greater confidentiality as requested by the University of Waterloo's ethics board. This step ensured that anyone not directly contacted to participate could not complete the survey.

Two follow-up email blasts were sent on June 14, 2010 and June 27, 2010 as reminders to participate in the study (see Appendix A).

In order to increase response rates, in addition to the pre-notifications, and reminder letters, three gift cards from Chapters/Indigo were drawn for as compensation for those who were contacted regardless of their participation. The University of Waterloo's ethics committee requested that email addresses were collected using a separate URL link, in order to further ensure confidentiality, as the email addresses were not directly linked to the survey responses. Respondents had to volunteer their email addresses for the draw. The email addresses were only used to randomly select and contact the winners. Duplicate email addresses were removed to ensure an equal chance for everyone.

By the end of the data collection period of three weeks, 397 mental health workers responded. To estimate response rate, the American Association for Public Opinion Research (AAPOR) Outcome Calculator, V 3.1 (2011) based on the 'Final Disposition codes for Internet Surveys of Specifically Named Persons' was used. Results are further discussed below (see 5.1).

#### *4.2 Respondents*

Of the 397 respondents, 94 survey responses were unusable for various reasons (see Inclusion Criteria and Exclusion Criteria below). This left 296 useable questionnaires for analysis.

### *4.3 Inclusion Criteria*

The following inclusion criteria were used:

1. Eligible to provide mental health care in Ontario.
2. Lived and worked within Ontario.
3. Provide mental health care for patients/clients.
4. Had a patient/client population of 1 or more.
5. Had some type of degree/certification to provide mental health care.

### *4.4 Exclusion Criteria*

The following exclusion criteria were used:

1. Ineligible to provide mental health care in Ontario.
2. Lived outside of Canada.
3. Retired.
4. Do not work with, or have a patient population.
5. Do not have any type of degree/certification to provide mental health care.
6. Incomplete surveys, ( $\geq 50\%$  of survey).

### *4.5 Measures*

Five measures were used within this study including the Emotional Labour Scale (ELS), Maslach Burnout Inventory-Health Services Survey (MBI-HSS), Minnesota Satisfaction Questionnaire- short form (MSQ-short form), the Perceived Stress Scale (PSS), and the General Health Questionnaire (GHQ-12). Brief descriptions, along with the psychometric properties of each scale are presented below.

*4.5.1 Emotional Labour Scale (ELS)*. In order to measure emotional labour performance, Brotheridge and Lee's (2003) revised version of the Emotional Labour Scale (ELS) was used. This newest version of the ELS has separated the two sub-dimensions of surface acting (hiding emotions and faking emotions), and included more items among these dimensions.

The ELS is an 18-item self report questionnaire that measures six facets of emotional labour in the workplace, including frequency, intensity and variety of emotional display, duration of interaction with patients/clients, deep acting and the two sub-dimensions of surface acting (hiding emotions and faking emotions). Responses for all 18-items were collected, however for the purpose of this study, only hiding emotions, faking emotions and deep acting items were used for analysis. Respondents were asked to answer items in response to the stem question, "Select the answer to indicate how frequently you engage in each of the following during a typical working week, using the scale:" Items such as "Hide your true feelings about a situation" (hiding emotions), "Show emotions that you don't feel" (faking emotions), and "Try to actually experience the emotions that you must show" (deep acting) appeared on the scale. An additional question regarding the mean number of minutes spent with a patient was not included in the regression analyses but was used for descriptive purposes. Items were rated on a 5-point Likert scale (1=Never to 5=Always). Higher scores on each of the subscales represent higher levels of the dimension being assessed.

In term of the psychometric property of the ELS, testing the reliability and validity of the original ELS included a sample of 296 undergraduate and graduate business majors with full-time or part-time positions in several service sectors, and 238 of their friends and family members with full-time employment (Brotheridge and Lee, 2003). Convergent validity of the ELS was tested using the MBI-HSS subscales- emotional exhaustion, personal accomplishment,

and depersonalization. Additionally, burnout and role identification were also examined to establish the convergent validity of the ELS, which was measured using two items from Lodahl and Kejner (1965) and three additional items developed for this study. Results showed that both emotional exhaustion and depersonalization were significantly correlated with the subscale surface acting ( $r = .20$ ) and depersonalization ( $r = .38$ ). Personal accomplishment was positively and significantly correlated with all subscales of the ELS (variety:  $r = .27$ ; frequency:  $r = .22$ ; intensity:  $r = .18$ ; duration:  $r = .15$ ; and deep acting:  $r = .27$ ) with the exception of surface acting, which was negatively associated ( $r = -.18$ ). Role identification was positively associated with deep acting ( $r = .16$ ), variety ( $r = .20$ ) and intensity ( $r = .17$ ) of emotions, but negatively associated with personal accomplishment ( $r = -.16$ ). The ELS was further correlated with the Emotional Work Requirement Scale (EWRS), which measures the extent individuals hide their emotions at work, and includes the subscales emotional suppression and emotional support and control. Results of the ELS and EWRS subscales found moderate correlations indicating ‘overlap’ suggesting evidence of convergent validity, however, due to the small correlations between the subscales (largest correlations found between variety of emotions and requirement to show sympathy,  $r = .47$ ), divergent validity was retained.

Internal consistency of the ELS subscales range from .74 to .91 (Brotheridge & Lee, 2003). The item-total correlations achieved were at .40 or greater (Brotheridge and Lee, 2003). Additionally, adequate levels of internal consistency were met (Cronbach’s  $\alpha$  values ranged from .68 to .85), with the exception of intensity of emotions displayed ( $\alpha = .58$ ) which contained three items, “none of which were highly correlated with the overall scale” (Brotheridge and Lee, 2003). Since then, several studies in relation to emotional labour have consistently reported moderate to high test-retest reliability. Overall, the scale has been found repeatedly to be a

reliable and valid measure of emotional labour in clinical and research settings (Brotheridge & Lee, 2003).

*4.5.2 Maslach Burnout Inventory- Health Services Survey (MBI-HSS).* To measure burnout, the Maslach Burnout Inventory- Health Service Survey (MBI-HSS; Maslach & Jackson, 1986) was used, as it is the most widely used measure of burnout (Evans et al., 2006). As stated in the title, the MBI-HSS measures burnout that manifests in human service institutions and health care occupations such as nursing, social work, and ministry. It has also been used in several previous research studies, including among mental health workers (Prosser et al, 1996).

The MBI-HSS consists of 22 statements and includes three dimensions; *emotional exhaustion, depersonalization and diminished personal accomplishment*. Emotional exhaustion refers to the lack of energy and depletion of emotional resources, whereas depersonalization refers to the negative, callous, cynical and detached attitudes and treatment towards one's 'recipients'. Reduced personal accomplishment, on the other hand, refers to feelings of inadequacy, reduced self-esteem and negative self-evaluation of one's professional performance.

Respondents were asked to answer items in response to the stem question, "Please select the one number for each question that comes closest to reflecting your opinion about it". Items include "I feel like I'm at the end of my rope" (emotional exhaustion), "I feel I treat some recipients as if they were impersonal objects" (depersonalization), and "I feel I'm positively influencing other people's lives through my work" (personal accomplishment). Each dimension is scored separately on a 7-point Likert scale (0=Never to 6=Every Day). Higher scores of emotional exhaustion ( $\geq 21$ ) and depersonalization ( $\geq 8$ ), and low scores on personal accomplishment ( $\leq 28$ ) suggests the existence of burnout. Table 1 report the range of experienced

burnout as 'low', 'average' and 'high' as set out by Maslach and Jackson (1986), for mental health workers.

The psychometric properties of the MBI-HSS have been well documented. Convergent validity was demonstrated in three ways: 1) individual MBI-HSS scores were correlated with behavioural ratings made by an individuals close to the person in question, such as co-worker (outside observers) and spouses (inside observers); 2) MBI-HSS scores were calculated with the presence of certain job characteristics expected to contribute to burnout; and 3) MBI-HSS scores were correlated with outcomes expected to contribute to burnout, such as job satisfaction (Maslach & Jackson, 1986).

For the first convergent validity investigation as mentioned above, a sample of 40 mental health workers acting as 'outside observers', were asked to anonymously evaluate the behaviour of their co-worker who completed the MBI-HSS in order to evaluate the emotional exhaustion, depersonalization, and personal accomplishment subscales. Findings revealed that while the correlations between co-workers evaluations of individuals' emotional exhaustion and depersonalization with MBI-HSS subscale scores were statistically significant, the predicted correlation between the co-workers evaluation of personal accomplishment and MBI-HSS scores did not reach statistical significance. Those as 'inside observers' consisted of 142 police officer's wives who evaluated the frequency of their spouse's behaviour using a questionnaire survey in order to evaluate the emotional exhaustion and personal accomplishment of their husbands. Depersonalization could not be assessed as wives did not see their husbands working with people on the job. Findings of the correlation between wives questionnaire answers and their husbands' MBI-HSS scores were statistically significant.

For the second convergent validity investigation as mentioned above, data confirming hypotheses regarding the associations between various job characteristics and burnout were tested using the MBI-HSS and job related scales. For instance, a sample of 91 social service and mental health workers completed the Job Diagnostic Survey (JDS; Hackman and Oldham, 1974, 1975) and the MBI-HSS. Results suggested that working with others gives employees clear and direct information concerning job performance. Additionally, working closely with people as part of ones' job requirement was only weakly correlated with emotional exhaustion, while how one assesses the degree to which ones' job impacts their own or others lives was positively correlated with personal accomplishment.

The third convergent validity investigation as mentioned above looked at the data that confirmed 'hypothetical' associations between burnout and various outcomes or personal reactions. Based on the prediction that burnout negatively impacts personal relationships, both on and off the job found that physicians who scored high on emotional exhaustion wanted to 'get away' from others. Additionally, mental health workers who scored high on emotional exhaustion were rated by co-workers as treating patients more negatively over time. Human services workers who scored low on measures of peers and co-worker satisfaction scored high on emotional exhaustion and depersonalization, but low on personal accomplishment.

Discriminant validity was tested using a sample of 91 social service and mental health workers. A comparison of the participants' scores from the MBI-HSS and the JDS found a moderate, negative correlation between job satisfaction with both emotional exhaustion ( $r = -.23$ ) and depersonalization ( $r = -.22$ ), as well as a weak, positive correlation with personal accomplishment ( $r = .17$ ). Therefore, while associations between the MBI-HSS and JDS



subscales were identified, no strong statistical correlations were established suggesting divergent validity remained.

Confirmatory factor analysis revealed that the subscales of the MBI-HSS “represent a related (emotional exhaustion and depersonalization), and independent (personal accomplishment), but separate multidimensional concept of the burnout construct” (Naude & Rothmann, 2004). Maslach and Jackson (1986) reported adequate levels of internal consistency for the three subscales ranging from .71 to .90, as well as high test-retest reliability. Consistent with these findings, previous literature has established internal consistency of the MBI-HSS well above .70 Cronbach alpha levels, except for the depersonalization scale in some samples (Schaufeli et al, 2001). Previous studies have also established test-retest reliability from three months to one year in the range of .50 to .82 (Leiter & Durup, 1996).

Table 1  
*Categorization of MBI-HSS Scores for Mental Health Workers According to Maslach & Jackson’s Sample (n = 730)\**

MBI Subscales	Range of Experienced Burnout		
	Low (Lower Third)	Average (Middle Third)	High (Upper Third)
Emotional Exhaustion	≤13	14-20	≥21
Depersonalization	≤4	5-7	≥8
Personal Accomplishment	≥40	39-34	≤33

\* Sample of 730 mental health workers included psychologists, psychotherapists, counselors, mental hospital staff, and psychiatrists.

4.5.3 *Minnesota Satisfaction Questionnaire- short form (MSQ-short form)*. To measure job satisfaction among the sample, the Minnesota Satisfaction Questionnaire-short form (MSQ-short form) was used. The MSQ-short form is a two-dimension questionnaire, and the most widely used job satisfaction scale available.

The short form MSQ is a 20-item scale containing two dimensions: internal satisfaction (IS), or external satisfaction (ES). Internal satisfaction refers to how people feel about their job-roles, while extrinsic satisfaction refers to the external or separate aspects from the job tasks or the job itself (Weiss et al, 1967). For the purpose of this study, the two subscales were summed to create a general job satisfaction score. Respondents were asked to answer items in response to the stem question, “Ask yourself: How satisfied am I with this aspect of my job?”. Items pertaining to job satisfaction include “The chance to do things for other people”, “The chance to do something that makes use of my abilities” and “My pay and the amount of work I do”. Items were rated on a 5-point Likert scale (1=Not Satisfied to 5=Extremely Satisfied), in which higher scores indicate higher job satisfaction. The cut-off scores of the MSQ, as shown in Table 2, indicate the levels of job satisfaction experienced.

Since the MSQ-short form subsets were derived from the long form version, concurrent validity of the short form was inferred from the data found from the longer version. Concurrent validity of the MSQ was established using a sample of 7 occupational groups (N = 1,723: janitors and maintenance men, assemblers, electronic assemblers, machinists, clerks, salesmen, and engineers. Mean comparisons of the 7 occupational groups revealed statistically significant differences for each of the three scales: intrinsic, extrinsic, and general satisfaction. Results found that on both the intrinsic satisfaction and general satisfaction scales, salesmen had the highest mean scores (50.24 and 79.82), while electronic assemblers had the lowest mean scores

(42.33 and 67.47) overall (Weiss et al, 1967). For the extrinsic satisfaction scale, salesmen again had the highest mean scores (21.38), while assemblers (17.89), followed closely by electronic assemblers (18.07), had the lowest mean scores (Weiss et al, 1967). Overall, the MSQ-short form version did not produce statistically significant group differences for any scale, as found with the longer form version (Weiss et al, 1967).

Weiss et al (1967) found adequate levels of internal consistency for the three subscales- the intrinsic scale internal consistency coefficients ranged from .84 to .91, the external scale ranged from .77 to .82, while the general satisfaction score ranged from .87 to .92. Total-item correlations between the three MSQ-short form scores ranged from .60 to .88 (Weiss et al, 1967). Previous studies have also established test-retest reliability coefficients of the general satisfaction scale scores from one-week to one-year which ranged from .70 to .89 (Weiss et al, 1967).

Table 2  
*MSQ Cut-Off Scores Indicating Levels of Job Satisfaction*

Lower Job Satisfaction	Moderate Job Satisfaction	Higher Job Satisfaction
$\leq 25$	26-74	$\geq 75$

*4.5.4 Perceived Stress Scale (PSS).* To measure stress, the Perceived Stress Scale (PSS) was used. The PSS is the most widely used psychological instrument for measuring the perception of stress. The PSS was designed for community samples with at least a junior high school education, as items are easy to interpret and understand (Cohen & Williams, 1988).

Furthermore, items are general in nature and respectfully content free (i.e. not created for any specific subgroup).

The PSS is a 10-item scale which measures the degree to which situations in one's life over the past month are appraised as stressful. While higher scores indicate greater perceived stress, no standard cut-off scores are provided by Cohen & Williamson (1988). Respondents were asked to answer items in response to the stem question, "In the last month, how often you...". Items including "been upset because of something that happened unexpectedly" and "felt that things were going your way" were measured using a 5-point scale (0=Never to 4=Very often).

A sample consisting of 2,387 respondents (males:  $n = 960$ ; and females:  $n = 1,427$ ), over the age of 18 (mean age = 42.8,  $SD = 17.2$ ), who responded to a telephone survey conducted by Louis Harris and Associated, Inc. in 1983 were selected to test the scales reliability and validity (Cohen & Williams, 1988). Unlike other stress scales, such as the PERI Demoralization Measure (Dohrenwend et al, 1980) and the GHQ (Goldberg, 1972), which include items that measure psychological symptomatology, the PSS also includes items that measure perceived control over external demands. While it seems unlikely to create a stress scale without including items that measure various psychological symptoms, findings suggest that the PSS does *not* measure the same thing as these scales mentioned above. As findings indicate, the association between the PSS and disorders are moderated by social support (Cohen & Williams, 1988). Those with high levels of social support showed fewer disorders, when compared to those with lower levels of social support (Cohen & Spacapan, 1986; Cohen & Williams, 1988). That is, elevated levels of the PSS scores do not represent psychological distress, but rather it identifies those at risk for future distress (Cohen & Williams, 1988).

Cohen & Williamson's (1988) investigation into the three versions of the scale, 14-, 10-, and 4-, using a US sample, found that the 10-item version was just as good a measure of perceived stress when compared to the longer 14-item version of the scale. A factor analysis, or principle component analysis, of the PSS-14 revealed two factors with eigenvalues over 1.0 (Factor 1= 3.6 and Factor 2= 2.2), which together explained a total variance of 42%. In the principle components analysis of the PSS-10, all items loaded positively on the first factor at .42 or above. The total explained variance of the 10-item version for both factors combined accounted for 49% (Factor 1= 34% and Factor 2= 15%), and with the deletion of the four items with low factor loadings (items 4, 5, 12, and 13), provided a slight improvement from the 14-item PSS. Additionally, deletion of the four items also showed slightly improved internal reliability (Cronbach  $\alpha = .78$ ).

Cohen et al (1983) investigated the concurrent and predicted validities of the PSS-14 using a sample of 446 participants made up of two groups of college students (group 1: M= 19.01 years of age; group 2: M= 20.75 years of age) and one group of community members (M= 38.4 years of age) participating in a smoking cessation program provided by the university. The investigation revealed that the PSS was a better predictor of depressive and physical symptomology, utilization of health services, social anxiety, and smoking-reduction maintenance than life-event scores. When compared to the depressive symptomology scale (CES-D), the PSS was found to measure different and independent predictive construct. Additionally, when the separate correlations between the PSS and the validity criteria were calculated by sex, no significant differences were found among the z scores. However, when the separate correlations between the PSS and validity criteria were calculated for those above (36 to 70 years) and below (22 to 35 years) the median age of those within the smoking cessation group found no

statistically significant differences, except with one exception among the PSS and the number of life events for those below, but not for those above the median age (.65 vs. .19).

#### *4.5.5 Health & Well-Being Measures*

Two measures were used to test the health and well-being of the sample, the GHQ-12 and the Physical Symptoms Checklist, which are discussed below.

An additional question taken from the SF-36 Health Survey: “In general, would you say your health is”, was used to measure the perception of one’s health using a 5-point Likert scale (1= Excellent to 5= Poor). This question was not used in the regression analysis but for descriptive purposes only.

*4.5.5.1 The General Health Questionnaire (GHQ-12).* To measure the psychological health of the sample in this study, the GHQ-12 was used. The GHQ-12 is not a diagnostic tool (Mears et al, 2007), but has been used in several studies as an indicator of psychological distress across various occupational health professions (Banks & Jackson, 1982), including mental health workers (Prosser et al, 1996; Evans et al, 2006).

The GHQ-12 is a 12-item screening tool for current, diagnosable mental health disorders, namely anxiety, depression, social dysfunction, and loss of confidence. Respondents were asked to answer items in response to the stem question, “Please consider the last four weeks and answer the following questions by selecting one of four answer options:”. Items included “Lost much sleep over worry”, “Felt constantly under strain”, and “Been feeling reasonably happy, all things considered”. Items were rated on a 5-point Likert scale from “Much less than usual” to “Much more than usual”. The most common methods of scoring the GHQ-12 are bi-modal (0-0-

1-1), or Likert-type scoring styles (0-1-2-3). Some have advised that the bi-modal scoring (0-0-1-1) be adopted, as the Likert method does not provide any advantage, as the correlations between the two scoring methods was found between 0.92 and 0.94 (Golderberg & Williams; 1988). Cut-off scores of 2/3 have been identified for the GHQ-12. However, threshold scores have been altered depending on the expected prevalence of the disorder or depending on the aim of the study. Several studies have used a cut-off score of 4 or greater to indicate potential for psychological distress, when scoring bi-modal. Therefore, for the purpose of this study, scoring was bi-modal (0-12), with a cut-off score of 4 (out of 12).

Validity estimates for the shortened version of the GHQ- 30, -20 and -12 were calculated by analyzing the subsets of questions from the GHQ-60 version. The scale was developed in England, but meant for use in both England and the United States (McDowell & Newell, 1996), however, comparison studies have been used to test the validity of the scale across other countries, including China, Australia, Mexico, Italy, Japan, Cambodia, India and Brazil. A factor analysis using an Australian sample revealed three factors- anhedonia and sleep disturbance, social performance, and loss of confidence (Worsley & Gribbin, 1977). A comparison study, with a Brazilian sample, between the GHQ-12 and Harding's (1980) 20-item Self Report Questionnaire (SRQ-20) were simultaneously validated against the criterion of the Clinical Interview Schedule (CIS) (Mari & Williams, 1985). The validity coefficients between the two scales were respectfully: sensitivity 85% to 83%; specificity 79% and 80%; and overmisclassification rate 18% and 19%. The ROC curve for the GHQ-12 was 0.87.

