Spring 3-2009

Screening for Mental Health Issues: Past Training and Current Practice ofPhysical Therapists

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Presented to the Faculty of the

Graduate Department of Clinical Psychology

George Fox University

in partial fulfillment

of the requirements for the degree of

Doctor of Psychology

In Clinical Psychology

Newberg, Oregon

March 2009

Screening for Depression: Past Education and Current Practice of Physical Therapists

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has been approved

at the

Graduate School of Clinical Psychology

George Fox University

As a Dissertation for the Psy.D. degree

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Abstract

Given the prevalence of mental health issues in the United States, increased screening measures are necessary to identify and treat individuals affected by mental health disorders. Literature indicates comorbidity between chronic pain, making those who experience chronic pain good candidates for focused screening efforts. Physical therapists are potential screeners since they frequently treat individuals with chronic pain. A survey sent to physical therapists to assess their previous training and attitudes towards mental health issues in the physical therapy environment indicated that the mental health of a patient played a role in the success of physical therapy. Previous training also played a role in the comfort and confidence levels of physical therapists in addressing mental health issues, as well as the actions taken to incorporate mental health into treatment.

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Chapter 1

Introduction

Mental Health

Mental health disorders are estimated to affect one in four Americans age 18 and older (Kessler, Chiu, Demler, & Walters, 2005). The incidences of depression are rising in younger populations, suggesting that this number will continue to increase over time (Seligman, 1989). Long term effects of depression and anxiety include work impairment, social isolation, and increased suicide risk. Because of these risks, there is an economic burden associated with mental health disorders. Millions of dollars are lost each year in the United States alone to these disorders, mostly in the form of lost workplace productivity (Wang, Simon, & Kessler, 2003). Mental health disorders are also the leading cause for disability in adults ages 15-44 (World Health Organization, 2004), both nationally and worldwide. There are effective treatments available for mental health conditions, such as depression. Unfortunately, less than half of individuals experiencing depression will seek treatment (Rupp, Gause, & Reigier, 1998). Individuals may live with symptoms for a variety of reasons including lack of treatment knowledge, denial or unawareness of the problem, or fear of social stigma. Increased screening measures are needed in order to identify those experiencing mental health disorders and to refer them to the appropriate treatment provider.

Recommendation to Screen

Given the high amounts of untreated mental health issues, efforts must be increased to identify individuals experiencing symptoms and refer them to the appropriate treatment provider. In an attempt to strengthen the identification process, the United States Preventive Services Task Force (USPSTF) issued a recommendation that primary care clinicians routinely screen for depression in eligible adult patients. This recommendation was based on evidence supporting the idea that screening accurately identifies depressed patients in the primary care setting and that treatment of these individuals decreases clinical morbidity. The recommendation for routine screening is also dependent on the availability of appropriate screening instruments, effectiveness of follow-up treatment, and effectiveness of screening. When the results of the assessment screen indicate possible depression, it is recommended that these individuals receive further psychological assessment to confirm the existence and determine the extent of psychopathology. Larger benefits have been shown when results are communicated to the patient and coordinated with follow up treatment than when results are simply given back to the clinician (United States Preventive Services Task Force, 2002).

In response to the USPSTF's recommendation to screen for depression in primary care, McAlpine and Wilson (2004) looked at the challenges of routine screening. Presentation of depression can include symptoms common to other ailments such as fatigue, memory impairment, insomnia, and anxiety. The multitude and variety of depressive symptoms can make it difficult to diagnose, particularly if the patient presents with a comorbid medical illness or is uncomfortable disclosing personal information. Primary care physicians fail to recognize approximately 30-50% of depression cases, leaving a large percentage of the population experiencing depression unidentified and untreated.

McAlpine and Wilson recommend targeting specific groups for depression screening who are at a higher risk for developing the disease. Targeting at-risk groups would increase the cost-effectiveness of screening, minimize any associated risks, and reduce false-positives. In light of this information, the next step in improving the screening process is to determine what groups are at a higher risk for depression. These groups could be targeted for screening and their medical caregivers educated on the diagnostic and treatment information for mood disorders in the depressive spectrum.