Reliability coefficients have ranged from .78 to .95 in previous studies (Goldberg, 1992). Internal consistency estimates included split-half of 0.83 for the GHQ-12. Alpha coefficients have ranged from 0.82 to 0.90 (Goldberg, 1992). Correlations between the shortened version

ranged from 0.85 to 0.97 (Deary et al, 1996). Goldberg and colleague's (1978) investigation also revealed that females tended to show higher scores, as well as those with lower social economical status (SES). However, the association between age and GHQ scores was less clear.

*4.5.5.2 Physical Symptoms Checklist.* Table 3 shows the twenty-four physical symptoms derived from the Physical Symptoms Checklist. A 4-point Likert scale (0=Not at all to 3=Sever) was used to measure the severity of the 24 symptoms, as show in Table 3. The number of symptoms experienced and severity of the symptoms were summed to provide an overall understanding of the physical health of the sample. The number of symptoms reported were summed and used in the correlations matrix, and multiple regressions. As the items were derived from a checklist, with no psychometric properties, the validity and reliability of the measure cannot be mentioned here. However, for the sake of this study, Cronbach  $\alpha$ 's was run among the 24-items. The findings are discussed below (see 5.12).



Table 3  
*24-Items from the Physical Symptom Checklist*

Items	Description
1	TROUBLE FALLING ASLEEP
2	TROUBLE STAYING ASLEEP
3	DIFFICULTY WAKING UP
4	TIRED MOST OF THE TIME
5	WEAKNESS
6	LACK OF ENDURANCE
7	DEPRESSION
8	LACK OF PLEASURE/ INTEREST
9	AGITATION
10	IRRITABILITY/ ANGER
11	WORRY EXCESSIVELY
12	ANXIOUS OR NERVOUS
13	DIFFICULTY CONCENTRATING
14	MEMORY DISTURBANCE
15	HEADACHES/ MIGRAINES
16	HEARTBURN
17	INDIGESTION
18	GASTRIC ULCERS
19	CHEST PAIN
20	HYPERTENSION
21	GENERAL ACHING
22	BACK PAIN
23	MUSCLE CONTRACTION
24	STIFFNESS IN NECK OR SHOULDERS

#### *4.6 Explanatory variables*

For the first set of stepwise multiple regressions, the explanatory variables included the three dimensions of the ELS: hiding emotions, faking emotions, and deep acting, in order to predict burnout, job satisfaction and perceived stress.

The explanatory variables in the second set of stepwise multiple regressions for predicting psychological distress and physical symptoms, included the three dimensions of emotional labour, as well as emotional exhaustion, personal accomplishment, depersonalization, job satisfaction and perceived stress. While these latter variables appear as response variables in the first set of stepwise regressions, these variables are included as they have been associated with psychological and physiological manifestations, as mentioned above.

#### *4.7 Response variables*

The response variables in the first five stepwise regressions include emotional exhaustion, depersonalization, personal accomplishment, job satisfaction, and perceived stress. The response variables in the sixth and seventh stepwise multiple regressions included psychological distress and physical symptoms.

#### *4.8 Demographic and Control Variables*

Demographics including age, gender, occupational title, specialization of psychologists, years in practice, education level, marital status, hours worked, work environment, as well as description and number of patients, coping strategies, and general health questions (i.e. smoking, alcohol intake, exercise, severity of physical symptoms, etc) were collected. Questions pertaining

to the individuals demographics appeared at the beginning and end of the survey (see Appendix A).

Control variables including gender, age and years in practice were adjusted for in the multiple regressions. Gender was included (males coded as 0 and females coded as 1) as females have been found to engage in more emotional labour, both at work and at home (Hochschild, 1989; Brotheridge & Grandey, 2002). Women entering the work-force in the 1980's in America, including job-roles dominated by men, while perceived as 'equals', still undertook the majority of the domestic tasks, including child rearing (Hochschild, 1989). Data collected from the 2005 General Social Survey found that while these gender differences in the division of labour are still evident, they are gradually changing (Statistics Canada, 2006). Men are slowly beginning to participate more in the home. However, these changing trends have been largely due the growing percentage of women entering the workforce rather than the percentage of men helping with the domestic duties (Statistics Canada, 2006).

Age was also controlled for, as a recent study by Dahling & Perez (2010) found that while age increases, the strategies for performing emotional labor depends upon one's age-related motives (i.e. to down-regulate negative emotional experiences- surface acting, and express genuine positive emotions- deep acting and naturally felt emotions). The study initially included a convenient sample of employed Northeastern US students with service sector jobs. Students were given credit for participation, as well as passing the survey on to family and friends in service positions over 25 years of age, also known as a 'snowballing sample'. A total of 191 responses were collected, with 186 usable for hypothesis testing. The final sample ranged in age from 18 to 69 years, with those in their late 70's and older excluded from the final analysis. The mean age of the sample was 31.2 years ( $SD = 14.6$  years). Dahling & Perez (2010)

adopted the Diefendorff et al.'s (2005) seven-item measure of surface acting ( $\alpha = .89$ ), four-item measure of deep acting ( $\alpha = .70$ ), and three-item measure of expressing naturally-felt emotions (NFE:  $\alpha = .58$ ) for hypothesis testing. Findings revealed that while age was positively associated with deep acting and the expression of naturally-felt emotions, age was negatively associated with surface acting. Additionally, findings revealed that trait positive affect partially-moderate some of the age-related strategies.

The number of years practicing mental health has not been directly related to emotional labour. However, among service workers, such as waitresses/waiters, and sales associates, findings suggest that due to long hours, low pay, and consistent interaction with the public over time effects one's health and well-being. Therefore, for the purpose of this study, the numbers of years in practice was controlled for.

#### *4.9 Data Cleaning*

Data cleaning was conducted by the researcher of this study, who wrote and distributed the survey, as well as collected the email addresses of the sample. Data cleaning also occurred during data collection. The survey was programmed to automatically skip those unable to provide mental health care, or who were currently retired out of the survey before they could begin.

#### *4.10 Data Analysis*

##### *4.10.1 Statistical Software*

Data were analyzed using SPSS/PASW for Mac, version 19.0.

#### *4.10.2 Pre-Analysis*

Univariate analysis was used for the pre-analysis to ensure that data were entered and coded properly, as well as to identify any outliers and missing data.

#### *4.10.3 Outliers and Missing Data*

Scatter plots were run during the pre-analysis to identify any obvious outliers that may skew the data results. No major outliers were identified during the pre-analysis when data were plotted.

Missing data were not replaced to avoid inflation of the results, and excluded from the final analysis. Additionally, questions that included ‘Don’t know’ or ‘I prefer not to say’ options were counted as missing data and not included in the final analysis.

#### *4.10.4 Analysis of Sample*

Univariate analysis was also used during the initial analysis to identify the sample of this study. For instance, descriptive statistics were used to identify the means, standard deviations, standard errors, variance, range, skewness, as well as valid and/or missing data of our sample when answering all survey questions. Frequencies were run in order to identify the number of valid or missing responses, as well as identify the percentage of the samples’ responses on demographic and scale items. Additionally, cross tabulations for gender and occupational title in relation to demographic variables and scale items were also run in order to provide a greater understanding of the sample.

Due to the cross-sectional nature of this study, mean comparisons were used to further analyze the sample. Mean comparisons among mental health workers based on occupational title,

gender, age, and years in practice in relation to performing emotional labour and the seven outcomes (burnout dimensions, job satisfaction, perceived stress, psychological distress and physical symptoms) were analyzed for significant differences. Findings are discussed below.

#### *4.10.5 Measurement Analysis*

Cronbach  $\alpha$ 's were run in order to test the reliability and validity for each of the scales used in this study. Alpha's of .70 or greater were considered 'acceptable' (Cronbach, 1951). This is later discussed. Results of  $\alpha$ 's are shown on the direct diagonal of Table 29, in Appendix B.

$$\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N - 1) \cdot \bar{c}}$$

Where:

N is equal to the number of items,

c-bar is the average inter-item covariance among the items

v-bar equals the average variance

Additionally, mean comparisons of one's knowledge of the scales used in this study compared to the samples' responses were tested, as shown in Tables 11 to 15. The point of this step was to ensure that those with prior knowledge or use of the measurements in this study would not skew the results, due to response bias.

#### 4.10.6 Hypothesis Testing

Persons Product Moment Correlation Coefficient (Person's *r*) and multiple regressions were used for hypotheses testing in this study.

##### 4.10.6.1 Pearson Product Moment Correlation Coefficient

Pearson's correlations were used to investigate the relationships among the controls variables (gender, age and years in practice), explanatory variables (hiding emotions, faking emotions, and deep acting), and response variables (emotional exhaustion, depersonalization, personal accomplishment, job satisfaction, perceived stress, psychological distress and physical symptoms) used within the multiple regressions.

$$r = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{N \sum X^2 - (\sum X)^2} \sqrt{N \sum Y^2 - (\sum Y)^2}}$$

Where:

The number of subjects, N

The sum of each subject's X score times the Y score, summation XY

The sum of the X scores, summation X

The sum of the Y scores, summation Y

The sum of the squared X scores, summation X squared

The sum of the squared Y scores, summation Y squared

##### 4.10.6.2 Multiple Linear Regression Analysis

Multiple linear regressions were used to determine whether the relationships among these variables remained when other variables were entered. A stepwise procedure was used to ensure that only variables that contributed incrementally beyond the variables already in the model would remain.

$$Y = b_0 + b_1x_1 + b_2x_2 + \dots + b_px_p + e$$

Where:

Y is related to the independent variables  $x_1, x_2, \dots, x_p$

$b_0, b_1, b_2, \dots, b_p$  are the parameters

e is a random variable called the error term

Table 21 and 25 show the  $R^2$  and  $\beta$ -weights with all predictors entered for the seven outcomes. For the first five outcomes (emotional exhaustion, depersonalization, personal accomplishment, job satisfaction, and perceived stress), the control variables (age, gender, and years in practice) and explanatory variables (hiding emotions, faking emotions, and deep acting) were entered stepwise into multiple regressions, as shown in Tables 21 and 25.

For the other two outcomes (psychological distress and physical symptoms), the control variables (age, gender, and years in practice) and explanatory variables (hiding emotions, faking emotions, deep acting, emotional exhaustion, depersonalization, personal accomplishment, job satisfaction, and perceived stress) were also entered stepwise into multiple regressions, as shown in Tables 26 and 27. Two major interests of this study was to determine whether hiding emotions, faking emotions or deep acting predicts the dimensions of burnout, job satisfaction, and perceived stress and how these variables are associated. A second major interest was to identify how the explanatory and response variables are also associated, and how they predict health and well-being of mental health workers. The  $R^2$  and  $\beta$ - weights of the full models were interpreted.



## 5.0 RESULTS

### *5.1 Response Rates*

Response rate was calculated using the AAPOR Outcome Calculator, V3.1 (2011). Table 28 in Appendix B shows the description of the AAPOR Final Disposition Codes for Internet Surveys of Specifically Named Persons used to calculate response rates. Findings suggest that Response Rate 1 (RR1 to RR4) was 20%; Cooperation Rate 1 (COOP1 to COOP4) was 25%; Refusal Rate 1 was 62% (Refusal Rate 2: 63%; Refusal Rate 3: 68%); while Contact Rate 1 was 82% (Contact Rate 2: 83%; Contact Rate 3: 91%).

Table 4A shows the descriptions of the email campaign reports. These reports were collected from Campaigner™ at the end of the survey closing date. These reports included information on the number and percentage of total emails initially sent out, total emails received, total emails opened, total emails not delivered, the number of those who clicked on the survey and draw links attached to the email, spam complaints and those who unsubscribed from receiving email blasts through Campaigner™. These data were used to calculate the response rates using AAPOR.

As seen in Table 4A, of the total emails initially sent during each email blast, almost 100% were received. However, 1% to 5% was not delivered for reasons unknown, and less than 1% had spam complaints. The percentage of those who opened the email ranged from 18% to 32% when compared to the percentage of those who received the initial emails, and dropped significantly to <1% to 14% for those who clicked on the link to the survey and draws.

Replies from respondents through Campaigner were sent directly to the researcher's UW email address, and therefore the researcher could respond to any questions or concerns regarding the survey. Additionally, the researcher was able to collect 'out of office' replies.

Less than half (43%) of the emails sent to respondents were replied as ‘out of office’ responses, which may have contributed to the low response rate. Unfortunately, there was no method of calculating the percentage of those who might have participated later in the survey.

Figure 2 shows the percentage of those who dropped out of the survey compared to those who did not. Based on the original number of respondents, while 85% of the 397 respondents completed the survey, 15% dropped out. On closer inspection, of the 15% who dropped out, 14% dropped out answering scale items, while 1% dropped out previously or directly following the scale items. As shown in Figure 3, almost 30% dropped out during, or right after completing the ELS, 12% dropped out during or after the MSQ, 4% during or after the MBI-HSS, 4% during or after the PSS, and 5% dropped out during or after completing the GHQ-12 scale items. Missing data on scale items were coded as ‘missing data’ using the SPSS/PASW code ‘999’.

Some respondents emailed the researcher directly and explained that they could not proceed with the survey when they reached the ELS used to measure emotional labour, as some felt that the questions were “inappropriate” or “unnecessary” for their line of work. Some within private practices also felt the questions pertaining to one’s supervisor or co-workers within the MSQ scale were not applicable. These issues may have contributed to the dropped out rates of the ELS (29%) and MSQ (12%), as shown in Figure 3. However, the latter was rectified by including an ‘NA’ option to the MSQ Likert-scale the following day. Unfortunately, there was no way to calculate if the ‘NA’ option rectified the response rate.

Table 4B shows the description of respondents who were excluded from the final analysis based on the exclusion criteria (see 4.3 and 4.4). Those excluded from the final analysis apart from those who dropped out (15%), included 4% living outside of Ontario, 3% without a

patient population, 2% who were not qualified or had no qualifications in mental health, and 1% who were retired.

Table 4A  
*Description of Email Campaign Reports*

Campaign Reports	Pre-Notifications	Survey	First Reminder	Second Reminder
Total Emails Sent	1372*	2068	2043	2025
Total Emails Received	1308 (95.3%)	2024 (97.9%)	2015 (98.6%)	1999 (98.7%)
Opened Emails	343 (18.0%)	653 (31.6%)	436 (21.3%)	364 (18.0%)
Clicked through Link	-	295 (14.3%)	142 (7.0%)	66 (3.3%)
Not Delivered	64 (4.7%)	44 (2.1%)	28 (1.4%)	26 (1.3%)
Unsubscribed	9 (<1%)	5 (<1%)	8 (<1%)	1 (<1%)
Spam Complaints	2 (<1%)	2 (<1%)	3 (<1%)	2 (<1%)

\*Over half of sample sent through Campaigner™. Other pre-notifications sent via UW email (n = 799).

Figure 2. Drop Out Percentage (N= 397)

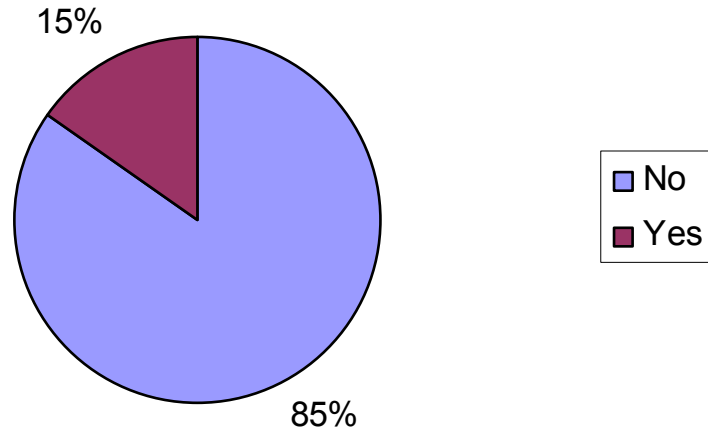
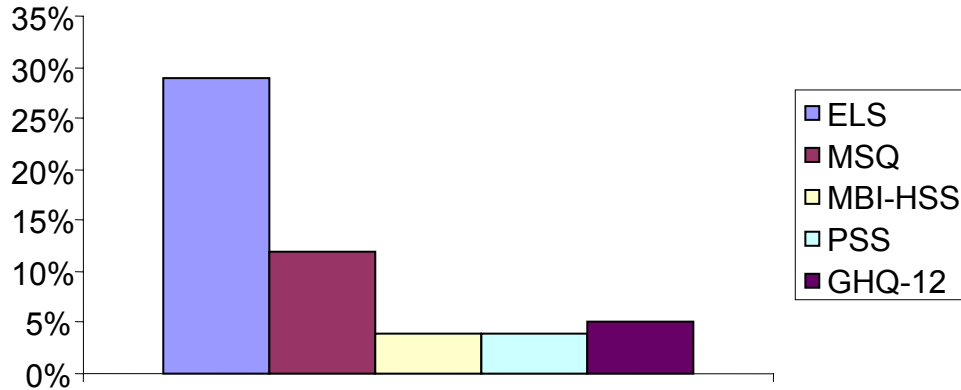


Table 4B  
*Description of Exclusion Criteria*

Reasons for Exclusion	N	%
Incomplete Survey ( $\geq 50\%$ of survey)*	54	13.6%
Live outside Ontario	14	3.5%
No patients	12	3.0%
Not qualified/ No degree or certification	9	2.3%
Retired	5	1.3%

\* N included in number of those who 'dropped out' (N = 61).

Figure 3. Description of Incomplete Scales



### 5.2 Demographic Statistics

Among the sample of mental health workers, 86% were associated with The Canadian Psychologists of Ontario (CPO), while 14% were selected through an online search. Table 5 shows the demographic statistics of the whole sample, as well as by occupational title: psychologist ( $n = 209$ ), psychiatrist ( $n = 39$ ), psychological associate ( $n = 42$ ), or other ( $n = 7$ ).

Over half of the respondents in this study were female ( $n = 199$ ). In a cross tabulation between gender and occupational title, more females than males identified themselves as psychological associates (86%) and psychologists (69%), while more males identified themselves as psychiatrists (59%) or as ‘other’ mental health workers (57%).

Respondents’ age was categorized into 5 convenient age groups, as seen in Table 5. The mean age group of the sample was between 45 to 54 years ( $M = 49$ ,  $SD = 10.14$ ). In a cross tabulation, over one-third of psychologists and over one-third of psychiatrists were younger (34 to 44 years of age) than over one-third of psychological associates, or those in other mental

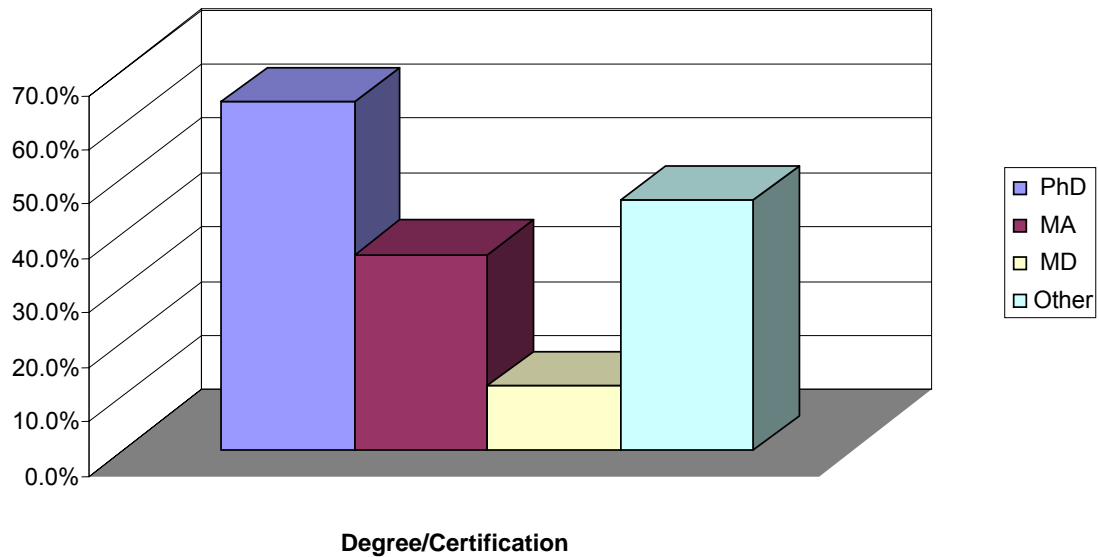
health professions (55 to 64 years of age). Additionally, the majority of the respondents were married (79%), regardless of occupational title.

Figure 4 show the respondents' degree and/or certifications for providing mental health care. Respondents were able to select more than one degree or certification. As shown in Figure 2, over half (64%) of respondents held a PhD, over one-third (36%) had a MA, and just over 10% had a MD (12%). The rest of the sample (46%) identified other degrees and certifications, including CPsych, M.Sc, FRCP, M.Ed, BA/B.Sc/B.Ed, PsychD, Diploma, CP, and Ed.D.

Table 5  
*Demographic Statistics*

	Whole Sample ( <i>n</i> = 296)	Psychologists ( <i>n</i> = 208 )	Psychiatrists ( <i>n</i> = 39)	Psychological Assoc. ( <i>n</i> = 42)	Other ( <i>n</i> = 7 )
Gender					
Female	67.2%	69.2%	41.0%	85.7%	42.9%
Male	32.8%	30.8%	59.0%	14.3%	57.1%
Age Group					
<35 years	7.5%	8.3%	5.1%	4.9%	14.3%
35-44 years	31.2%	34.1%	33.3%	19.5%	–
45-54 years	28.8%	28.8%	25.6%	31.7%	28.6%
55-64 years	26.7%	24.4%	25.6%	36.6%	42.9%
65+ years	5.8%	4.4%	10.3%	7.3%	14.3%
Marital Status					
Married/ Common- Law	79.9%	81.7%	69.2%	73.8%	100.0%
Single/ Never Married	11.6%	9.6%	15.4%	19.0%	–
Separated/ Divorced/ Widowed	8.5%	8.7%	12.8%	4.8%	–

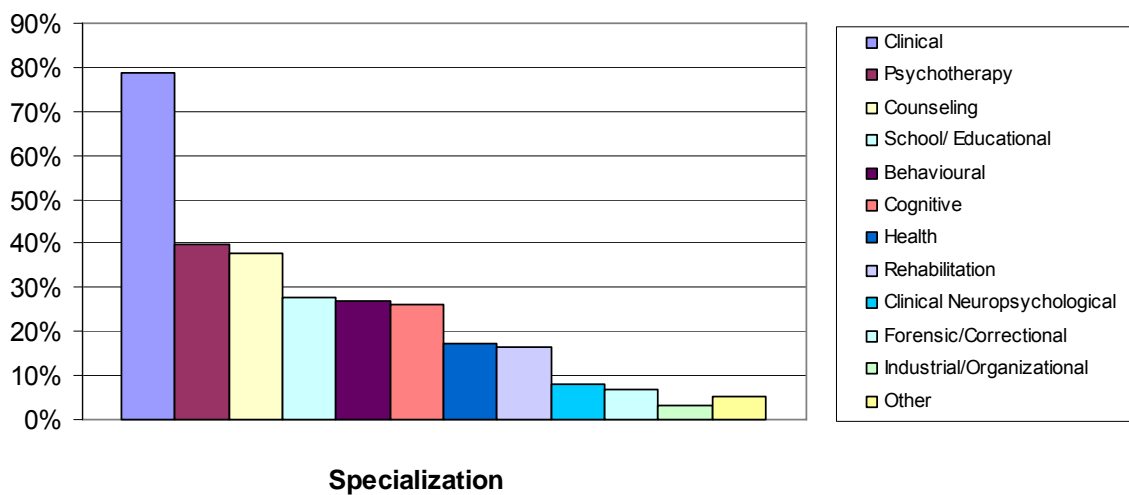
Figure 4. Description of Respondents' Degree/ Certification



As shown in Figure 5, those who stated their occupational title as 'psychologist' were asked to report their specialization: clinical ( $n = 164$ ), psychotherapy ( $n = 83$ ), counseling ( $n = 64$ ), school/ educational ( $n = 58$ ), behavioural ( $n = 56$ ), cognitive ( $n = 54$ ), health ( $n = 36$ ), rehabilitation ( $n = 34$ ), clinical neuropsychological ( $n = 17$ ), forensic/ correctional ( $n = 14$ ), industrial/ organizational ( $n = 7$ ), or other ( $n = 11$ ). Respondents were able to select more than one category of specialization. The majority of psychologists classified their specialization in clinical psychology (79%), while over one-third specialized in psychotherapy (40%), or counseling (38%). Additionally, over one-quarter of respondents reported their specialization in school/educational (28%), behavioural (27%), or cognitive (26%) psychology. Just over 15% of the sample reported health (17%) or rehabilitation (16%) as their specialization. The other twenty-three percent identified their specialization in clinical neuropsychology (8%),

forensic/correctional (7%), industrial/organizational (3%), and/or other (5%). Please note that psychological associates were unable to answer this question, as no check box was created for this occupational title in the survey, and therefore no skip created to this question. Therefore, psychological associates were excluded from this data.

Figure 5. Specialization of Psychologists (n = 208)



### 5.3 Work Statistics

Table 6 shows the work statistics of the sample. The demographic variable, years in practice was placed into 5 convenient groups for analysis, as shown in Table 6. The mean number of years in practice was between 10 to 19 years ( $SD = 1.04$ ) for the entire sample. Almost one-third of psychologists (32%) and one-third of psychiatrists (33%) reported less than 10 years of experience in mental health care, while 45% of psychological associates reported between 20 to 29 years in practice. Mental health workers in other fields not specified was tied between 20 to 29 years (43%), or 30 or more years of practice in mental health care (43%).



Over half of the sample (56%) reported working within a private practice. Over half of psychologists (64%), and other mental health workers (57%), identified private practice as their place of employment, as well as over one-third of psychological associates (38%) and psychiatrists (36%). Over one-third (44%) of the entire sample also identified hospitals as their place of employment, including 90% of psychiatrists, 86% of other mental health workers, 38% of psychologists, and 24% of psychological associates. Under one-quarter (22%) of the sample identified universities or schools as their place of employment, including 36% of psychiatrists, 17% of psychologists, and 12% of psychological associates.

Exactly half of the sample reported working between 30 to 40 hours a week on average ( $M=41$ ,  $SD = 11.22$ ). Only 11% of the entire sample reported working more than 50 hours a week on average, including 18% of psychiatrists, 12% of psychologists, and 2% of psychological associates.

The average number of evenings worked per week was 1 to 2 ( $SD = .82$ ), and the average number of weekends worked per month was zero ( $SD = 1.27$ ). Only 4% of the whole sample reported working 5 to 7 nights per week on average, in which 5% of psychiatrists, 4% of psychologists, and 2% of psychological associates reported. Additionally, 8% of the sample indicated working 4 weekends a month on average, including 10% of psychologists, 5% of psychiatrists, and 2% of psychological associates.

Over one-third (40%) of respondents had over 100 patients per mental health worker ( $M= 64$ ,  $SD =3.23$ ). The majority (72%) of mental health workers described their patient population as ‘adults’. This was also true regarding occupational title, except for psychological associates who reported a greater percentage of adolescent patients overall (76%). Furthermore, when asked, the mean number of minutes spent with a patient on average was 69 minutes ( $SD =45.86$ ).

Table 6  
Work Statistics

	Whole Sample (n = 296)	Psychologists (n = 208 )	Psychiatrists (n = 39)	Psychological Assoc. (n = 42)	Other (n = 7 )
<b>Years in Practice</b>					
<10 years	28.0%	31.7%	33.3%	7.1%	14.3%
10 to 19 years	26.4%	28.8%	17.9%	26.2%	–
20 to 29 years	30.7%	28.4%	25.6%	45.2%	42.9%
30≥ years	14.9%	11.1%	23.1%	21.4%	42.9%
<b>Work Environment<sup>a</sup></b>					
Private Practice	56.1%	63.5%	35.9%	38.1%	57.1%
Hospital	43.6%	37.5%	89.7%	23.8%	85.7%
University/ School	21.6%	17.3%	35.9%	11.9%	–
Agency	10.1%	9.6%	17.9%	7.1%	–
Government	3.4%	3.4%	–	7.1%	–
Other	18.6%	19.7%	12.8%	42.9%	–
<b>Hours Per Week</b>					
<30 hours a week	9.9%	10.1%	2.6%	17.1%	–
30 to 40 hours a week	49.7%	49.5%	39.5%	61.0%	42.9%
41 to 50 hours a week	29.3%	28.4%	39.5%	19.5%	57.1%
50> hours a week	11.2%	12.0%	18.4%	2.4%	–
<b>Evenings Per Month</b>					
None	36.5%	34.1%	46.2%	42.9%	14.3%
1 to 2 evenings	43.2%	44.2%	33.3%	42.9%	71.4%
3 to 4 evenings	16.6%	17.8%	15.4%	11.9%	14.3%
5 to 7 evenings	3.7%	3.8%	5.1%	2.4%	–
<b>Weekends Per Month</b>					
None	52.9%	50.7%	56.4%	64.3%	28.6%
1 weekends per month	20.7%	18.8%	23.1%	21.4%	57.1%
2 weekends per month	12.2%	12.6%	10.3%	11.9%	14.3%
3 weekends per month	6.4%	8.2%	5.1%	–	–
4 weekends per month	7.8%	9.7%	5.1%	2.4%	–
<b>Patient Population<sup>a</sup></b>					
Adult	72.3%	73.6%	89.7%	45.2%	100.0%
Adolescent	58.8%	59.6%	33.3%	76.2%	71.4%
Children	49.0%	51.0%	25.6%	64.3%	28.6%
Family	33.8%	35.6%	28.2%	23.8%	71.4%
Seniors	22.3%	21.2%	41.0%	7.1%	42.9%
Couples	18.6%	21.2%	15.4%	4.8%	42.9%
Organizations	13.9%	12.5%	25.6%	4.8%	42.9%
Others	2.4%	2.4%	2.6%	2.4%	100.0%

Number of Patients					
<20	18.6%	21.6%	5.1%	16.7%	14.3%
20-39	23.3%	27.9%	7.7%	16.7%	14.3%
40-59	11.8%	12.0%	20.5%	4.8%	–
60-79	4.4%	2.9%	10.3%	7.1%	–
80-99	1.7%	1.0%	5.1%	2.4%	–
100≥	40.2%	34.6%	51.3%	52.4%	71.4%

<sup>a</sup> Respondents could answer more than once.

#### 5.4 Health Statistics

Table 7 shows the health statistics of the whole sample as well as across the subgroups of the mental health workers. Respondents were asked to report their perceived health, in which almost half (47%) reported it as ‘very good’ ( $SD = .89$ ), regardless of their field in mental health care.

Over one-quarter of respondents reported 1 to 2 alcoholic drinks per week on average, while one-quarter indicated none. Over one-quarter of psychiatrists (28%), and 43% of other mental health workers reported consuming over 6 alcoholic drinks per week on average. The trend showed a decreasing pattern, until 6 or more alcoholic drinks per week, which increased to 17% from 13% for 5 to 6 alcoholic drinks per week.

When asked to report the number of cigarettes smoked per day, the majority (95%) of mental health workers, regardless of occupational title, reported ‘none’. Almost half (47%) of the entire sample reported 60 to 180 minutes of exercise per week on average, including 56% of psychiatrists, 46% of psychologists, and 44% of psychological associates, while over half (57%) of other mental health workers reported between 181 to 360 minutes of exercise on average per week. The average number of sick days for the overall sample (52%), regardless of occupational title, was between 1 to 4 days in the past 12 months.

Table 7  
Health Statistics

	Whole Sample (n = 296)	Psychologists (n = 208 )	Psychiatrists (n = 39)	Psychological Assoc. (n = 42)	Other (n = 7 )
<b>Perceived Health</b>					
Excellent	23.0%	24.0%	25.6%	16.7%	14.3%
Very Good	46.6%	46.6%	48.7%	42.9%	57.1%
Good	22.3%	21.6%	17.9%	31.0%	14.3%
Fair	7.4%	7.2%	5.1%	9.5%	14.3%
Poor	<1%	<1%	2.6%	—	—
<b>Alcohol Consumption</b>					
None	25.4%	27.1%	25.6%	21.4%	—
1 to 2 per week	27.5%	25.1%	17.9%	47.6%	28.6%
3 to 4 per week	17.3%	15.9%	20.5%	19.0%	28.6%
5 to 6 per week	13.2%	16.4%	7.7%	4.8%	—
6 > per week	16.6%	15.5%	28.2%	7.1%	42.6%
<b>Smoking Habit</b>					
None	95.2%	95.6%	97.4%	90.2%	100.0%
1 to 4 per day	2.4%	3.4%	—	—	—
5 to 10 per day	<1%	1.0%	—	—	—
10> per day	1.7%	—	2.6%	9.8%	—
<b>Minutes of Exercise Per Week</b>					
None	5.7%	6.0%	2.6%	8.3%	—
<60 minutes	8.9%	9.0%	7.7%	11.1%	—
60 to 180 minutes	46.5%	45.5%	56.4%	44.4%	28.6%
181 to 360 minutes	30.5%	31.0%	30.8%	22.2%	57.1%
361 to 540 minutes	5.7%	6.0%	—	8.3%	14.3%
541 to 600 minutes	1.1%	1.0%	2.6%	—	—
600> minutes	1.8%	1.5%	—	5.6%	—
<b>Number of Sick Days in the Past 12 Months</b>					
None	26.0%	25.2%	42.1%	16.7%	14.3%
1 to 4 days	51.6%	53.0%	47.4%	47.6%	57.1%
5 to 10 days	17.3%	15.8%	10.5%	31.0%	14.3%
11 to 20 days	3.8%	4.5%	—	4.8%	—
21 to 30 days	<1%	<1%	—	—	—
30> days	1.0%	1.0%	—	—	14.3%

### 5.5 Stress Management Statistics

Table 8A shows the description of stress management statistics. When asked to identify stress management techniques used during times of stress, the top three choices, regardless of occupational title included: i) talking to friends/family members (90%); ii) engaging in exercise/sports (81%); and iii) talking to co-workers (69%).

The response ‘other’ was open-ended for respondents to include other stress relieving methods not listed, as shown in Table 8B. The top three ‘other’ methods for reducing stress were leisure, hobbies and recreational activities (30%), reading (24%), and meditation, yoga and tai chi (22%).

Table 8A  
*Stress Management Statistics*

	Whole Sample (n = 296)	Psychologists (n = 208 )	Psychiatrists (n = 39)	Psychological Assoc. (n = 42)	Other (n = 7)
Stress Management <sup>a</sup>					
Talk to friends/ family	89.5%	88.0%	94.9%	90.5%	100.0%
Exercise/ Sports	80.7%	80.8%	92.3%	66.7%	100.0%
Talk to co-workers	69.3%	68.8%	66.7%	71.4%	85.7%
Alcohol	19.3%	20.2%	20.5%	14.3%	14.3%
Therapy/ Counseling	17.9%	15.4%	30.8%	19.0%	14.3%
Stress-relieving medications	5.7%	3.8%	7.7%	14.3%	–
Other medications	4.1%	4.3%	5.1%	2.4%	–
Recreational drugs	2.0%	2.9%	–	–	–
Smoking	1.4%	1.4%	–	2.4%	–
Other	40.2%	38.0%	41.0%	50.0%	42.9%

<sup>a</sup> Respondents could answer more than once.

Table 8B  
*'Other' Stress Management Statistics*

	Whole Sample (n = 112)	N
'Other' Stress Management Methods <sup>a</sup>		
Leisure/Hobbies/Recreation	30.4%	34
Reading	24.1%	27
Meditation/Yoga/Tia Chi	22.3%	25
Music (play/listen to)	16.1%	18
Outdoor Activities (i.e. gardening)	15.2%	17
Media (TV/movies/video or computer games)	12.5%	14
Spirituality/Religion	9.8%	11
Time with pets	9.8%	11
Time with family	7.1%	8
Art (projects/theatre/ galleries)	6.3%	7
Massage therapy	5.4%	6
Time with friends/social events	4.5%	5
Vacation/trips	4.5%	5
Over Counter Meds/ Vitamins	4.5%	5
Eating/cooking	3.6%	4
Writing	2.7%	3
Volunteer Work	2.7%	3
Work	1.8%	2
Sex	<1%	1

<sup>a</sup> Respondents could answer more than once.

As shown in Table 9, significant differences between stress management and gender were found. Females were more likely than males to talk to friends/family members  $F(1, 296) = 5.65$ ,  $p < .05$ , as well as with co-workers  $F(1, 296) = 22.74$ ,  $p < .001$  as a method for reducing stress. Males, on the other hand, were more likely to use alcohol than females for reducing stress  $F(1, 296) = 3.97$ ,  $p < .05$ .

Table 9  
*Compared Means of Stress Management by Gender*

Stress Management <sup>a</sup>	Gender					
	Female		Male		Total	
	Mean	N	Mean	N	Mean	N
Talk to friends/ family	92.5%	199	83.5%	97	89.5%	296
Exercise/ Sports	79.4%	199	83.5%	97	80.7%	296
Talk to co-workers	77.9%	199	51.5%	97	69.3%	296
Alcohol	16.1%	199	25.8%	97	19.3%	296
Therapy/ Counseling	19.6%	199	14.4%	97	17.9%	296
Stress-relieving medications	5.5%	199	6.2%	97	5.7%	296
Other medications	4.5%	199	3.1%	97	4.1%	296
Recreational drugs	1.5%	199	3.1%	97	2.0%	296
Smoking	1.0%	199	2.1%	97	1.4%	296
Other	41.7%	199	37.1%	97	40.2%	296

<sup>a</sup> Respondents could answer more than once.

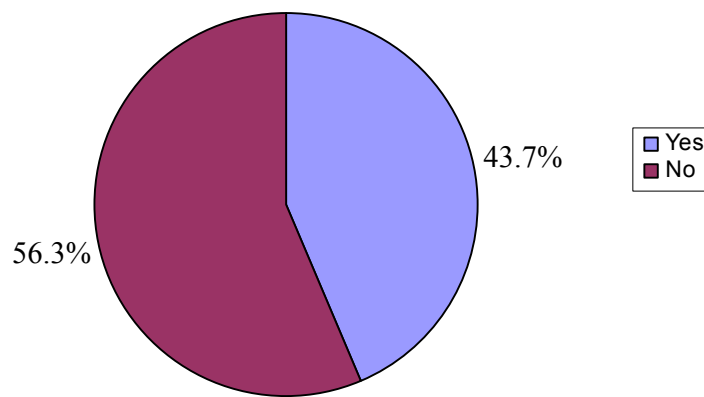
### 5.6 Program/Seminar Participation Statistics

Figure 6 shows the percentages of those whose work provides programs/seminars for reducing stress. Those who reported ‘private practice’ (n = 147) were excluded from this analysis. While 44% reported having some sort of stress relieving programs or seminars provided by their work, 56% said no.

Table 10 shows the description of the program/seminar participation statistics. Again, those who reported ‘private practice’ (n = 147) were excluded from this analysis. Of the 44% who reported taking part in these stress reducing programs/seminars provided by their employment, an overwhelming majority at 62%, across all mental health workers, reported ‘never’ participating. Of those who stated participating in such programs/seminars ‘sometimes’, ‘often’

or 'always' (n = 23) were asked to give their opinions on the effectiveness of these programs/seminars in reducing their stress. As shown in Table 10, only 18% reported that they found these programs/seminars to 'always' be effective in reducing their stress. Among the other mental health workers not stated, 100% reported these programs/seminars as 'always' being effective, as well as 50% of psychiatrists, and 13% of psychologists. Half of the overall sample reported 'sometimes', in which 60% of psychologists, 50% of psychiatrists and 25% of psychological associated reported as their opinion on the effectiveness of these programs/seminars. Interestingly, none of the sample, regardless of occupational title, reported the effectiveness of the seminars/programs as 'never' being effective for reducing stress.

Figure 6. Does your place of work provide any programs/seminars for reducing stress?



Note: Excludes those in 'private practice' (N = 147).



Table 10  
*Program/Seminar Participation Statistics*

	Whole Sample (n = 261)	Psychologists (n = 76)	Psychiatrists (n = 17)	Psychological Assoc. (n = 19)	Other (n = 2)
<b>Work Stress Program Participation<sup>a</sup></b>					
Never	62.3%	61.8%	82.4%	47.4%	50.0%
Seldom	17.5%	17.1%	5.9%	31.6%	-
Sometimes	14.0%	14.5%	-	21.1%	50.0%
Often	4.4%	5.3%	5.9%	-	-
Always	1.8%	1.3%	5.9%	-	-
<b>Opinion of Work Stress Programs Effectiveness<sup>b</sup></b>					
Never	-	-	-	-	-
Seldom	18.2%	20.0%	-	25.0%	-
Sometimes	50.0%	60.0%	50.0%	25.0%	-
Often	13.6%	6.7%	-	50.0%	-
Always	18.2%	13.3%	50.0%	-	100.0%

*Note:* Excludes those in 'private practice' (N = 147).