Comorbidity of Chronic Pain and Mental Health Disorders

While there are a variety of groups that are at risk for mental health disorders, individuals experiencing chronic pain are especially vulnerable (Gatchel, 2004). The relationship between chronic pain and mental health disorders is often conceptualized using a biopsychosocial model of pain. The biopsychosocial model of pain emerged slowly, following a biomedical model in which the mind and body were considered separate elements. In 1965 Melzack and Wall developed Gate Control theory, which emphasized that the pathway of pain can include opportunities for pain signals to be altered by other sensations in the body (Melzack & Wall, 1965). Prior to this, pain was viewed as a stimulus to brain process, with few if any, mediating factors. The Gate Control theory was one of the first to describe the physiological mechanism by which psychological factors including depression and anxiety, affect the experience of pain. Current research continues to support a more holistic view of pain that incorporates an individual's physical being, mental health, social context, and situational aspects (Gatchel & Turk, 1999).

As cited in Gatchel and Turk (1999), the work of William Fordyce in conjunction with more recent cognitive behavioral models have lead to the continued recognition of the

biopsychosocial model of pain and to behavioral assessment and treatment methods. Treatment from the biopsychosocial conceptualization includes a multidisciplinary team of physicians, nurses, physical therapists, occupational therapists, and psychologists (Gatchel & Turk, 1999).

Recent research suggests that there is a high rate of comorbidity between chronic pain and mental illness, specifically depression, anxiety, and substance abuse disorders (Gatchel, 2005). Several comprehensive reviews have been done to explore the relationship between chronic pain and psychopathology. In an early review of the literature, Romano and Turner (1985) attempted to solidify this relationship. The authors concluded that despite varying research methods there is a noticeable trend of increased depressive symptoms in the chronic pain population.

Fishbain, Cutler, Rosomoff, and Rosomoff, (1997) surveyed more recent research and updated the work done by Romano and Turner. In a review of 12 studies, Fishbain et al. found that the rate of depression is higher in chronic pain populations than in non-chronic pain populations. This increased prevalence is a consistent finding across a wide range of demographic groups including civilian, military, elderly, and those with co-occurring psychiatric disorders. Their second finding was that there is a statistically significant relationship between the frequency, intensity, and duration of pain symptoms and the severity of depressive symptoms.

Thirteen studies in Fishbain et al.'s analysis examined the relationship between chronic pain and suicidality. These 13 studies showed findings consistent with those of the previous studies mentioned –that there is a higher rate of suicidal ideation, attempts, and completions in the chronic pain population than in the general population.

In light of the biopsychosocial mode of pain and the marked relationship between chronic pain and symptoms indicative of a mental health disorder, it is logical to assess more than just a primary care patient's physical symptoms; their psychological state and social functioning should be considered in order to gain a more complete picture of the patient and develop the appropriate treatment. Psychological assessments can help solidify a diagnosis, establish treatment goals, reduce emotional distress, and formulate realistic expectations for treatment (Turk & Burwinkle, 2005).

Given the well-documented relationship between chronic pain and mental health, the chronic pain population poses as an acceptable candidate group for targeted screening. Since this population comes into contact with a variety of health professionals, there are several options for additional mental health screeners, rather than just primary care physicians. Additional practitioners screening for mental health symptoms could increase the percentage of cases identified, thus increasing the number of individuals receiving treatment. Further, patients would benefit from having more than one practitioner screening for mental health, as they may not disclose symptoms to a particular practitioner given visit time restraints or personal comfort level.

Physical Therapists as Screeners

It is estimated that the average physical therapy patient sees their physical therapist 1-3 times per week for approximately 30-45 minutes (S. Miller, personal communication, October 3, 2006). Given the frequency and duration of physical therapy treatment, physical therapists are one option for additional mental health screeners. However, before we can look to Physical Therapists to screen for mental disorders in their patients, we need to determine if the Physical Therapists have the interest or training to accurately identify the signs and symptoms of mental

health problems. Competence to assess mental health problems is difficult to determine due to a lack of formal data on training for mental health issues in physical therapy graduate programs. According to the American Physical Therapy Association (2005), entry level physical therapy graduates should be able to "screen for physical, sexual, and psychological abuse" however there is no mention of specific psychological disorders. Inquiries into several graduate physical therapy programs yielded similar findings. Dr. Tschoepe, director of the graduate physical therapy program at Regis University stated that students study the role of mental health issues throughout the curriculum (B. Tschoepe, personal communication, October 16, 2006). Similarly, Nancy Devine, an associate professor of physical therapy at Idaho State University communicated that their students also look at how depression may influence treatment, but do not discuss specific screening issues (N. Devine, personal communication, October 5, 2006). While it appears that awareness of psychological issues may be explored during graduate training, there is no formal research on the consistency of this topic among graduate programs. Further, a review of research did not provide any information on the current attitudes, feelings of competence, and current practices of physical therapists in regards to mental health issues.