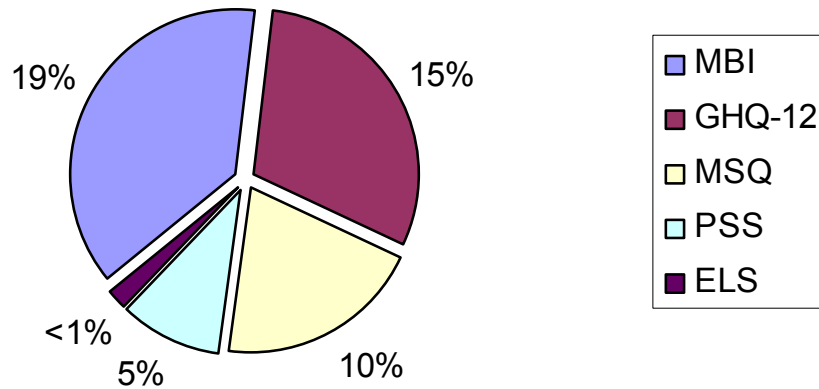
<sup>a</sup> based on respondents who answered 'yes' to having access to work stress programs (n = 114).

<sup>b</sup> based on respondents who responded 'sometimes', 'often' or 'always' to participating in work stress programs (n = 22).

### 5.7 Scale Knowledge or Use among Sample

Respondents were asked “which of the following scales (used in the survey) are you familiar with, or have used in the past?”. As shown in Figure 7, 19% had prior knowledge and/or use of the MBI; 15% reported the GHQ-12; 10% reported the MSQ; 5% reported the PSS; and less than 1% had knowledge or prior use of the ELS. Additionally, 29% had no knowledge of any of these scales mentioned above.

Figure 7. Percentage of Scale Knowledge or Use among Sample



As shown in Tables 11 to 15, no significant differences were found between having prior knowledge or use of these scales mentioned above with individual responses to scale items.

Table 11  
Compared Means of MBI Responses by MBI Knowledge/Use

MBI Responses	MBI Knowledge					
	Yes		No		Total	
	Mean	N	Mean	N	Mean	N
Emotional Exhaustion <sup>a</sup>	20.30	53	19.50	240	19.65	296
Personal Accomplishment <sup>b</sup>	39.79	56	39.73	240	39.74	296
Depersonalization <sup>c</sup>	3.91	56	3.79	240	3.81	296
Total						

Note: <sup>a</sup>  $F(1, 296) = 0.27, p = .606$

<sup>b</sup>  $F(1, 296) = 0.004, p = .948$

<sup>c</sup>  $F(1, 296) = 0.05, p = .826$

Table 12  
*Compared Means of ELS Responses by ELS Knowledge/Use*

ELS Responses	ELS Knowledge					
	Yes		No		Total	
	Mean	N	Mean	N	Mean	N
Hiding Emotions <sup>a</sup>	3.67	1	2.99	295	2.99	296
Faking Emotions <sup>b</sup>	3.00	1	1.98	295	1.98	296
Deep Acting <sup>c</sup>	3.67	1	2.87	295	2.87	296

Note: <sup>a</sup>  $F(1, 296) = 1.25, p = .265$

<sup>b</sup>  $F(1, 296) = 2.20, p = .139$

<sup>c</sup>  $F(1, 296) = 0.51, p = .476$

Table 13  
*Compared Means of MSQ Responses by MSQ Knowledge/Use*

MSQ Knowledge	MSQ Responses	
	Mean	N
Yes	75.27	30
No	71.31	266
Total	71.71	296

Note:  $F(1, 296) = 1.92, p = .167$

Table 14  
*Compared Means of PSS Responses by PSS Knowledge/Use*

PSS Knowledge	PSS Responses	
	Mean	N
Yes	13.71	14
No	14.03	282
Total	14.02	296

Note:  $F(1, 296) = 0.40, p = .842$

Table 15  
*Compared Means of GHQ-12 Responses by GHQ-12 Scale Knowledge/Use*

GHQ-12 Knowledge	GHQ-12 Responses	
	Mean	N
Yes	1.53	43
No	1.50	253
Total	1.51	296

*Note:  $F(1, 294) = 0.02, p = .904$*

### *5.8 Emotional Labour Performance of Mental Health Workers*

As shown in Table 29 in Appendix B, the means of emotional labour performance revealed greater frequency of hiding emotions ( $M = 2.99, SD = .61$ ) when compared to deep acting ( $M = 2.87, SD = 1.11$ ) and faking emotions ( $M = 1.98, SD = .69$ ) among mental health workers.

Table 30 in Appendix B, reports the mean comparisons of emotional labour performance, burnout, job satisfaction, perceived stress, psychological distress and physical symptoms experienced among mental health workers. Results found significant difference in the frequency of engaging in faking emotions during patient interactions among the occupational groups of mental health workers  $F(3, 292) = 2.92, p < .05$ . Post hoc comparisons, using Scheffé's method, identified psychological associates as the most likely group of mental health workers to engage in faking emotions with their patients (2.26), while psychiatrists were the least likely (1.85).

Mean comparisons, as shown in Tables 30 to 32 in Appendix B revealed significant differences among mental health workers by gender, age and years in practice in regard of emotional labour performance.

Table 31 in Appendix B shows the mean comparisons of emotional labour performance and occupational title of mental health workers by gender. Significant differences were found for

deep acting among male and female psychologists  $F(1, 206) = 9.77, p < .05$ . Female psychologists (3.01) reported greater deep acting with their patients than male psychologists (2.51).

Table 32 in Appendix B shows the mean comparisons of emotional labour performance and occupational title of mental health workers by age. Significant differences were found for deep acting among psychologists depending on age  $F(1, 203) = 6.19, p < .05$ . Psychologists under 50 years of age reported greater deep acting with their patients (3.02) than psychologists 50 years of age or older (2.64).

As shown in Table 33 in Appendix B, the mean comparisons of emotional labour and occupational title of mental health workers by years in practice revealed significant differences among psychologists for deep acting  $F(1, 206) = 5.22, p < .05$ . Psychologists with less than 20 years of practice reported greater deep acting (3.00) than psychologists with more years of practice (2.64).

### *5.9 Burnout among Mental Health Workers*

Table 16 shows the MBI cut-off score comparisons. When mental health workers scores were compared to Maslach and Jackson's (1986) mental health category for norm cut-off scores of burnout among their occupational subgroup of mental health workers ( $n = 730$ ; i.e. psychologists, psychiatrists, psychotherapists, counselors, and mental hospital staff), this studies sample scored an 'average' mean of emotional exhaustion ( $M = 19.65, SD = 10.52$ ), and 'lower' means of depersonalization ( $M = 3.81, SD = 3.65$ ) and personal accomplishment ( $M = 39.74, SD = 6.22$ ). Additionally, mental health workers, when compared to Evan and college's (2006) sample of mental health social workers ( $n = 237$ ), and Pajak and college's (2003) samples of

consultant psychiatrists ( $n = 181$ ), reported lower depersonalization and emotional exhaustion, and greater personal accomplishment.

Table 30 in Appendix B, reports the mean comparisons of burnout among mental health workers. Results found significant difference in the levels of personal accomplishment during patient interactions among the occupational groups of mental health workers  $F(3, 292) = 2.91, p < .05$ . Post hoc analysis, using Scheffé's method, revealed greater experience of personal accomplishment among 'other' mental health workers, including nurses and social workers (5.36). The analysis also revealed psychological associates as experiencing the least amount of personal accomplishment (4.71).

Table 31 in Appendix B, shows the mean comparisons of burnout and occupational title of mental health workers by gender. Significant differences were found for depersonalization among male and female psychiatrists  $F(1, 37) = 4.11, p < .05$ . Male psychiatrists reported greater depersonalization of their patients (5.48), then female psychiatrists (2.94).

As shown in Table 32 in Appendix B, when comparing burnout and occupational title of mental health workers by age, significant differences were found for the burnout dimensions personal accomplishment  $F(1, 203) = 9.02, p < .05$ , and depersonalization  $F(1, 203) = 6.16, p < .05$  among psychologists. Psychologists under 50 years of age reported greater depersonalization of their patients (4.27) then older psychologists (3.03), while psychologists 50 years of age or older reported greater personal accomplishment (41.59) then their younger counterparts (39.06). However, the mean comparisons of emotional labour and occupational title of mental health workers by years in practice revealed no significant differences, as shown in Table 33 of Appendix B.

Table 16

*MBI Cut-Off Score Comparisons*

Dependent Variables	Mental Health Workers (n = 296)	Mental Health Social Workers (n = 237) <sup>1</sup>	Consultant Psychiatrists (n = 181) <sup>2</sup>	Mental Health Category Norms (n = 730) <sup>3</sup>
Emotional Exhaustion	19.65 (10.52)	26.3 (10.10)	24.20 (11.30)	16.90 (8.90)
Depersonalization	3.81 (3.65)	7.30 (5.20)	8.50 (6.10)	5.70 (4.60)
Personal Accomplishment	39.74 (6.22)	33.90 (6.80)	36.00 (5.70)	30.90 (6.40)

1. Data from Evans et al, 2006.
2. Data from Pajak et al, 2003.
3. Data from Maslach & Jackson, 1986.

*5.10 Job Satisfaction among Mental Health Workers*

The mental health workers revealed 'moderate' job satisfaction ( $M = 71.71$ ,  $SD = 5.81$ ), based on Weiss et al's (1967) low ( $\leq 25$ ), moderate (26-74) and high ( $75 \geq$ ) cut-off scores.

No significant differences were found in the mean comparison of job satisfaction and occupational title of mental health workers by gender, as shown in Table 31 of Appendix B. However, significant differences were found in the mean comparison of job satisfaction and occupational title by age among psychologists  $F(1, 203) = 11.66$ ,  $p < .001$ , and psychiatrists  $F(1, 37) = 7.17$ ,  $p < .01$ , as shown in Table 32 of Appendix B. In both cases, older psychologists (75.65 vs. 68.65) and older psychiatrists (81.17 vs. 68.29) reported greater job satisfaction than those below 50 years of age.

Additionally, as shown in Table 33 of Appendix B, significant differences were found among psychologists  $F(1, 206) = 8.86$ ,  $p < .01$ , and psychiatrists  $F(1, 37) = 4.33$ ,  $p < .05$  in the mean

comparisons of job satisfaction and occupational title by years in practice. In both cases, psychologists (75.74) and psychiatrists (79.53) with 20 or more years of practice reported greater job satisfaction than psychologists (69.54) and psychiatrists (69.20) with less than 20 years of experience in mental health care.

### *5.11 Perceived Stress of Mental Health Workers*

As mentioned above, while the PSS-10 has no standard cut-off score to indicate high levels of perceived stress, the mean of the mental health workers was 14.02 ( $SD= 5.81$ ).

No significant differences were found in the mean comparisons of perceived stress and occupational title by gender, or perceived stress and occupational title by age, as shown in Tables 30 and 31 of Appendix B. However, as shown in Table 33 of Appendix B, significant differences were found among psychologists  $F(1, 206) = 6.36, p < .01$  in the mean comparisons of perceived stress and occupational title of mental health workers by years in practice. Psychologists with less than 20 years of practice (14.52) reported greater perceived stress than psychologists with more years of experience (12.40).

### *5.12 Health & Well-being of Mental Health Workers*

Regarding psychological distress, mental health workers scored a mean of 1.51 ( $SD = 1.64$ ). As shown in Figure 8, respectively 60% reported 'low' or lower psychological distress scores of 0/1, 25% reported 'average' scores of 2/3, and 16% reported 'high' scores of 4 or greater of psychological distress on the GHQ-12.



Figure 8. Description of GHQ-12 Cut-off Scores

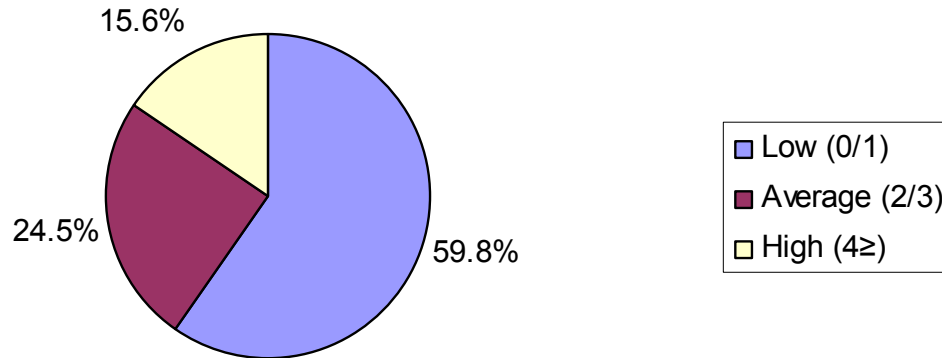


Table 30 showed significant mean differences in psychological distress  $F(3, 292) = 3.11$ ,  $p < .05$ , and physical symptoms  $F(3, 292) = 2.87$ ,  $p < .05$  reported among the subgroups of mental health workers.

As shown in Table 31 of Appendix B, no significant differences were found for reported psychological distress or physical symptoms in the mean comparisons by gender among mental health workers. Additionally, no significant differences were found in the mean comparisons of physical symptoms and occupational title by age or years in practice, as shown in Tables 31 and 32 in Appendix B.

However, as shown in Table 32 of Appendix B, the mean comparisons of psychological distress and occupational title of mental health workers by age revealed significant difference among psychologists  $F(1, 203) = 7.27$ ,  $p < .01$ , and psychiatrists  $F(1, 37) = 6.03$ ,  $p < .05$ . In both cases, older psychologists (6.51) and older psychiatrists (6.65) reported greater psychological distress compared to psychologists (5.74) or psychiatrists (5.43) below 50 years of age.

Additionally, significant differences were found in the mean comparison of reported psychological distress and occupational title by years in practice among psychologists  $F(1, 206) = 10.87, p < .001$ . Psychologists with 20 or more years of practice in mental health care reported greater psychological distress (6.63) than psychologists with less than 20 years of experience (5.68).

In order to identify if mental health workers perception of their overall health was consistent with their health habits, mean comparisons based on one's perceived health and number of sick days, minutes of exercise, smoking habits and alcohol consumption were compared, as shown in Tables 17 to 20. Significant differences were found for number of sick days in the past 12 months  $F(4, 289) = 4.83, p < .001$ , and minutes of exercise per day  $F(4, 282) = 3.52, p < .01$ . No significant differences were found for smoking habits per day  $F(3, 14) = 0.42, p = .743$ , nor alcohol consumption per week  $F(4, 295) = 0.54, p = .706$ .

Table 17  
*Compared Means of Perception of Overall Health by Sick Days in Past 12 months*

Perceived Health	Number of Sick Days in Past 12 Months	
	Mean	N
Excellent	1.71	66
Very Good	3.24	135
Good	4.71	65
Fair	6.64	22
Poor	-	1
Total	2.04	289

*Note:  $F(4, 289) = 4.83, p < .001$*

Table 18  
*Compared Means of Perception of Overall Health by Minutes of Exercise Per Day*

Perceived Health	Minutes of Exercise Per Day	
	Mean	N
Excellent	228.14	66
Very Good	192.71	133
Good	154.34	61
Fair	117.25	20
Poor	60.00	2
Total	3.32	282

*Note:  $F(4, 282) = 3.52, p < .01$*

Table 19  
*Compared Means of Perception of Overall Health by Smoking Habit Per Day*

Perceived Health	Smoking Habit Per Day	
	Mean	N
Excellent	-	1
Very Good	8.67	3
Good	8.25	8
Fair	11.50	2
Poor	-	-
Total	8.29	14

*Note:  $F(3, 14) = 0.42, p = .743$*

Table 20  
*Compared Means of Perception of Overall Health by Units of Alcohol Consumption Per Week*

Perceived Health	Units of Alcohol Consumption Per Week	
	Mean	N
Excellent	1.74	68
Very Good	1.74	137
Good	1.58	66
Fair	1.59	22
Poor	0.50	2
Total	1.68	295

*Note:  $F(4, 295) = 0.54, p = .706$*

### 5.13 Correlation Matrix

Table 29 in Appendix B reports a correlation matrix for all variables used in the multiple linear regressions. The absolute values of the correlations coefficients of the 5 scales ranged from -.31 to .50, with a mean  $r$  of .06 for the ELS; from -.44 to .72, with a mean  $r$  of .03 for the MBI-HSS; from -.42 to .37, with a mean  $r$  of -.07 for the MSQ; from -.52 to .72, with a mean  $r$  of .08 for the PSS; from -.52 to .31, with a mean  $r$  of -.08 for the GHQ-12; and from -.41 to .61, with a mean  $r$  of .09 among the 24 Physical Symptoms checklist items.

Due to the number of predictors within this study, *classical suppression*-in which any  $\beta$ s are significant while the corresponding zero-order  $r$  are not, and *net suppression*-in which any  $\beta$ s and corresponding zero-order  $r$  while significant produce opposite signs, were examined (Cohen and Cohen, 1983). Classical suppression occurred in the association between deep acting and job satisfaction. However, without the presents of net suppression, multicollinearity was not an issue when interpreting the results of the regression weights across all outcomes.

The following significant associations were identified:

Among the emotional labour performance dimensions, hiding emotions and faking emotions ( $r = .50$ ), were not surprisingly associated, as both dimensions made up the original sub-dimension, surface acting. Interestingly, faking emotions and deep acting were associated, but only weakly ( $r = .15$ ).

Hiding emotions and faking emotions were associated with the burnout dimensions emotional exhaustion (hiding:  $r = .35$ ; faking:  $r = .37$ ), and depersonalization (hiding:  $r = .31$ ; faking:  $r = .31$ ). Additionally, hiding emotions ( $r = -.26$ ) and faking emotions ( $r = -.28$ ) were also associated with personal accomplishment. Contrary to prediction, deep acting was associated with personal accomplishment, but only weakly ( $r = .13$ ).

As predicted, hiding emotions ( $r = -.18$ ) and faking emotions ( $r = -.31$ ) were both associated with lower job satisfaction. However, contrary to prediction, deep acting was *not* associated with job satisfaction ( $r = .04$ ).

Regarding stress, as hypothesized, both hiding emotions ( $r = .36$ ) and faking emotions ( $r = .43$ ) were associated with perceived stress, while deep acting was *not* associated with perceived stress ( $r = .06$ ).

For the two health and well-being dimensions, psychological distress and physical symptoms, some predicted and unpredicted associations were identified.

Findings suggested that hiding emotions was associated with physical symptoms, as anticipated ( $r = .23$ ), but surprisingly *not* associated with psychological distress ( $r = .03$ ). As predicted, deep acting was *not* associated with either psychological distress ( $r = .03$ ), or physical symptoms ( $r = .07$ ). Faking emotions, however, was unexpectedly associated with psychological distress ( $r = .12$ ), and physical symptoms ( $r = .35$ ).

As with the other response variables anticipated to be associated with psychological distress and physical symptoms reported, some expected and unexpected associations were also found. For emotional exhaustion and depersonalization, both burnout dimensions were associated with psychological distress (emotional exhaustion:  $r = .23$ ; depersonalization:  $r = .14$ ), and physical symptoms (emotional exhaustion:  $r = .57$ ; depersonalization:  $r = .34$ ) as predicted. The other burnout dimension, personal accomplishment, as anticipated, was associated with physical symptoms reported ( $r = -.35$ ), but contrary to prediction, was *not* significantly associated with psychological distress ( $r = -.04$ ).

As predicted, perceived stress was associated with both physical symptoms ( $r = .57$ ), and psychological distress ( $r = .31$ ). Also as anticipated, job satisfaction and physical symptoms

were associated ( $r = -.37$ ). However, the association between job satisfaction and psychological distress was *not* significant as first anticipated ( $r = -.10$ ).

All three control variable, age, genders, and years in practice, were significantly associated with deep acting (age:  $r = -.15$ ; gender:  $r = .15$ ; years practicing:  $r = .14$ ). More specifically, age and years in practice were negatively associated with deep acting, indicating younger mental health workers with fewer years of practice were less likely to engage in deep acting with their patients. Additionally, gender was positively associated with deep acting, indicating female mental health workers engaged in deep acting more than their male counterparts. Furthermore, a negative association between faking emotions and age was also identified ( $r = -.15$ ), indicating younger mental health workers were more likely to engage in faking emotions during patient interactions.

Several significant associations were also found among the control variables, response variables, and control and response variables. The most significant correlations found were, not surprisingly, between age and years in practice ( $r = .84$ ), emotional exhaustion and perceived stress ( $r = .72$ ), emotional exhaustion and physical symptoms ( $r = .61$ ), perceived stress and physical symptoms ( $r = .60$ ), emotional exhaustion and depersonalization ( $r = .56$ ), and psychological distress and physical symptoms ( $r = .22$ ).

#### *5.14 Cronbach Alpha's*

Table 29, in Appendix B, reports the estimates of scale reliability, which were calculated with Cronbach  $\alpha$ 's on the main diagonal. With two exceptions (depersonalization: .64, and GHQ-12: .57), all measures had  $\alpha$ 's of .70 or higher.

## 5.15 Multiple Regression Results

### 5.15.1 Predicting Emotional Exhaustion

Table 21 reports the multiple regressions for predicting emotional exhaustion. Data, including control variables (age, gender and years in practice), and explanatory variables (hiding emotions, faking emotions and deep acting) were entered stepwise in a multiple regression.

Results showed that only faking emotions and hiding emotions were significant predictors of emotional exhaustion. Both faking emotions and hiding emotions were positive predictors. In other words, as faking emotions, or hiding emotions increased, emotional exhaustion also increased. Faking emotions predicted 14% of the variance in emotional exhaustion, while hiding emotions predicted 4% of the variance.

Table 21  
*Stepwise Regression Analysis for Variables Predicting Emotional Exhaustion (N = 292)*

Variables	<i>B</i>	<i>SE B</i>	$\beta$
Step 1			
Faking Emotions	5.56	.81	.37**
Step 2			
Faking Emotions	3.83	.922	.26**
Hiding Emotions	3.91	1.05	.23**

*Note.*  $R^2 = .14$  for Step 1;  $\Delta R^2 = .04$  for Step 2, ( $ps < .05$ ).

\* $p < .05$ . \*\* $p < .01$ .

### 5.15.2 Predicting Depersonalization

Table 22 reports the multiple regressions for predicting depersonalization. Data, including control variables (age, gender and years in practice), and explanatory variables (hiding emotions, faking emotions and deep acting) were entered stepwise in a multiple regression.

Results showed that only hiding emotions, faking emotions, gender, and age were significant predictors of depersonalization. While both hiding emotions and faking emotions were positive predictors, age and gender were negative predictors. These results suggested that when faking emotions, or hiding emotions increased, depersonalization also increased. Additionally, older mental health workers, and females were less likely to depersonalization their patients. While hiding emotions predicted 10% of the variance in depersonalization, faking emotions predicted 3% of the variance, gender predicted 2%, and age predicted 1%.

Table 22  
*Stepwise Regression Analysis for Variables Predicting Depersonalization (N = 292)*

Variables	<i>B</i>	<i>SE B</i>	$\beta$
Step 1			
Hiding Emotions	1.86	.34	.31**
Step 2			
Hiding Emotions	1.24	.38	.21**
Faking Emotions	1.08	.34	.21**
Step 3			
Hiding Emotions	1.15	.38	.19**
Faking Emotions	1.17	.33	.22**
Gender	-1.20	.42	-.16**
Step 4			
Hiding Emotions	1.23	.37	.21**
Faking Emotions	1.01	.33	.19**
Gender (males = 0, females = 1)	-1.56	.43	-.20**
Age	-0.06	.02	-.18**

Note.  $R^2 = .10$  for Step 1;  $\Delta R^2 = .03$  for Step 2,  $\Delta R^2 = .02$  for Step 3,  $\Delta R^2 = .01$  for Step 4, ( $ps < .05$ ).

\* $p < .05$ . \*\* $p < .01$ .



### *5.15.3 Predicting Personal Accomplishment*

Table 23 reports the multiple regressions for predicting personal accomplishment. Data, including control variables (age, gender and years in practice), and explanatory variables (hiding emotions, faking emotions and deep acting) were entered stepwise in a multiple regression.

Results showed that only faking emotions, deep acting, hiding emotions, and age were significant predictors of personal accomplishment. While both deep acting and age were positive predictors, hiding emotions and faking emotions were negative predictors. These results suggested that when deep acting increased, personal accomplishment also increased.

Additionally, older mental health workers were more likely to experience personal accomplishment than younger mental health workers. Conversely, when hiding emotions or faking emotions increased, one's personal accomplishment decreased. While faking emotions predicted 8% of the variance of personal accomplishment, deep acting predicted 4% of the variance, hiding emotions predicted 2%, and age predicted 2%.

Table 23  
*Stepwise Regression Analysis for Variables Predicting Personal Accomplishment*  
*(N = 292)*

Variables	<i>B</i>	<i>SE B</i>	$\beta$
Step 1			
Faking Emotions	-2.51	.51	-.28**
Step 2			
Faking Emotions	-2.79	.51	-.31**
Deep Acting	1.09	.32	.19**
Step 3			
Faking Emotions	-2.11	.59	-.23**
Deep Acting	1.00	.32	.18**
Hiding Emotions	-1.49	.66	-.15*
Step 4			
Faking Emotions	-1.91	.59	-.21**
Deep Acting	1.09	.32	.19**
Hiding Emotions	-1.59	.66	-.16*
Age	.08	.03	.13*

*Note.*  $R^2 = .08$  for Step 1;  $\Delta R^2 = .04$  for Step 2,  $\Delta R^2 = .02$  for Step 3,  $\Delta R^2 = .02$  for Step 4, ( $ps < .05$ ).

\* $p < .05$ . \*\* $p < .01$ .

#### 5.15.4 Predicting Job Satisfaction

Table 24 reports the multiple regressions for predicting job satisfaction. Data, including control variables (age, gender and years in practice), and explanatory variables (hiding emotions, faking emotions and deep acting) were entered stepwise in a multiple regression.

Results showed that only faking emotions, age, and deep acting were significant predictors of job satisfaction. While both deep acting and age were positive predictors, faking emotions was a negative predictor. These results suggested that when deep acting increased, job satisfaction also increased. Additionally, older mental health workers had greater job satisfaction over younger mental health workers. Conversely, while faking emotions increased, one's sense of job

satisfaction decreased. While faking emotions predicted 10% of the variance of job satisfaction, age predicted 4% of the variance, and deep acting predicted 1%.

Table 24  
*Stepwise Regression Analysis for Variables Predicting Job Satisfaction (N =292)*

Variables	<i>B</i>	<i>SE B</i>	$\beta$
Step 1			
Faking Emotions	-6.64	1.21	-.31**
Step 2			
Faking Emotions	-5.98	1.19	-.28**
Age	.31	.08	.21**
Step 3			
Faking Emotions	-6.34	1.20	-.29**
Age	.33	.08	.23**
Deep Acting	1.57	.75	.12*

Note.  $R^2 = .10$  for Step 1;  $\Delta R^2 = .04$  for Step 2,  $\Delta R^2 = .01$  for Step 3, ( $ps < .05$ ).

\* $p < .05$ . \*\* $p < .01$ .

### 5.15.5 Predicting Perceived Stress

Table 25 reports the multiple regressions for predicting perceived stress. Data, including control variables (age, gender and years in practice), and explanatory variables (hiding emotions, faking emotions and deep acting) were entered stepwise in a multiple regression.

Results showed that only faking emotions and hiding emotions were significant predictors of perceived stress. Both faking emotions and hiding emotions were positive predictors. These results suggested that when faking emotions or hiding emotions increased, perceived stress also increased. While faking emotions predicted 18% of the variance of perceived stress, hiding emotions predicted 4% of the variance.

Table 25  
*Stepwise Regression Analysis for Variables Predicting Perceived Stress (N =292)*

Variables	<i>B</i>	<i>SE B</i>	$\beta$
Step 1			
Faking Emotions	3.58	.44	.43**
Step 2			
Faking Emotions	2.71	.50	.32**
Hiding Emotions	1.96	.57	.21**

*Note.*  $R^2 = .18$  for Step 1;  $\Delta R^2 = .03$  for Step 2, ( $ps < .05$ ).

\* $p < .05$ . \*\* $p < .01$ .

#### 5.15.6 Predicting Psychological Distress

Table 26 reports the multiple regressions for predicting psychological distress. Data, including control variables (age, gender and years in practice), and explanatory variables (hiding emotions, faking emotions, deep acting, emotional exhaustion, personal accomplishment, depersonalization, job satisfaction, and perceived stress) were entered stepwise in a multiple regression.

Results showed that perceived stress was the only significant predictor of psychological distress. Furthermore, perceived stress was a positive predictor. These results suggested that when perceived stress increased, psychological distress also increased. Perceived stress predicted 9% of the variance of psychological distress.

Table 26

*Stepwise Regression Analysis for Variables Predicting Psychological Distress (N =292)*

Variables	<i>B</i>	<i>SE B</i>	$\beta$
Step 1			
Perceived Stress	.08	.02	.30**

*Note.*  $R^2 = .09$  for Step 1 ( $ps < .05$ ).

\* $p < .05$ . \*\* $p < .01$ .

### 5.15.7 Predicting Physical Symptoms

Table 27 reports the multiple regressions for predicting reported physical symptoms. Data, including control variables (age, gender and years in practice), and explanatory variables (hiding emotions, faking emotions, deep acting, emotional exhaustion, personal accomplishment, depersonalization, job satisfaction, and perceived stress) were entered stepwise in a multiple regression.

Results showed that only perceived stress, emotional exhaustion, and job satisfaction were significant predictors of reported physical symptoms. While emotional exhaustion and perceived stress were positive predictors, job satisfaction was a negative predictor. These results suggested that when emotional exhaustion or perceived stress increased, physical symptoms also increased. Conversely, when job satisfaction increased, physical symptoms reported decreased. While perceived stress predicted 31% of the variance of physical symptoms, emotional exhaustion predicted 5% of the variance, and job satisfaction predicted 1%.

Table 27  
*Stepwise Regression Analysis for Variables Predicting Physical Symptoms (N = 292)*

Variables	<i>B</i>	<i>SE B</i>	$\beta$
Step 1			
Perceived Stress	.47	.04	.56**
Step 2			
Perceived Stress	.28	.06	.34**
Emotional Exhaustion	.15	.03	.32**
Step 3			
Perceived Stress	.25	.06	.30**
Emotional Exhaustion	.14	.03	.29**
Job Satisfaction	-.04	.02	-.13**

*Note.*  $R^2 = .31$  for Step 1;  $\Delta R^2 = .05$  for Step 2,  $\Delta R^2 = .01$  for Step 3, ( $ps < .05$ ).

\* $p < .05$ . \*\* $p < .01$ .

### 5.16 Findings of Test Hypotheses

Based on the findings from the correlations matrix, and multiple regressions, as mentioned above, the following hypothesis were supported:

*H1a:* The ELS and MBI-HSS were successful at predicting the association between the subscales, hiding emotions and emotional exhaustion.

*H1b:* The ELS and MBI-HSS were successful at predicting the association between the subscales, faking emotions and depersonalization, and faking emotions and personal accomplishment.

*H1c:* The ELS and MBI-HSS were less successful at predicting *no* association between the dimension deep acting and any of the MBI-HSS dimensions, as findings revealed an association between deep acting and personal accomplishment.

*H2a:* The ELS and MSQ were successful at predicting the association between the subscales faking emotions and lower to moderate job satisfaction, but unsuccessful at predicting the association between hiding emotions and lower to moderate job satisfaction.

*H2b:* The ELS and MSQ were successful at predicting the association between the subscales deep acting and higher job satisfaction.

*H3a:* The ELS and PSS were successful at predicting the association between the subscales hiding emotions and perceived stress, and faking emotions and perceived stress.

*H3b:* The ELS and PSS were successful at revealing *no* association between the subscales- deep acting and perceived stress.

*H4a*: Among all of the scales, the PSS was the only successful scale at predicting the association between the subscales (i.e. perceived stress) and psychological distress.

*H4b*: Among all of the scales, only three were successful at predicting the associations between the subscales and reported physical symptoms; the PSS, the MSQ, and somewhat less successful, the MBI-HSS as only emotional exhaustion was related.



## 6.0 DISCUSSION

This study has made three major contributions: (1) uncovered which method of performing emotional labour was most frequently used by mental health workers when interacting with patients; (2) identified which consequences were associated with performing emotional labour for those in the mental health field- including burnout, job satisfaction and perceived stress; and (3) identified which of these variables, as mentioned above, predicted the health and well-being of mental health workers.

### *6.1 Sample*

This sample of mental health workers primarily consisted of psychologists, psychiatrists and psychological associates. Of the psychologists, the majority specialized in ‘clinical’ psychology.

The sample was primarily female, married, and middle-aged, and in regard to education, the majority held PhDs. Furthermore, the majority worked in private practices, and their primary patient population consisted of adults, with an average of 64 patients per mental health worker. The average number of years practicing mental health was between 10 to 19 years, in which most worked full-time of over 40 hours a week.

Due to the cross-sectional design of this study, no causal inferences were implied. However, using mean comparisons, significant differences were found among the subgroups of mental health workers. Results suggested that psychological associates were more likely to engage in faking emotions during patient interaction, and also least likely to experience personal accomplishment. These findings suggest that faking emotions will decrease one’s sense of personal accomplishment, as previous research has found. Interestingly, mental health workers in

‘other’ fields, such as nursing and social work, reported the greatest personal accomplishment. However, caution should be applied, due to the small sample size of this subgroup ( $n = 7$ ). Also notably, psychiatrists were the least likely subgroup of mental health workers to engage in faking emotions.

Significant differences among the mean scores for gender, age, and years in practice were also found among mental health workers, specifically among psychologists and psychiatrists. For instance, female psychologists reported greater deep acting, while male psychologists reported greater depersonalization. These findings are consistent with previous emotional labour literature that states females are more likely to engage in emotional labour than males, reinforcing the gender stereotype that females are more “nurturing”.

Psychologists under 50 years of age and with obviously, fewer years of practice, reported greater depersonalization, deep acting and perceived stress than older psychologists. Conversely, older psychologists reported greater personal accomplishment over younger psychologists. Additionally, older psychologists and psychiatrists, with over 20 years of practice in mental health care, reported greater job satisfaction, but also greater psychological distress than their younger counterparts. These findings suggest that these conflicting methods of engaging in deep acting during patient sessions, while at the same time depersonalizing one’s patients, produces stress among younger psychologists. Older psychologists and psychiatrists, on the other hand, with more years in the field experienced greater personal accomplishment, and therefore greater job satisfaction. However, even with this said, psychological distress was still prevalent. These findings suggest that over time personal accomplishment and therefore job satisfaction may increase, but these factors cannot prevent the experience of psychological strain.

One goal of this study was to identify which method of emotional labour performance was most frequently used among mental health workers during patient interactions. The greater frequency of hiding emotions, reflected in mean scores on the hiding emotions scale (2.99) relative to deep acting (mean score 2.87) and faking emotions (mean scores 1.98) was supported by Lee et al's (2010) findings. Their cohort of physicians ( $n = 278$ ) showed similar results regarding the mean scores on the hiding emotions scale (2.86) relative to deep acting (mean scores 2.49) and faking emotions (mean scores 1.91). These findings suggested that "emotional suppression" by way of hiding emotions, requires the most effort in order to prevent "leakage of facial expressions and body language" (Lee et al, 2010). However, mental health workers showed greater frequency of performing emotional labour among each of the three dimensions when compared to Lee et al's (2010) cohort of physicians, especially deep acting, which in this study, was a significant predictor of personal accomplishment. While faking emotions was the least frequently used dimension of emotional labour, which was associated with the depersonalization and a decreased sense of personal accomplishment (Lee et al, 2010), this was also true for hiding emotions in our study.

According to Naude and Rothman (2004), high scores of emotional exhaustion and depersonalization, and low scores of personal accomplishment indicates the existence of burnout. Respondents in this study fell into the 'average' or 'middle third' range of experienced emotional exhaustion, and 'lower third' of experienced depersonalization, and personal accomplishment, according to Maslach and Jackson's (1986) mental health category norm cut-off scores, as shown above. Furthermore, when compared to other mental health workers burnout scores, this sample reported lower depersonalization and emotional exhaustion, and greater personal

accomplishment. These findings indicated a weak existence of burnout among this sample of mental health workers.

Respondents' estimation of their own health was consistent with their reported minutes of exercise per day and number of sick days in the past 12 months, but not for number of cigarettes smoked per day, nor units of alcohol consumed per day. That is, those who reported fewer sick days, and more minutes of exercise per day, overall, rated their health as better. Alcohol consumption or the smoking habits of smokers did not differ on how one rated their overall health. These findings indicated that respondents had an appropriate understanding of their own health, which was supported by previous research, in that individuals of greater SES and higher education have greater overall health, and are therefore more likely to assess it as such (Taylor, 2006).

In regard to the psychological health and well-being of mental health workers, physical symptoms and psychological distress was reported. While respondents reported an average of 8.9 physical symptoms out of 24, the average severity among these physical symptoms, however, was reported as 'mild'. Furthermore, most respondents scored below the cut-off score of psychological distress, indicating minimal risk.

Few mental health workers reported participating in seminars or stress-relieving programs provided by their work. According to the Conference Board of Canada (June 1999), over half of the organizations surveyed reported having wellness and stress-relieving programs available for their staff members. These findings showed that while over one-third had access to such programs, only 16% reported experiencing any benefit from these programs in reducing their stress.

Regardless of participation or access to such programs, results suggest that mental health workers, overall, appear to have a ‘positive’ or ‘healthy’ approach to dealing with stressful situations. A large percentage of mental health workers, especially females, reported having some kind of social support network. As social support can act as a mediator between stress and health, the existence of social support, coupled with other contributing factors (i.e. SES, income, education, etc) may contribute to the minimal burnout, stress and health complaints among these health care workers.

However, these findings do not overshadow the fact that mental health workers are only moderately satisfied in their line of work. While the exact reason remains unclear, the existence of stress, emotional exhaustion, and depersonalization may contribute to these findings. However, as mentioned above, the degree of burnout found among this group was much lower than found in previous research. Additionally, personal accomplishment was also much greater among these mental health workers.

## *6.2 Scales and Measures*

These findings further contribute to the validity of these measures by adding to the existing body of knowledge regarding EL (see Interpretations and Findings 6.4). Most scales, with the exception of the subscale depersonalization from the MBI-HSS and the GHQ-12, reached acceptable  $a$ 's of over .70. As mentioned earlier, the Cronbach  $a$ 's for the depersonalization scale does not always reach acceptable levels among certain samples (Schaufeli, et al, 2001). Therefore, these results were not surprising. However, the results for the GHQ-12 were unexpected.

Mean comparisons of mental health workers responses to scale items, based on measurement knowledge, or previous use did not produce any significant results. In other words, no differences were found among mental health workers with working knowledge of these measurements, compared to those without any, in regard to answering scale items. Therefore, these findings suggested that having any prior knowledge or use of these scales does not skew the results, leading to response bias. However, caution must be taken, as the face validity of the scale items may have lead to these similar responses.

### *6.3 Correlations*

Several correlations were identified among the variables used in the multiple regressions. However, most correlations were weak. Additionally, without net suppression, multicollinearity was not an issue.

### *6.4 Interpretations and Findings*

H1a, b, c: In regard to burnout, the dimensions from the ELS- hiding emotions, faking emotions and deep acting were hypothesized to be differentially associated with the dimensions from the MBI- HSS- emotional exhaustion, depersonalization and personal accomplishment. However, as mentioned above, these findings were more consistent with previous research by Brotheridge and Grandey (2002), in which hiding and faking emotions were positively associated with emotional exhaustion and depersonalization, and negatively associated with personal accomplishment, while deep acting was positively associated with personal accomplishment. Also, the current findings by Lee and colleges (2010) sample of physicians did not support these findings. Furthermore, faking emotions was better at predicting burnout among

mental health workers than hiding emotions. Based on these findings, we can postulate that faking emotions provides a greater risk for mental health workers when compared to the act of hiding emotions, while deep acting provides a greater sense of personal accomplishment.

H2a, b: Investigating job satisfaction as a consequence of performing emotional labour produced interesting results among the MSQ and ELS dimensions. The finding showed that while the dimensions from the ELS- faking emotions and deep acting were significant predictors of the MSQ dimension- job satisfaction, the dimension hiding emotions was not a significant predictor as first anticipated. Additionally, while deep acting was found to be a predictor of job satisfaction, it did not reach traditional levels of significance. These levels may have been influenced by the degree of overall job satisfaction felt by our sample (i.e. 'moderate'). Furthermore, from these findings we can postulate that faking emotions during patient interactions led to decreased sense of job satisfaction for mental health workers, while provoking felt emotions during these interactions led to moderate levels of job satisfaction for this occupational group. We may also postulate that the two subscales of surface acting- hiding emotions and faking emotions are in fact two separate dimensions measuring different things.

H3a, b: Regarding the stress of mental health workers in association with performing emotional labour on a daily basis, the dimensions from the ELS-hiding emotions and faking emotions were significantly associated with the dimension from the PSS- perceived stress. Both hiding emotions and faking emotions were positively associated with how one perceives stress in their lives. Upon closer inspection, faking emotions was a greater significant predictor of self-perceived stress for mental health workers than hiding emotions. Furthermore, the dimension from the ELS- deep acting was not associated with the dimension of the PSS- perceived stress as anticipated. These findings are supported by previous EL literature.

H4a, b: In regard to the health and well-being of mental health workers as a consequence of performing emotional labour, the dimensions from the MBI-HSS- emotional exhaustion, personal accomplishment and depersonalization; the dimension from the MSQ- job satisfaction; and the dimension from the PSS- perceived stress, were hypothesized to be differentially associated with the dimension from the GHQ-12- psychological distress, and the 24-items from the Physical Checklist. Not all variables associated with psychological distress and physical symptoms were significant predictors when other variables were entered into the multiple regressions. Based on these findings, the dimensions hiding emotions, depersonalization, and personal accomplishment did not predict psychological distress, or the reported physical symptoms as hypothesized. Results did find that perceived stress was a predictor of psychological distress. Additionally, perceived stress, emotional exhaustion, and job satisfaction were predictors of physical symptoms reported. These findings indicate that further research into the ‘black-box’ of health and well-being among mental health workers is required.