Purpose of the Study

The present study aims to address these needs using a nationwide survey of practicing physical therapists. The goals of the survey will be to assess past training, current practice, and attitudes regarding mental health screening in the physical therapy setting. Survey results will help to determine the ability and desire of physical therapists to routinely screen for symptoms of mental illness in their patients.

Chapter 2

Methods

Participants

Randomly selected members of the American Physical Therapy Association (APTA) were asked to participate in a mail survey. The APTA was selected because it is the primary nationwide professional organization for practicing physical therapists and because its' professional members have graduated from accredited physical therapy programs.

Out of 1,000 surveys sent out, 264 were returned with a signed consent form. The highest number of respondents were between 36-40 years of age. Twenty-nine percent were male and 70% were female. Ninety-four percent described themselves as Caucasian; 2% described themselves as Asian, and 1% described themselves as African-American.

Instruments

A survey designed by the researcher was used in this study. The purpose of the survey was to explore physical therapists' past training, current practice, and attitudes towards screening for mental health issues in their patients. Participants were asked questions regarding the relationship between physical pain and depression, prior training in mental health issues, and current screening procedures. Demographic data was also obtained from participants including age, gender, ethnicity, past education level, and current practice information.

Procedure

Participants were mailed the surveys along with an introductory letter explaining the purpose of the study and a preaddressed, stamped envelope for returning the completed survey. Several weeks later a follow up postcard was sent in order to increase response rate. Data was collected and entered into a spreadsheet for analysis.

Data Analysis

Participant responses were analyzed using descriptive statistics.

Chapter 3

Results

As previously stated, 264 surveys were returned with a signed consent form. Table 1 describes the age range of participants. The highest number of respondents had been in practice for 11-20 years (see Table 2). Twenty-nine percent were male and 70% were female. Less than 1% of respondents described their highest level of training as a PTA degree ($N = 2$); 43.6% endorsed a BS or BA ($N = 115$); 38.3% endorsed a Master's level degree ($N = 101$); and 15.2% endorsed a Doctoral degree ($N = 40$).

Table 1

Age of Respondents

Age Group	Frequency	Percent	Cumulative Percent
26-30	1	0.4	0.4
31-35	1	0.4	0.8
36-40	101	38.3	39.2
41-45	63	24.0	63.2
46-50	46	17.4	80.6
51+	51	19.4	99.6

$N = 263$

Table 2

Years in Practice

Years in Practice	Frequency	Percent	Cumulative Percent
<1	1	0.4	0.4
1-5	1	0.4	0.8
6-10	2	0.8	1.6
11-15	87	33.0	34.6
16-20	110	41.7	76.4
21-25	22	8.3	84.8
25+	40	15.2	99.6

$N = 263$

The highest number of respondents identified their specialization as orthopedic/sport (51.1%), followed by neurological (12.1%), geriatric (12.1%), pediatric (8.3%), and other (10.4%). The majority of responders worked in outpatient settings (61.0%), followed by inpatient (20.1%), home health (12.1%), and other (6.8%).

Participants were asked two questions to assess the importance and incorporation of mental health issues in the practice of physical therapy (see Table 3). Of the respondents, 75.4% ranked the importance of mental health to treatment success as "Very Important" on a Likert scale of one to five. Of the respondents, 56.4% of participants reported that they "Always" consider the mental well being of a patient. Furthermore, there was a significant positive

correlation between the importance and frequency of consideration of mental health issues (r = .338, $p < 0.01$).

Table 3

Importance and Incorporation of Mental Health Issues

Item	*M*	*SD*	*R*
Importance of mental health to success of physical therapy	4.75	.432	.338
Frequency of considering mental well being of patient	4.48	.658	.338

Note. Responses given on a Likert scale of 1-5. $N = 264$

Respondents were also asked what percentage of their current patients had a mental health issue that interfered with treatment (see Table 4). Additionally, they were asked to estimate the percentage of current patients with undiagnosed mental health issues (see Table 5). The majority of respondents (53.8%) estimated that between 1-25% of their current patients had mental health issues that interfered with treatment. Similarly, the majority of participants (70.5%) indicated that 1-25% of their current patients had undiagnosed mental health issues.

In order to assess what psychological concerns were perceived to be present in the physical therapy environment, participants were asked what types of mental health issues were most relevant to their patients. Depression, Anxiety, Post-Traumatic Stress Disorder, and Substance Abuse were listed as the most commonly occurring disorders, Results are listed in Table 6. Most respondents endorsed two or more mental health issues (77%, $N = 203$).