### *6.5 Limitations and Implications*

As with all studies, limitations are expected. For this particular study, the limitations met with included the sample size, time of data collection, the recruitment process, as well as the measures used. Additionally, self-reported surveys in and of themselves possess limitations.

Low response rates are common among mental health workers (Hawley et al, 2009). Small sample sizes are often expected among this group, as they are difficult to recruit (Hawley et al, 2009). Therefore, based on previous findings, pre-notifications and non-contingent, monetary compensations were used to try to increase response rates, as suggested in previous web-based survey literature (Hawley et al, 2009; Lavrakas, 2008; Metagora, 2006). However, even with



these precautions taken, low response rates occurred. The response rate of the sample was slightly lower than previous response rates found among mental health workers, but not by much (25% to 40%; Hawley et al, 2009). This was partially due to the population being sampled and loss of co-operation with the CFMHN due to delayed ethics approval. Furthermore, ethics approval was not granted for advertising in organizations' monthly newsletters, further shrinking the potential sample size.

A large number of 'out of office' replies were collected by the researcher, suggesting the time of year (June) may have been a more challenging time for collect responses. Unfortunately, the number of those who participated later could not be estimated.

The particular measures used, in which most showed acceptable reliability and validity, were met with some unexpected results. First, the GHQ-12 did not meet the acceptable  $\alpha$  of .70. Additionally, some of the scales themselves were creating certain limitations for data collection. Some respondents explicitly felt that the ELS items were 'inappropriate' or 'not applicable' to their line of work, while those in private practices had issues with the MSQ questions pertaining to one's co-workers or boss. These concerns seemed to be mirrored by the percentage of drop outs found around these scales. While the latter was rectified by including an 'NA' option, it is unknown if this improved the response rate for this scale.

Causal inference could not be drawn from our findings given our cross-sectional design. Additionally, as with all self-report surveys, sampling bias, self-selection bias, and response bias may have occurred. These biases play an important role in obtaining valid, representative responses from the survey. For instance, the sample may not accurately represent the larger population of interest (i.e. sampling bias); those who choose to participate may be different in some way from those who choose not to participate (i.e. non-response bias); and those who

participated may feel pressured to answer items in a particular way (i.e. response bias).

Additionally, while there is no empirical data to suggest that mental health workers', particularly psychiatrists' and psychologists', familiarity with standardized measures leads to response bias, as a precaution, we asked respondents to identify which scales used within our study were recognized, or used at one time or other. As the majority of respondents were unaware of the measurements, and results from the mean comparisons, suggested that response bias did not occur among the sample. However, we must caution against face validity of the scales.

### *6.6 Recommendations for Future Research*

For future research, several other issues should be addressed. First, further investigations into the 'black box' of health and well-being of mental health workers should be addressed.

While this study investigated some common consequences found in previous research, several other potential predictors should be considered, such as certain job and interpersonal demands (e.g., patient load and work-life conflict) and resources (e.g., control and social support).

Second, some mental health workers reported feeling the questions pertaining to emotional labour as 'irrelevant' to their occupation. That in itself is an interesting finding which should be further investigated.

Third, differences in regard to the consequences of performing emotional labour based on occupational title (psychiatrist, psychologist, psychological assistant, mental health nurse, social worker, etc.), and/or differences in workplace environment (private practice, hospital, university, etc.) should be examined. In this study, differences in sample size represented a limitation for making significant comparisons among the occupational groups and workplace locations.

Fourth, program evaluations for stress relieving programs/seminar directed at mental health workers should be investigated. While most respondents reported availability through their work, not all participated. Therefore, is this low participation rate is due to individual's assessment of stress, or the programs itself.

Last, an investigation into patient satisfaction with their mental health care provider should be compared with their mental health workers emotional labour technique- hiding emotions, faking emotions or deep acting. This last suggestion would shed light on the effectiveness of patient care.

#### *6.7 Recommendations for Real World Applications*

Overall, these findings may be generalized to Canadian mental health workers, specifically those living and working in Ontario. Furthermore, many of these findings address issues that face both full-time and part-time workers, within various occupational settings (i.e. private practice, hospitals, Universities, etc). Therefore, these findings should be viewed by mental health workers and their organizations as precautions for the potential pitfalls that may occur when certain emotional labour performance techniques are adopted when interacting with patients. Specifically, while hiding emotions is a commonly used method among mental health workers, as these findings suggest, hiding emotions has been linked to negative consequences including emotional exhaustion, stress, and reduced personal accomplishment. Based on these findings, mental health workers and their organizations can provide screening tools to identify which emotional labour performance method is being used, as well as any associated negative consequences. Furthermore, organizations and associations could also potentially provide seminars and programs that address these issues, but also give hands-on lessons and instructions of how to interact with patients with the least likely negative consequences while staying within

the organizations guidelines. For those in private practices, these seminars and programs should be extended, as these issues apply to them as well.

## 7.0 CONCLUSION

Mental health workers, like other health care professionals, perform emotional labour as part of their job-role. As these findings suggest, mental health workers are more willing to hide their emotions from patients than faking their emotions, or actual feeling the emotions through deep acting. Unlike other health care professionals, mental health workers differ in the consequences associated with performing emotional labour. Interestingly, previous findings with other mental health workers also revealed differences, particularly with burnout rates.

These results also suggested performing emotional labour has both positive and negative consequences. Among the negative consequences found, performing emotional labour through hiding and faking emotions has been associated with burnout, job dissatisfaction, and increased stress. Conversely, through deep acting, increased personal accomplishment and job satisfaction has been confirmed.

While previous literature has found evidence to suggest that performing emotional labour can lead to psychological and physical health issues, these results found no link. Rather, these findings revealed the consequences associated with performing emotional labour, such as perceived stress, emotional exhaustion and job dissatisfaction contributed to the actual health complaints. Furthermore, few health complaints, both physical and psychological were actually reported, suggesting mental health workers are 'healthy' overall.

Different conclusions would have been reached had only univariate models and Person's  $r$  been used. Multiple linear regressions helped optimized the investigation of the consequences associated with performing emotional labour, and predicting health and well-being among mental health workers.

## REFERENCES

- Abbott, A. (1988). *The system of professions: An essay on the division of expert labor*. Chicago: University of Chicago Press.
- Abraham, R. (1998). Emotional dissonance in organizations: Antecedent, consequence, and moderators. *Genetic, Social, and General Psychology Monographs*, 124(2), 229-246.
- Ackerley, G.D., Burnell, J. Holder, D.C. & Kurdek, L.A. (1988). Burnout among licensed psychologists. *Professional Psychology: Research and Practice*, 19(6), 624-631.
- Adelmann, P. K. (1995). *Emotional labor as a potential source of job stress*. In S. L. Sauter & L. R. Murphy (Eds.), *Organizational risk factors for stress* (pp. 371-381). Washington, DC: American Psychological Association.
- American Association for Public Opinion Research (2011). *Standard Definition: Final Disposition of Case Codes and Outcomes Rates for Surveys* (Revised 2011). Retrieved from: <http://www.aapor.org/Content/NavigationMenu/AboutAAPOR/StandardsampEthics/StandardDefinitions/StandardDefinitions2011.pdf>
- All Doctors Search/ Doctor Search/ College of Physicians and Surgeons of Ontario. (2009). Retrieved March 2009: [www.cpso.on.ca/docsearch/](http://www.cpso.on.ca/docsearch/).
- Ashforth, B. E. & Humphrey, R. H. (1993). Emotional labor in service roles: The influence of identity. *Academy of Management Review*, 18, 88-115.
- Banks, M.H. & Jackson, P.R. (1982). Unemployment and risk of minor psychiatric disorder in young people: cross-sectional and longitudinal evidence *Psychol Med*, 12(4):789-98.
- Bailey, J. (1996), "*Service agents, emotional labor, and costs to overall customer service*", paper presented at the 11th Annual Conference of the Society for Industrial and Organizational Psychology, San Diego, April. Retrieved March 2009.
- Brotheridge, C.M. & Grandey, A.A. (2002). Emotional Labour and Burnout: Comparing Two Perspectives of "People Work". *Journal of Vocational Behaviour* 60, 17-39.
- Brotheridge C.M. & Lee R.T. (2003). Development and validation of the Emotional Labour Scale. *Journal of Occupational and Organizational Psychology*, Vol 76(3), 365-379(15)
- Brown, R.D. (1988). Professorial Responses to Stress: A Self-Assessment Scale. *Review of Higher Education*, 11:3.
- Bono, J.E. & Vey, M.A. (2005). *Toward understanding emotional management at work: A quantitative review of emotional labor research*. In CE Hartel and WJ Zerbe (eds) *Emotions in organizational behavior*, pp.213-233. Mahwah: Lawrence Erlbaum Associates.

CMA Masterfile. (2009). Number of Physicians by Province/ Territories and Specialty, Canada, 2009. Canadian Medical Association. Retrieved from: [http://www.cma.ca/index.php/ci\\_id/16959/la\\_id/1.htm](http://www.cma.ca/index.php/ci_id/16959/la_id/1.htm)

Canadian Institute of Health Information. (2006). *Health Personal Trends in Canada, 1995 to 2004*. Retrieved March 2009: [http://secure.cihi.ca/cihiweb/disPage.jsp?cw\\_page=AR\\_21\\_E](http://secure.cihi.ca/cihiweb/disPage.jsp?cw_page=AR_21_E)

Canadian Federation of Mental Health Nurses. (2010). Retrieved Jan 2010: [http://cfmhn.ca/pages/About\\_Us.html/](http://cfmhn.ca/pages/About_Us.html/).

Cohen, J. & Cohen, P. (1983). *Applied multiple regression/correlation analysis for behavioural sciences (2nd ed.)*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Cohen, S., Evans, G. W., Krantz, D. S. & Stokols, D. (1986). *Behavior, health and environmental stress*. New York: Plenum.

Cohen, S., Kamarck, T., & Mermelstein, R., (1983). A Global Measure of Perceived Stress. *Journal of Health and Social Behavior*, 24, 385-396.

Cohen, S., Rothbart, M. & Phillips, S. (1976). Locus of control and generality of learned helplessness in humans. *Journal of Personality and Social Psychology*, 34, 1049-1056.

Cohen, S. & Spacapan, S. (1978). The aftereffects of stress: An attentional interpretation. *Environmental Psychology and Nonverbal Behavior*, 3, 43-57.

Cohen, S. & Williamson, G. (1988) *Perceived Stress in a Probability Sample of the United States*. In Spacapan, S. and Oskamp, S. (Eds.) *The Social Psychology of Health*. Newbury Park, CA: Sage.

Conference Board of Canada (1999). *Workplace Solutions for Stressed-Out Workers*. Retrieved March 2009: <http://www.conferenceboard.ca/>

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297-334.

Cushway, D. & Tyler, P. (1994). Stress and coping in clinical psychologists. *Stress Medicine*, 10, 35-42.

Danna, K. & Griffin, R. W. (1999). Health and well-being in the workplace: A review and synthesis of the literature. *Journal of Management*, 25, 357-384.

Dahling, J.J. & Perez, L.A. (2010). Older worker, different actor? Linking age and emotional labor strategies. *Personality and Individual Differences*, 48(5), 574-578.

Deary, I.J., Agius, R.M. & Sadler A. (1996). Personality and stress in consultant psychiatrists. *International Journal of Social Psychiatry*, 42(2), 112-124.

- de Jonge, J., Le Blanc, P.M., Peeters, M.C.W., & Noordam, H. (2008). Emotional job demands and role of matching job resources; A cross-sectional survey among health care workers. *International Journal of Nursing Studies*; 45, 1460- 1469.
- Dohrenwend, B.P., Shrout, P.E., Egri, G. & Mendelsohn, F.S. (1980). Nonspecific psychological distress and other dimensions of psychopathology. Measures for use in the general population. *Arch Gen Psychiatry*. 37(11):1229-36.
- Duxbury, L. & Higgins, C. (2001). *Work-life balance in the new millennium: Where are we? Where do we need to go?* Canadian Policy Research Networks (CPRN). Discussion paper No. W/12 Ottawa.
- Evans, S., Huxley, P., Gately, C., et al. (2006). Mental health, burnout and job satisfaction among mental health social workers in England and Wales. *British Journal of Psychiatry*, 188, 75-80.
- Firth, E.S. & Krantz, S.R. (1991). Low burnout in a high-stress setting: A study on staff adaptation at Fountain House. *Psychosocial Rehabilitation Journal*, 14(3), 15-26.
- Freidson, E. (1988). *Profession of medicine: A study in the sociology of applied knowledge*. Chicago: University of Chicago Press.
- Fortener, R.G. (1999). *Relationship between work setting, client prognosis, suicide ideation, and burnout in psychologists and counsellors*. Doctoral Dissertation. University of Toledo: USA.
- Hackman, J. R. & Oldham, G. R. (1974). *The Job Diagnostic Survey: An instrument for the diagnosis of jobs and the evaluation of job redesign projects (Tech. Rep. No. 4)*. New Haven, CT: Yale University, Department of Administrative Sciences.
- Hackman, J. R. & Oldham, G. R. (1975). Development of the Job Diagnostic Survey. *Journal of Applied Psychology*, 60(2), 159-170.
- Hann, S.G. (1999). *Stress, burnout, and job satisfaction among school psychologists: An investigation into the measurement, relationship and factorial validity of the constructs*. Doctoral Dissertation. Indiana University of Pennsylvania: USA.
- Hawley, K., Cook, J. & Jensen-Doss, A. (2009). Do Noncontingent Incentives Increase Survey Response Rates among Mental Health Providers? A Randomized Trial Comparison. *Adm Policy Ment Health*; 36(5): 343–348.
- Hochschild, A. (1983). *The Managed Heart*. Berkeley: University of California Press.
- Hochschild, A. (1989). *The second shift*. New York: Avon Books.



- Gao, F., Luo, N., Thumboo, J., Fones, C., Li, S.C., & Cheung, Y.B. (2004). Does the 12-items General Health Questionnaire contain multiple factors and do we need them? *Health and Quality of Life Outcomes* 2:63
- Grandey, A.A. (1998). *Emotional labor: A concept and its correlates*. Paper presented at the first conference on emotions in organizational life, San Diego, August, 1998.
- Grandey, A.A. (2000). Emotion regulation in the workplace: A new way to conceptualize emotional labor. *Journal of Occupational Health Psychology*, 5, 95–100.
- Greenglass, E.R. & Nash, K. (2008) *Coping and emotional labor: Theoretical considerations*. In, P. Buchwald, T. Ringeisen, & M. Eysenck (Eds.). *Stress and Anxiety Application to Life Span Development and Health Promotion*. Berlin: Logos Verlag. pp. 7-18.
- Glomb, T.M. & Tews, M.J. (2004). Emotional labour. A conceptualization and scale development. *Journal of Vocational Behavior* 64, 1–23.
- Goldberg, D. (1992). *General Health Questionnaire (GHQ-12)*. Windsor, UK: NFER-Nelson.
- Goldberg, D.P. (1972). *The detection of psychiatric illness by questionnaire*. London, Oxford University Press.
- Goldberg, D.P. et al. (1978). *Manual of the General Health Questionnaire*. Windsor, England, NFER Publishing.
- Goldberg, D.P. & Hillier, V.F. (1979). A scaled version of the General Health Questionnaire. *Psychol Med. Feb; 9(1):139-45*.
- Golderberg, D. & Williams, P. (1988). *A user's guide to the General Health questionnaire*. Windsor, UK: NFER-Nelson.
- Kaplowitz, M.D., Hadlock, T.D. & Levine, R. (2004). A comparison of web and mail survey response rates. *Public Opinion Quarterly, Vol. 68 No. 1*, 94-101.
- Kruml, S.M. & Geddes D. (2000). Exploring the Dimensions of Emotional Labor: The Heart of Hochschild's Work. *Management Communication Quarterly, Vol. 14, No. 1*, 8-49.
- Lavrakas, P.J. (2008). *Encyclopedia of Survey Research Methods, Vol.2*. SAGE Publishing Inc, California
- Lazarus, R.S. (1966). *Psychological Stress and the Coping Process*. New York: McGraw-Hill.
- Lazarus, R.S. & Cohen, J.B. (1977). *Environmental Stress*. In I. Altman and J.F. Wohlwill (eds.), *Human Behavior and Environment. (Vol 2)* New York: Plenum.

- Lee, R.T., Lovell, B.L. & Brothridge, C.M. (2010). Tenderness and Steadiness: Relating Job and Interpersonal Demands & Resources with Burnout and Physical Symptoms of Stress in Canadian Physicians. *Journal of Applied Social Psychology*, Vol 40 (9), 2319-2342.
- Leiter, M.P. & Durup, J. (1996). Work, home, and in-between: A longitudinal study of spill-over. *Journal of Applied Behavioral Science*, 32, 29-47.
- Lin, S.P. (2000). A study of the development of emotional labour loading scale. *Sun Yat-Sen Management Review* 8(3), 427-447.
- Locke, E.A. (1976). *The nature and causes of job satisfaction*. In M.D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297- 1349). Chicago: Rand McNally.
- Lodahl, T.M. & Kejner, M. (1965). The definition and measurement of job involvement. *Journal of Applied Psychology*, 49, 24-33.
- Mann, S. (2004). 'People- work': emotion, management, stress and coping. *British Journal of Guidance & Counselling*, 32, (2), 205- 221.
- Mann, S. & Cowburn, J. (2005). Emotional labour and stress within mental health nursing. *Journal of Psychiatric and Mental Health Nursing*, Vol. 12, (2), 154–162.
- Mari, J.J. & Williams, P.A. (1985). A comparison of the validity of two psychiatric screening questionnaires (GHQ-12 and SRQ-20) in Brazil, using Relative Operating Characteristic (ROC) analysis. *Psychological Medicine*, 15, 651-659.
- Maslach, C. (1982a). *Burnout-the cost of caring*. Upper Saddle River, NJ: Prentice Hall.
- Maslach, C. (1982b). *Understanding burnout: Definitional issues in analyzing a complex phenomenon*. In W.S. Paine (Ed.), *job stress and burnout*, (pp.29-40). Beverly Hills, CA: Sage
- Maslach, C. & Jackson, S.E. (1981). *Maslach Burnout manual*. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C. & Jackson, S.E. (1986). *Maslach Burnout manual (2nd ed.)*. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S. E. & Leiter, M. P. (1996). *Maslach Burnout Inventory. (3rd ed.)*. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Wilmar, B.S. & Leiter, M.P. (2001). Job Burnout. *Annu. Rev. Psychol.* 52:397-422.
- McDowell, I. & Newell, C. (1996). *Measuring health: A guide to rating scales and questionnaires*. (2nd ed.) New York: Oxford U Pr.

- McHorney C.A. & Ware J.E. (1995). Construction and validation of an alternate form general mental health scale for the Medical Outcomes Study Short Form 36-Item Health Survey. *Med Care*; 33(1):15-28.
- Metagora (2006). Incentives. Retrieved from: <http://www.metagora.org/training/encyclopedia/incentives.html#49th>
- Mears A. et al (2007). Consultant psychiatrists' working patterns. *Psychiatric Bulletin*, 31, 252-255.
- Mehta, R (2007). Burnout in Clinical Psychologists in the UK: An Examination of its Nature, Extent and Correlates. School of Health & Medicine: Division of Health Retrieved March 2009: <http://www.lancs.ac.uk/fass/ihr/research/mental/burnoutofcps.htm>.
- Moos, R.H. & Billings, A.C. (1982). *Conceptualizing and Measuring Coping Resources and Processes*. In *Handbook of Stress: Theoretical and Clinical Aspects*, edited by Leo Goldberger and Shlomo Breznitz. New York: Free Press.
- Morris, J. A. & Feldman, D. C. (1996). The dimensions, antecedents, and consequences of emotional labor. *Academy of Management Review*, 21, 986-1010.
- Naude, J.L.P. & Rothmann, S. (2004). The validity of the Maslach Burnout Inventory- Human Services Survey for emergency medical technicians in Gauteng. *Journal of Industrial Psychology*, 30(3), 21-28.
- Onyett, S., Pillinger, T., Muijen, M. (1997). Job satisfaction and burnout among members of community mental health teams. *Journal of Mental Health*, 6(1): 55-66.
- Ogresta, J., Rusac, S. & Zorec, L. (2008). Relation between Syndrome and Job Satisfaction among Mental Health Workers. *Croat Med J.* 49:364-74.
- Pajak S, Mears A, Kendall T, Katona C. & Medina J. (2003). *Workload and Working Patterns in consultant psychiatrists: an investigation into occupational pressures and burdens - project report*. Retrieved from <http://www.rcpsych.ac.uk/cru/hsrp/workloadreport.pdf>
- Persing, J.M. (2000). *An exploration of the effects of spirituality on psychologist burnout*. Doctoral Dissertation. The California School of Professional Psychology, Berkley: USA.
- Prosser, D. et al. (1996). Perceived sources of work stress and satisfaction among hospital and community mental health staff, and their relation to mental health burnout and job satisfaction. *J Psychosom Res.* 43:51-9.
- Rutter D.R. & Fielding, P.J. (1988). Sources of occupational stress: an examination of British prison workers. *Work and Stress* 2, 291-299.

Schaufeli, W.B., Bakker, A.B., Hoogduin, K., Schaap, C. & Kladler, A. (2001). On the clinical validity of the Maslach Burnout Inventory and the Burnout Measure. *Psychology and Health, 16*, 565-582.

Smith, A.C. & Kleinman, S. (1989). Managing emotions in medical school: students' contacts with the living and the dead. *Social Psychology Quarterly, Vol. 52*, 56-69.

Smith, P. (1992). *The emotional labour of nursing*. London: Macmillan.

Statistics Canada (1999). *Statistical Report on the Health of Canadians*. Retrieved from: <http://www.statcan.gc.ca/> March 2009.

Statistics Canada (2006). *General Social Survey: Paid and unpaid work*. Retrieved from: <http://www.statscan.gc.ca/>

Sonnentag S. & Frese M. (2003). *Stress in organizations*. In Borman WC, Ilgen Dr, Klimoski RJ. *Comprehensive handbook of psychology: Industrial and organizational psychology*. Hoboken (NJ): Wiley; p. 453-91.

Taylor, Shelly E. 2006. (Sixth Edition). *Health Psychology*. New York: McGraw- Hill.

The College of Physicians and Surgeons of Ontario. Retrieved March 2009: <http://www.cpso.on.ca/>.

The College of Psychologists of Ontario. Retrieved March 2009: [www.cpo.on.ca/](http://www.cpo.on.ca/)

Tolich, M. B. (1993). Alienating and liberating emotions at work: Supermarket clerks' performance of customer service. *Journal of Contemporary Ethnography, 22*(3), 361-381.

Tsai C., Bayliss M.S. & Ware J.E. (1997). *SF-36® Health Survey Annotated Bibliography: Second Edition* (1988-1996). Boston, MA: Health Assessment Lab, New England Medical Center.

Van Dijk, P. & Kirk-Brown, A. (2009). Emotional labour and negative job outcomes: An evaluation of the mediating role of emotional dissonance. *Journal of Management & Organization, ISSN 1833-3672*.

Vieweg, B.W. & Hedlund, J.L. (1983). The General Health Questionnaire (GHQ): A comprehensive review. *Journal of Operational Psychiatry; 14*(2), 74-81.

Walfish S. & O'Donnell P. (2008). *Satisfaction and Stresses in Private Practice*. Independent Practitioner, Bulletin of Psychologists in Independent Practice. Retrieved from: [www.division42.org/MembersArea/Pfiles/.../Stress\\_in\\_practice.php](http://www.division42.org/MembersArea/Pfiles/.../Stress_in_practice.php)

Ware, J.E., Kosinski, M., Keller, S.K. (1994). *SF-36® Physical and Mental Health Summary Scales: A User's Manual*. Boston, MA: The Health Institute.

Ware, J.E., Snow, K.K., Kosinski, M. & Gandek B. (1993). *SF-36® Health Survey Manual and Interpretation Guide*. Boston, MA: New England Medical Center: The Health Institute.

Wharton, A. (1993). The affective consequences of service work: managing emotions on the job. *Work and Occupations* 20 (2), 205-232.

Weiss, D.J., Davis, R.V., England, G.W. & Lofquist, L.H., (1967). *Manual for the Minnesota Satisfaction Questionnaire*. Industrial Relation Center, University Minnesota, Minneapolis, NM.

WHO (2003). WHO definition of Health. Retrieved March 2009:  
<http://www.who.int/about/definition/en/print.html>

Worsley, A. & Gribbin, C.C. (1977). A factor analysis study of the twelve item General Health Questionnaire. *Aust NZ J Psychiatry*; 11:269-272.

Yang, F.H. & Chang, C.C. (2008). Emotional labour, job satisfaction and organizational commitment amongst clinical nurses: A questionnaire survey. *International Journal of Nursing Studies*; 45, 879-887.

Zapf, D. (2002). Emotional work and psychological well-being: A review of literature and some conceptualized considerations. *Human Resource Management Review*, 12, 237- 268.

## APPENDIX A

## PRE-NOTIFICATION EMAIL

Hello,

This message is a notification about an upcoming study for a Master's thesis that you have been selected to participate in. This research study is conducted by graduate student Andrea Dick, under the supervision of Dr. Philip Bigelow of the University of Waterloo, Canada. The objective of the research study is to investigate the occupational stress associated with mental health care.

If you decide to volunteer, you will be asked to complete a one-time, 15-minute web-based survey. A second email will be sent to you in a week with the survey link.

Opening date of the survey is June 7, 2010 and closing date June 28, 2010.

Survey questions focus on the emotional labour, burnout, job satisfaction, and stress of your job-role, and include questions pertaining to your general health and occupation.

Participation in this study is voluntary. You may decline to answer any questions that you do not wish to answer and you can withdraw your participation at any time by exiting the survey. There are no known or anticipated risks from participating in this study.

Regardless of participation or completion of the survey, you may volunteer to enter into a draw to win one of three \$25 giftcard from Chapters/Indigo by providing your email address. Please note, confidentiality will be maintained and you will only be contact if you have won. Your email address will not be sold or used for any other purpose than the draw.

It is important for you to know that any information that you provide will be confidential and completely anonymous. All of the data will be summarized and no individual could be identified from these summarized results. Furthermore, the web site is programmed to collect responses alone and will not collect any information that could potentially identify you (such as machine identifiers). This survey used Survey Monkey(TM) whose computer servers are located in the USA. Consequently, USA authorities under provisions of the Patriot Act may access this survey data.

Should you have any questions about the study, please contact either Andrea Dick at [REDACTED] or Philip Bigelow at [REDACTED]. Further, if you would like to receive a copy of the results of this study, please contact either investigator.

I would like to assure you that this study has been reviewed and received ethics clearance through the Office of Research Ethics at the University of Waterloo. However, the final decision about participation is yours. If you have any comments or concerns resulting from your participation in this study, please feel free to contact Dr. Susan Sykes, Director, Office of Research Ethics, at 1-519-888-4567 ext. 36005 or by email at [ssykes@uwaterloo.ca](mailto:ssykes@uwaterloo.ca).

Thank you for considering participation in this study.

Sincerely,  
Andrea Dick

\*Email addresses were obtained from a basic web search and the CPO's Public Registry-Members Search ([https://members.cpo.on.ca/members\\_search/new](https://members.cpo.on.ca/members_search/new)).

## **SURVEY AND CONTEST EMAIL**

Hello,

You are invited to participate in a Master's thesis research study conducted by graduate student Andrea Dick, under the supervision of Dr. Philip Bigelow of the University of Waterloo, Canada. The objective of the research study is to investigate the occupational stress associated with mental health care. It will take you approximately 15-minutes to complete. CLOSING DATE IS JUNE 28, 2010.

If you wish to participate, please visit:

Survey link: <https://www.surveymonkey.com/s/mastersthesis>

Survey password: waterloo

Contest link: <https://www.surveymonkey.com/s/thesisdraw>

Contest password: waterloo

Regardless of participation or completion of the survey, you may volunteer to enter into a draw to win one of three \$25 giftcard for Chapters/Indigo by providing your email address. Please note, confidentiality will be maintained and you will only be contact if you have won. Your email address will not be sold or used for any other purpose than the draw.

Survey questions focus on the emotional labour, burnout, job satisfaction, and stress of your job-role, and include questions pertaining to your general health and occupation. Participation in this study is voluntary. You may decline to answer any questions that you do not wish to answer and you can withdraw your participation at any time by exiting the survey. There are no known or anticipated risks from participating in this study.

It is important for you to know that any information that you provide will be confidential and completely anonymous. All of the data will be summarized and no individual could be identified from these summarized results. Furthermore, the web site is programmed to collect responses alone and will not collect any information that could potentially identify you (such as machine identifiers). This survey used Survey Monkey(TM) whose computer servers are located in the USA. Consequently, USA authorities under provisions of the Patriot Act may access this survey data.

The data, with no personal identifiers, collected from this study will be maintained on a password-protected computer database in a restricted access area of the University of Waterloo. As well, the data will be electronically archived after completion of the study and maintained for five years and then erased.

Should you have any questions about the study, please contact either Andrea Dick at [REDACTED] or Philip Bigelow at [REDACTED]. Further, if you would like to receive a copy of the results of this study, please contact either investigator.

I would like to assure you that this study has been reviewed and received ethics clearance through the Office of Research Ethics at the University of Waterloo. However, the final decision about participation is yours. If you have any comments or concerns resulting from your participation in this study, please feel free to contact Dr. Susan Sykes, Director, Office of Research Ethics, at 1-519-888-4567 ext. 36005 or by email at [ssykes@uwaterloo.ca](mailto:ssykes@uwaterloo.ca).



Thank you for considering participation in this study.  
Sincerely,  
Andrea Dick

\*Email addresses were obtained from a basic web search and the CPO's Public Registry-Members Search ([https://members.cpo.on.ca/members\\_search/new](https://members.cpo.on.ca/members_search/new)).

## **FIRST FOLLOW-UP EMAIL**

Hello,

This is a friendly reminder that there are still two weeks remaining to participate in the study for graduate student Andrea Dick's Master's thesis.  
CLOSING DATE IS JUNE 28, 2010.

Survey link: <https://www.surveymonkey.com/s/mastersthesis>  
PASSWORD: waterloo

Participation in this study is voluntary. You may decline to answer any questions that you do not wish to answer and you can withdraw your participation at any time by exiting the survey. There are no known or anticipated risks from participating in this study.

Regardless of participation or completion of the survey, you may volunteer to enter into a draw to win one of three \$25 Chapter/ Indigo giftcards by providing your email address.

Contest link: <https://www.surveymonkey.com/s/thesisdraw>  
PASSWORD: waterloo

Please note, confidentiality will be maintained and you will only be contact if you have won. Your email address will not be sold or used for any other purpose than the draw.

It is important for you to know that any information that you provide will be confidential. All of the data will be summarized and no individual could be identified from these summarized results. Furthermore, the web site is programmed to collect responses alone and will not collect any information that could potentially identify you (such as machine identifiers). This survey uses Survey Monkey(TM) whose computer servers are located in the USA. Consequently, USA authorities under provisions of the Patriot Act may access this survey data.

The data, with no personal identifiers, collected from this study will be maintained on a password-protected computer database in a restricted access area of the university. As well, the data will be electronically archived after completion of the study and maintained for five years and then erased.

Should you have any questions about the study or wish to obtain a copy of the results, please contact either Andrea Dick at [REDACTED] or Philip Bigelow at [REDACTED].

I would like to assure you that this study has been reviewed and received ethics clearance through the Office of Research Ethics at the University of Waterloo. However, the final decision about participation is yours. If you have any comments or concerns resulting from your participation in this study, please feel free to contact Dr. Susan Sykes, Director, Office of Research Ethics, at 1-519-888-4567 ext. 36005 or by email at [ssykes@uwaterloo.ca](mailto:ssykes@uwaterloo.ca).

Thank you for considering participation in this study.

Sincerely,  
Andrea Dick

\*Email addresses were obtained from a basic web search and the CPO's Public Registry-Members Search ([https://members.cpo.on.ca/members\\_search/new](https://members.cpo.on.ca/members_search/new))

## **SECOND FOLLOW-UP EMAIL**

Hello,

This is the FINAL reminder that tomorrow is the last day to participate in the study for graduate student Andrea Dick's Master's thesis. If you have already participated in this survey, thank you. Your participation is greatly appreciated.

Survey link: <https://www.surveymonkey.com/s/mastersthesis>

PASSWORD: waterloo

Participation in this study is voluntary. You may decline to answer any questions that you do not wish to answer and you can withdraw your participation at any time by exiting the survey. There are no known or anticipated risks from participating in this study.

Regardless of participation or completion of the survey, you may volunteer to enter into a draw to win one of three \$25 Chapter/ Indigo giftcards by providing your email address.

Contest link: <https://www.surveymonkey.com/s/thesisdraw>

PASSWORD: waterloo

Please note, confidentiality will be maintained and you will only be contact if you have won. Your email address will not be sold or used for any other purpose than the draw.

It is important for you to know that any information that you provide will be confidential. All of the data will be summarized and no individual could be identified from these summarized results. Furthermore, the web site is programmed to collect responses alone and will not collect any information that could potentially identify you (such as machine identifiers). This survey

uses Survey Monkey(TM) whose computer servers are located in the USA. Consequently, USA authorities under provisions of the Patriot Act may access this survey data.

The data, with no personal identifiers, collected from this study will be maintained on a password-protected computer database in a restricted access area of the university. As well, the data will be electronically archived after completion of the study and maintained for five years and then erased.

Should you have any questions about the study or wish to obtain a copy of the results, please contact either Andrea Dick at [REDACTED] or Philip Bigelow at [REDACTED].

I would like to assure you that this study has been reviewed and received ethics clearance through the Office of Research Ethics at the University of Waterloo. However, the final decision about participation is yours. If you have any comments or concerns resulting from your participation in this study, please feel free to contact Dr. Susan Sykes, Director, Office of Research Ethics, at 1-519-888-4567 ext. 36005 or by email at [ssykes@uwaterloo.ca](mailto:ssykes@uwaterloo.ca).

Thank you for considering participation in this study.  
Sincerely,  
Andrea Dick

\*Email addresses were obtained from a basic web search and the CPO's Public Registry-Members Search ([https://members.cpo.on.ca/members\\_search/new](https://members.cpo.on.ca/members_search/new))

## **THANK YOU EMAIL**

Thank you for participating in Andrea Dick's Master's Thesis! Your participation and constructive criticism was greatly appreciated.

Please note, the winners of the draw to win one of three \$25 Chapter/ Indigo giftcards have already been contacted. Congratulations to those individuals!

It is important for you to know that any information that you provided will be confidential. All of the data will be summarized and no individual could be identified from these summarized results. Furthermore, the web site is programmed to collect responses alone and will not collect any information that could potentially identify you (such as machine identifiers). This survey used Survey Monkey(TM) whose computer servers are located in the USA. Consequently, USA authorities under provisions of the Patriot Act may access this survey data.

The data, with no personal identifiers, collected from this study will be maintained on a password-protected computer database in a restricted access area of the University. As well, the data will be electronically archived after completion of the study and maintained for five years and then erased.

If you wish to obtain a copy of the results, please contact either Andrea Dick at [REDACTED] or Philip Bigelow at [REDACTED].

I would like to assure you that this study has been reviewed and received ethics clearance through the Office of Research Ethics at the University of Waterloo. However, the final decision about participation is yours. If you have any comments or concerns resulting from your participation in this study, please feel free to contact Dr. Susan Sykes, Director, Office of Research Ethics, at 1-519-888-4567 ext. 36005 or by email at [ssykes@uwaterloo.ca](mailto:ssykes@uwaterloo.ca).

Again, thank you for your participation in this study.

Sincerely,  
Andrea Dick

\*Email addresses were obtained from a basic web search and the CPO's Public Registry-Members Search ([https://members.cpo.on.ca/members\\_search/new](https://members.cpo.on.ca/members_search/new)).

Please note that all scales used in this study were removed from the survey below due to copyright.

This survey should take approximately 20-minutes to complete.

The last day to participate is June 28, 2010.

Participation in this study is voluntary. You may decline to answer any questions that you do not wish to answer and you can withdraw your participation at any time by exiting the survey. There are no known or anticipated risks from participating in this study.

Regardless of participation or completion of the survey, you may volunteer to enter into a draw to win one of three \$25 Chapter/ Indigo giftcards by providing your email address.

PLEASE SEE THE LINK PROVIDED IN THE ORIGINAL LETTER TO ENTER INTO THE DRAW.

Please note, confidentiality will be maintained and you will only be contact if you have won. Your email address will not be sold or used for any other purpose than the draw.

This survey uses Survey Monkey(TM) whose computer servers are located in the USA. Consequently, USA authorities under provisions of the Patriot Act may access this survey data.

It is important for you to know that any information that you provide will be confidential. All of the data will be summarized and no individual could be identified from these summarized results. Furthermore, the web site is programmed to collect responses alone and will not collect any information that could potentially identify you (such as machine identifiers).

The data, with no personal identifiers, collected from this study will be maintained on a password-protected computer database in a restricted access area of the university. As well, the data will be electronically archived after completion of the study and maintained for five years and then erased.

### **Are you qualified to provide mental health care in Ontario?**

Yes

No

### **Are you currently:**

Working

On leave of absence

On maternity leave

Retired

### **Do you live in Ontario?**

Yes

No

### **Please indicate where you live:**

State/Province:

**What is your current/main occupation?**  
**(Please select only ONE of the following)**

- Psychiatrist
- Psychologist
- Social Worker
- Registered Nurse
- Registered Practical Nurse
- Psychiatric/Mental Health Nurse
- I prefer not to say
- Other (please specify)

**What is your specialization?**  
**(Please select ALL that apply)**

- Clinical
- Cognitive
- Psychotherapy
- Behavioural
- Counseling
- Health
- Rehabilitation
- School/ Educational
- Clinical Neuropsychology
- Industrial/ Organizational
- Forensic/ Correctional
- I prefer not to say
- Other (please specify)

**Are you?**

- Male
- Female
- I prefer not to say

**How old are you?**

**(Please enter the NUMERIC VALUE)**

- I prefer not to say
- Age:

**What is your current marital status? Are you....**

- Single, never married
- Married/ common-law
- Separated/ Divorced/ Widowed
- I prefer not to say

**How many years have you been practicing?**

- Less than a year
- 1-4
- 5-9
- 10-14
- 15-19
- 20-24
- 25-29
- 30+
- I don't know/ I prefer not to say



**What are your credentials:  
(Please select ALL that apply)**

- |   |                                 |  |
|---|---------------------------------|--|
| <input type="checkbox"/> ABFP                   | <input type="checkbox"/> FAACP  | <input type="checkbox"/> LSW                 |
| <input type="checkbox"/> ABPP                   | <input type="checkbox"/> JD     | <input type="checkbox"/> MA                  |
| <input type="checkbox"/> ACSW                   | <input type="checkbox"/> LAC    | <input type="checkbox"/> MAC                 |
| <input type="checkbox"/> APRN                   | <input type="checkbox"/> LCP    | <input type="checkbox"/> MBA                 |
| <input type="checkbox"/> ATR-BC                 | <input type="checkbox"/> LCPC   | <input type="checkbox"/> MC                  |
| <input type="checkbox"/> BCD                    | <input type="checkbox"/> LCS    | <input type="checkbox"/> MCC                 |
| <input type="checkbox"/> CADC                   | <input type="checkbox"/> LCSW   | <input type="checkbox"/> MD                  |
| <input type="checkbox"/> CAP                    | <input type="checkbox"/> LCSW-C | <input type="checkbox"/> MDiv                |
| <input type="checkbox"/> CASAC                  | <input type="checkbox"/> LCSW-R | <input type="checkbox"/> MEd                 |
| <input type="checkbox"/> CATC                   | <input type="checkbox"/> LICSW  | <input type="checkbox"/> MFT                 |
| <input type="checkbox"/> CCDC                   | <input type="checkbox"/> LISW   | <input type="checkbox"/> MFTI                |
| <input type="checkbox"/> CGP                    | <input type="checkbox"/> LMFT   | <input type="checkbox"/> MS                  |
| <input type="checkbox"/> CHT                    | <input type="checkbox"/> LMHC   | <input type="checkbox"/> MSW                 |
| <input type="checkbox"/> CRC                    | <input type="checkbox"/> LMSW   | <input type="checkbox"/> NCC                 |
| <input type="checkbox"/> CSW                    | <input type="checkbox"/> LMSWCC | <input type="checkbox"/> PhD                 |
| <input type="checkbox"/> DCSW                   | <input type="checkbox"/> LP     | <input type="checkbox"/> PsyD                |
| <input type="checkbox"/> DMin                   | <input type="checkbox"/> LPC    | <input type="checkbox"/> RN                  |
| <input type="checkbox"/> DO                     | <input type="checkbox"/> LPCC   | <input type="checkbox"/> SAP                 |
| <input type="checkbox"/> EdD                    | <input type="checkbox"/> LPCI   | <input type="checkbox"/> I prefer not to say |
| <input type="checkbox"/> Other (please specify) |                                 |  |

**On average, how many HOURS do you work per WEEK (excluding on-call)?  
(Please enter the NUMERIC VALUE)**

I don't know/ I prefer not to say

Hours per week:

**On average, how many EVENINGS do you work per WEEK?**

- None
- 1-2
- 3-4
- 5-6
- 7
- I don't know/ I prefer not to say

**On average, how many WEEKENDS do you work per MONTH?**

- None
- 1
- 2
- 3
- 4
- I don't know/ I prefer not to say

**Where do you work?**

**(Please select ALL that apply)**

- Hospital/ Institute
- Private Practice
- Agency
- Government
- University
- I prefer not to say
- Other (please specify)

**How many patients/ clients do you currently care for?**

**(Please enter the NUMERIC VALUE)**

- I don't know/ I prefer not to say
- Number of patients/ clients:

**Who make up your patient/client population?  
(Please select ALL that apply)**

- Adolescents
- Adults
- Children
- Seniors
- Couples
- Families
- Organizations
- I don't know/ I prefer not to say
- Other (please specify)

**In general, would you say your health is:**

- Excellent
- Very Good
- Good
- Fair
- Poor
- I don't know/ I prefer not to say

**Please indicate the number of sick days due to illness over the past 12 months:  
(Please enter the NUMERIC VALUE)**

- I don't know/I prefer not to answer
- Number of sick days:

**On average, please indicate how many alcoholic drinks you consume per week:**

- 0
- 1-2
- 3-4
- 5-6
- 6+
- I don't know/ I prefer not to say

**On average, please indicate the number of cigarettes smoked per day:**

**(Please enter the NUMERIC VALUE)**

- I don't know/ I prefer not to say
- Number of cigarettes smoked per day:

**On average, please indicate how many minutes you exercise per week:**

**(Please enter the NUMERIC VALUE)**

- I don't know/ I prefer not to say
- Minutes exercised per week:

**Please indicate which symptoms you suffer from and the severity:**

	Not at all	Mild	Moderate	Severe
Trouble falling asleep	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trouble staying asleep	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Difficulty waking up	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tired most of the time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Weakness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of endurance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Depression	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of pleasure/ interest	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Agitation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Irritability/anger	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worry excessively	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anxious or nervous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Please indicate which symptoms you suffer from and the severity:**

	Not at all	Mild	Moderate	Severe
Difficulty concentrating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Memory disturbance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Headaches/ Migraines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heartburn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indigestion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gastric ulcers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chest pain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hypertension	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
General aching	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Back pain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Muscle contraction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stiffness in neck or shoulders	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**What methods do you engage in to reduce your stress?**

**(Please select ALL that apply)**

- Exercise/sports
- Talk to friends/ family members
- Talk to co-workers
- Therapy/ counseling
- Alcohol
- Smoking
- Stress-relieving medications
- Other medications
- Recreational drugs
- I don't know/ I prefer not to say
- Other (please specify)

**Does your place of work provide any programs/seminars for reducing stress?**

- Yes
- No
- I don't know

**How often do you participate in these programs?**

- Never
- Seldom
- Sometimes
- Often
- Always
- I prefer not to say

**In your opinion, do you find these programs/seminars effective in reducing your stress?**

- Never
- Seldom
- Sometimes
- Often
- Always
- I don't know/I prefer not to say

**Which of the following scales are you familiar with/or have used in the past?**

**(Please select ALL that apply)**

- Emotional Labour Scale (ELS)
- General Health Questionnaire (GHQ-12)
- Maslach Burnout Inventory (MBI)
- Minnesota Satisfaction Questionnaire (MSQ)
- Perceived Stress Scale (PSS)
- None of the above
- I don't know/I prefer not to say

**If you have an comments about this survey, please write them below. Your opinion is greatly appreciated.**

Thank you for participating in our web-based survey! Your feedback is extremely valuable.

As a reminder, the purpose of this study is to identify the occupational stress associated with mental health care, in regards to emotional labour, burnout, job satisfaction, stress and one's general health.

Please remember that any data pertaining to yourself as an individual participant will be kept confidential. Once all the data are collected and analyzed for this project, I plan on sharing this information with the research community through seminars, conferences, presentations, and journal articles.

If you have any general comments or questions related to this study, or wish to obtain a copy of the results, please contact Andrea Dick at [REDACTED] or Dr. Philip Bigelow at [REDACTED]

We would like to assure you that this study has been reviewed by, and received ethics clearance through, the Office of Research Ethics. If you have any concerns regarding your participation in this study, please contact Dr. Susan Sykes, Director, Office of Research Ethics at [ssykes@uwaterloo.ca](mailto:ssykes@uwaterloo.ca) or 519-888-4567 Ext. 36005.

## APPENDIX B



Table 28  
*Description of AAPOR 'Final Disposition Codes for Interview Surveys of Specifically Named Persons'*

	Code	Number
1. Returned Questionnaire	(1.0)	397
Complete	(1.1)	296
Partial or break-off with sufficient information	(1.2)	
2. Eligible, "Non-Interview"	(2.0)	
Refusal	(2.11)	23
Explicit refusal	(2.111)	14
Implicit refusal	(2.112)	
Logged on to survey, did not complete any items	(2.1121)	106
Read receipt confirmation, refusal	(2.1122)	1056
Break-off or partial with insufficient information	(2.12)	61
Non-Contact	(2.20)	
Respondent was unavailable during field period	(2.26)	171
Complete questionnaire, but not returned during field period	(2.27)	
Other	(2.30)	
Language barrier	(2.33)	
3. Unknown eligibility, "Non-Interview"	(3.0)	
Nothing known about respondent or address	(3.10)	
No invitation sent	(3.11)	171
Nothing ever returned	(3.19)	
Invitation returned undelivered	(3.30)	
Invitation returned with forwarding information	(3.40)	4
Other	(3.90)	
Returned from a unsampled email address	(3.91)	
4. Not Eligible, Returned	(4.0)	
Selected Respondent Screened Out of Sample	(4.10)	94
Quota Filled	(4.80)	
Duplicate Listing	(4.81)	
Other	(4.90)	

American Association for Public Opinion Research (2011). *Standard Definitions: Final Disposition of Case Codes and Outcome Rates for Surveys*. Table 4 (p. 60).

Table 29.  
*Means, Standard Deviations, Reliability Estimates, and Correlations among the Variables (N = 296).*

Variables	Mean	SD	Range	Gender	Age	Years in Practice	Hiding	Faking	Deep Acting	Emotional Exhaustion	Depersonalization	Personal Accomplishment	Job Satisfaction	Percieved Stress	Psychological Distress	Physical Symptoms
Gender	-	-	-	-												
Age	48.74	10.14	31-76	-.27**	-											
Years in Practice <sup>a</sup>	2.32	1.04	1-4	-.23**	.84**	-										
Hiding Emotions <sup>b</sup>	2.99	0.61	1-5	-.04	-.001	.04	.79									
Faking Emotions <sup>b</sup>	1.98	0.69	1-5	.05	-.15*	-.09	.50**	.86								
Deep Acting <sup>b</sup>	2.87	1.11	1-5	.15**	-.15**	-.14*	-.03	.15**	.91							
Emotional Exhaustion	19.65	10.52	0-50	.001	-.13*	-.11	.35**	.37**	.05	.92						
Depersonalization	3.81	3.65	0-19	-.15**	-.15**	-.12*	.31**	.31**	.02	.56**	.64					
Personal Accomplishment	39.74	6.22	17-48	-.02	.13*	.10	-.26**	-.28**	.13*	-.33**	-.27**	.79				
Job Satisfaction	71.71	14.85	28-109	-.08	.25**	.17**	-.18**	-.31**	.04	-.39**	-.32**	.37**	.91			
Percieved Stress	14.02	5.81	0-36	.01	-.13*	-.10	.36**	.43**	.06	.72**	.44**	-.44**	-.42**	.88		
Psychological Distress	1.51	1.64	0-6	-.10	-.04	-.03	.03	.16*	.03	.23**	.14*	-.04	-.10	.31**	.57	
Physical Symptoms	8.90	4.88	0-22	.03	-.04	-.01	.23**	.35**	.07	.57**	.34**	-.35**	-.37**	.57**	.22**	.83

Note: Cronbach  $\alpha$ 's are on the main diagonal.

<sup>a</sup> Years in Practice: (Likert Scale: 1 to 4) 1 = <10 years; 2 = 10 to 19 years; 3 = 20 to 29 years; 4 = 30+ years; <sup>b</sup> Likert scale 1 to 5.

\*\* . Correlations is significant at the 0.01 level (2-tailed).

\* . Correlations is significant at the 0.05 level (2-tailed).

Table 30.  
*Compared Means of Mental Health Workers by Occupational Title*

	Hiding Emotions	Faking Emotions	Deep Acting	Emotional Exhaustion	Depersonalization	Personal Accomplishment	Job Satisfaction	Perceived Stress	Psychological Distress	Physical Symptoms
Psychologists ( <i>n</i> = 208)	2.98 (0.64)	1.95 (0.72)	2.86 (1.11)	2.15 (1.18)	0.74 (0.72)	5.05 (0.74)	3.63 (0.74)	1.37 (0.60)	1.57 (1.62)	8.74 (4.73)
Psychologists Assoc. ( <i>n</i> = 42)	3.07 (0.45)	2.26 (0.56)	3.10 (1.06)	2.42 (1.20)	0.79 (0.73)	4.71 (0.76)	3.37 (0.61)	1.62 (0.54)	1.43 (1.76)	10.60 (5.60)
Psychiatrists ( <i>n</i> = 39)	2.96 (0.59)	1.86 (0.57)	2.68 (1.24)	2.22 (1.06)	0.89 (0.80)	4.96 (0.82)	3.73 (0.80)	1.36 (0.47)	1.03 (1.37)	7.62 (4.48)
Other ( <i>n</i> =7)	2.95 (0.59)	1.95 (0.65)	3.14 (0.72)	1.60 (0.98)	0.51 (0.45)	5.36 (0.60)	3.93 (0.74)	1.36 (0.63)	2.86 (2.34)	10.86 (4.45)
Total ( <i>n</i> = 296)	2.99 (0.61)	1.98 (0.69)	2.87 (1.11)	19.65 (10.52)	3.81 (3.65)	39.74 (6.22)	71.71 (14.85)	14.02 (5.81)	1.51 (1.64)	8.90 (4.88)

*Note.* Standard deviations in brackets.

Table 31.  
*Compared Means of Mental Health Workers by Gender*

	Psychologist			Psychological Assoc.			Psychiatrists			Other		
	Female (n= 144)	Male (n= 64)	Total (n=208)	Female (n=36)	Male (n=6)	Total (n= 42)	Female (n=16)	Male (n=23)	Total (n= 39)	Female (n= 3)	Male (n=4)	Total (n = 7)
Hiding Emotions	2.97 (0.61)	3.03 (0.69)	2.98 (0.64)	3.07 (0.44)	3.06 (0.53)	3.07 (0.45)	2.92 (0.52)	2.99 (0.65)	2.96 (0.59)	2.56 (0.51)	3.25 (0.50)	2.95 (0.59)
Faking Emotions	1.98 (0.70)	1.89 (0.79)	1.95 (0.72)	2.28 (0.54)	2.17 (0.72)	2.26 (0.56)	1.79 (0.52)	1.91 (0.61)	1.86 (0.57)	1.44 (0.51)	2.33 (0.47)	1.95 (0.65)
Deep Acting	3.01 (1.07)	2.51 (1.11)	2.86 (1.11)	3.14 (1.10)	2.83 (0.78)	3.10 (1.06)	2.38 (1.37)	2.88 (1.13)	2.68 (1.24)	3.33 (0.58)	3.00 (0.86)	3.14 (0.72)
Emotional Exhaustion	19.44 (10.19)	19.17 (11.71)	19.36 (10.65)	21.14 (9.76)	25.00 (16.82)	21.69 (10.85)	20.38 (10.42)	19.61 (9.16)	19.92 (9.57)	8.00 (2.65)	19.25 (8.92)	14.43 (8.85)
Personal Accomplishment	40.23 (5.15)	40.13 (7.85)	40.20 (6.09)	36.89 (5.87)	39.00 (5.59)	37.19 (5.82)	40.06 (7.16)	39.00 (6.84)	39.44 (6.90)	44.00 (5.29)	42.00 (4.97)	42.86 (4.78)
Depersonalization	3.44 (3.46)	4.33 (3.90)	3.71 (3.62)	3.81 (3.70)	4.83 (3.37)	3.95 (3.64)	2.94 (1.34)	5.48 (4.87)	4.44 (4.01)	1.33 (0.58)	3.50 (2.65)	2.57 (2.23)
Job Satisfaction	70.69 (13.92)	74.89 (16.84)	71.99 (14.97)	67.08 (12.27)	65.50 (11.31)	66.86 (12.01)	77.50 (16.06)	71.96 (16.17)	74.23 (16.51)	89.67 (17.62)	70.25 (3.86)	78.57 (14.79)
Perceived Stress	13.73 (5.64)	13.59 (6.81)	13.69 (6.00)	15.92 (5.23)	17.83 (6.71)	16.19 (5.4)	13.94 (5.96)	13.22 (4.52)	13.51 (4.66)	8.67 (2.08)	17.25 (5.80)	13.57 (6.27)
Psychological Distress	1.42 (1.49)	1.91 (1.84)	1.57 (1.62)	1.39 (1.75)	1.67 (1.97)	1.43 (1.76)	1.31 (1.66)	0.83 (1.11)	1.03 (1.37)	1.00 (1.73)	4.25 (1.71)	2.86 (2.34)
Physical Symptoms	8.84 (4.58)	8.50 (5.09)	8.74 (4.73)	10.36 (5.37)	12.00 (7.27)	10.60 (5.60)	7.56 (3.54)	7.65 (5.11)	7.62 (4.48)	7.67 (5.51)	13.25 (1.26)	10.86 (4.45)

Note. Standard deviations in brackets.

Table 32.  
*Compared Means of Mental Health Workers by Age (<50 years, 50≥ years)*

	Psychologist			Psychological Assoc.			Psychiatrists			Other		
	<50 Years (n=110)	50≥ Years (n=95)	Total (n=205)	<50 Years (n=17)	50≥ Years (n=24)	Total (n=41)	<50 Years (n=21)	50≥ Years (n=18)	Total (n=29)	<50 Years (n=3)	50≥ Years (n=4)	Total (n=7)
Hiding Emotions	2.96 (0.61)	3.01 (0.67)	2.98 (0.63)	3.14 (0.37)	3.01 (0.51)	3.07 (0.46)	2.95 (0.60)	2.96 (0.60)	2.96 (0.59)	3.11 (0.51)	2.83 (0.69)	2.95 (0.59)
Faking Emotions	2.01 (0.77)	1.89 (0.67)	1.95 (0.72)	2.41 (0.58)	2.18 (0.54)	2.28 (0.56)	2.00 (0.61)	1.70 (0.48)	2.01 (0.77)	1.44 (0.51)	2.33 (0.47)	1.95 (0.65)
Deep Acting	3.02 (1.00)	2.64 (1.18)	2.84 (1.10)	2.94 (1.08)	3.29 (0.96)	3.15 (1.01)	2.71 (1.11)	2.63 (1.40)	2.68 (1.24)	3.22 (0.69)	3.08 (0.83)	3.14 (0.72)
Emotional Exhaustion	20.22 (10.42)	18.00 (10.29)	19.19 (10.39)	21.59 (7.89)	22.54 (12.27)	22.15 (10.57)	22.48 (9.94)	16.94 (8.43)	19.92 (9.57)	9.00 (2.00)	18.50 (1.12)	14.43 (8.85)
Personal Accomplishment	39.06 (6.76)	41.59 (5.00)	40.23 (6.12)	35.88 (5.95)	37.71 (5.47)	36.95 (5.67)	40.29 (6.47)	38.44 (7.43)	39.44 (6.90)	42.00 (4.00)	43.50 (5.80)	42.86 (4.78)
Depersonalization	4.27 (3.70)	3.03 (3.41)	3.70 (3.62)	3.65 (3.26)	4.33 (3.91)	4.05 (3.63)	5.48 (4.38)	3.22 (3.23)	4.44 (4.01)	1.67 (0.58)	3.25 (2.87)	2.57 (2.23)
Job Satisfaction	68.65 (14.29)	75.65 (15.02)	71.90 (15.01)	67.76 (12.14)	66.12 (12.39)	66.80 (12.16)	68.29 (15.64)	81.17 (14.17)	74.23 (16.15)	78.33 (11.85)	78.75 (18.54)	78.57 (14.79)
Perceived Stress	14.36 (6.18)	12.87 (5.66)	13.67 (5.97)	16.82 (4.23)	16.25 (5.74)	16.49 (5.12)	14.43 (4.41)	12.44 (4.83)	13.51 (4.66)	10.00 (1.73)	16.25 (7.37)	13.57 (6.27)
Psychological Distress	1.59 (1.63)	1.52 (1.60)	1.56 (1.62)	1.94 (1.95)	1.13 (1.57)	1.46 (1.76)	1.14 (1.39)	0.89 (1.37)	1.03 (1.37)	2.33 (2.08)	3.25 (2.75)	2.86 (2.34)
Physical Symptoms	8.67 (4.63)	8.74 (4.82)	8.70 (4.71)	10.47 (4.39)	11.04 (6.25)	10.80 (5.50)	7.57 (4.65)	7.67 (4.41)	7.62 (4.48)	10.67 (4.93)	11.00 (4.83)	10.86 (4.45)

Note: Standard deviations in brackets.

Table 33.  
*Compared Means of Mental Health Workers by Years in Practice (<20 years, 20≥ years)*

	Psychologist			Psychological Assoc.			Psychiatrists			Other		
	<20 Years (n=126)	20≥ Years (n=82)	Total (n=208)	<20 Years (n=14)	20≥ Years (n=28)	Total (n=42)	<20 Years (n=20)	20≥ Years (n=19)	Total (n=39)	<20 Years (n=1)	20≥ Years (n=6)	Total (n=7)
Hiding Emotions	2.94 (0.59)	3.04 (0.70)	2.98 (0.64)	3.12 (0.38)	3.05 (0.49)	3.07 (0.45)	2.98 (0.58)	2.93 (0.62)	2.96 (0.59)	3.00 (—)	2.94 (0.65)	2.95 (0.59)
Faking Emotions	2.01 (0.74)	1.86 (0.68)	1.95 (0.72)	2.38 (0.45)	2.20 (0.61)	2.26 (0.56)	1.98 (0.62)	1.74 (0.49)	1.86 (0.57)	1.00 (—)	2.11 (0.54)	1.95 (0.65)
Deep Acting	3.00 (1.00)	2.64 (1.23)	2.86 (1.11)	2.95 (0.78)	3.17 (1.17)	3.10 (1.06)	2.80 (1.21)	2.54 (1.29)	2.68 (1.24)	4.00 (—)	3.00 (0.67)	3.14 (0.72)
Emotional Exhaustion	20.59 (10.68)	17.48 (10.39)	19.36 (10.65)	23.43 (7.57)	20.82 (12.19)	21.69 (10.85)	20.95 (10.32)	18.84 (8.86)	19.92 (9.57)	11.00 (—)	15.00 (9.55)	14.43 (8.85)
Personal Accomplishment	39.26 (6.47)	41.65 (5.15)	40.20 (6.09)	35.93 (4.95)	37.82 (6.19)	37.19 (5.82)	40.30 (6.64)	38.53 (7.23)	39.44 (6.90)	38.00 (—)	43.67 (4.68)	42.86 (4.78)
Depersonalization	4.06 (3.61)	3.18 (3.58)	3.71 (3.62)	4.21 (3.83)	3.82 (3.60)	3.95 (3.64)	5.40 (4.57)	3.42 (3.12)	4.44 (4.01)	2.00 (—)	2.67 (2.42)	2.57 (2.23)
Job Satisfaction	69.2 (16.27)	75.74 (15.31)	71.99 (14.97)	67.00 (12.67)	66.79 (11.91)	66.86 (12.01)	69.2 (16.27)	79.53 (14.62)	74.23 (16.15)	71.00 (—)	79.83 (15.78)	78.57 (14.79)
Perceived Stress	14.52 (6.25)	12.4 (5.39)	13.69 (6.00)	16.57 (3.18)	16.00 (6.28)	16.19 (5.41)	13.9 (4.54)	13.11 (4.86)	13.51 (4.66)	11.00 (—)	14.00 (6.75)	13.57 (6.27)
Psychological Distress	1.57 (1.62)	1.56 (1.63)	1.57 (1.62)	1.57 (1.87)	1.36 (1.73)	1.43 (1.76)	1.35 (1.66)	0.68 (0.89)	1.03 (1.37)	0.00 (—)	3.33 (2.16)	2.86 (2.34)
Physical Symptoms	8.93 (4.65)	8.44 (4.86)	8.74 (4.73)	11.57 (4.62)	10.11 (6.05)	10.60 (5.60)	7.25 (4.53)	8.00 (4.52)	7.62 (4.48)	14.00 (—)	10.33 (4.63)	10.86 (4.45)

Note. Standard deviations in brackets.