Table 4

Percentage of Current Patients Whose Mental Health Issues Interfere With Treatment

Percentage of Patients	Frequency	Physical Therapist Endorsement
0%	3	1.1%
1-25%	142	53.8%
26-50%	76	28.8%
51-75%	33	12.5%
76-100%	8	3.0%

$N = 262$

Table 5

Estimate of Percentage of Current Patients with Undiagnosed Mental Health Issues

Patient Estimate	Frequency	Physical Therapist Endorsement
0%	9	3.4%
1-25%	186	70.5%
26-50%	53	20.1%
51-75%	8	3.0%
76-100%	4	1.5%

$N = 260$

Table 6

Physical Therapist Report of Mental Health Issues In Patients

Mental Health Issue	Frequency	Percentage
Depression	244	92.4
Anxiety	200	75.8
Substance Abuse	63	23.9
PTSD	38	14.4

To help understand the current standard of practice, the survey asked respondents to identify how information related to a patient's mental health was collected. Results are listed in Table 7.

Table 7

Collection of Information

Method	Frequency	Percentage
Conversation during treatment	228	86.4%
Initial evaluation	175	66.6%
Intake Form	167	63.3%
Referral source	85	32.2%
Not discussed unless patient initiates	16	6.1%

$N = 264$

Several questions were asked to determine the frequency and type of actions taken with a patient's mental health information once it was collected. Similarly, physical therapists were also asked if they had ever referred a patient to a mental health provider. In regards to this latter question, 88.3% of physical therapists reported previously referring a patient to a mental health provider. Other forms of action are listed with results in Table 8.

Table 8

Frequency and Types of Action

Action	*N*	*M*	*SD*
Incorporate in treatment	259	3.51	.89
Discuss with patient	258	3.29	.82
Consult with colleagues	260	3.05	.94
Refer to social support	257	2.98	.96
Refer to mental health provider	258	2.81	1.02
Consult with mental health provider	257	2.51	1.02
Refer to mental health provider	258	2.81	1.02

Relationships between Variables

A significant relationship was found between the frequency in which physical therapists consider the mental well-being of their patients and several methods of action. Significant relationships were also found between reported confidence and/or comfort level, and methods of action. Results are presented in Table 9.

Table 9

Correlations Between Perceived Importance, Comfort, Confidence, and Action

Action	Frequency of Considering Mental Health Issues	Comfort	Confidence
Discuss with Patient	.292**	.466**	.270**
N	258		
Incorporate Into Treatment	.298**	.197**	.212**
N	259		
Consult w/ Colleagues	.243**	.074	.152*
N	260		
Consult with Mental Health Provider	.245**	.173**	.262**
N	257		
Refer to Mental Health Provider	.191*	.234**	.291**
N	258		
Refer to Social Support	.330**	.204**	.204**
N	257		

**$p < 0.01$
*$p < 0.05$

Comfort and confidence in their ability to identify mental health concerns were also assessed among respondents. Physical therapists were asked to rank their confidence in their ability to recognize mental health issues on a Likert scale of one to five. Similarly, they were asked to rank their comfort in discussing mental health issues on a separate Likert scale. Results are listed in Table 10. The correlation between the two variables was .571 ($p < 0.01$).

Both confidence and comfort varied with educational degree. Significant differences occurred between Master's level degrees and Doctoral level degrees on both constructs. A one-way analysis of variance showed that respondents with Doctoral level training reported that they

were more confident and more comfortable in their ability to identify and discuss mental health issues than respondents having Masters level training (see Tables 11 and 12).

Table 10

Self Report of Abilities

Ability	*N*	*M* [a]	*SD*	*r*
Confidence	264	3.42	.84	
Comfort Level	259	3.26	.87	.571*

[a] Responses given on a Likert scale of 1-5.
* $p < .01$

Table 11

Confidence and Degree Level

Source	Type III Sum of Squares	*df*	Mean Square	*F*	Sig.	Partial Eta Squared
Corrected Model	7.220[a]	3	2.407	3.476	.017	.039
Intercept	358.930	1	358.930	518.353	.000	.671
Degree	7.220	3	2.407	3.476	.017	.039
Error	175.881	254	.692			
Total	3212.000	258				
Corrected Total	183.101	257				

Table 12

Comfort and Degree Level

Source	Type III Sum of Squares	*df*	Mean Square	*F*	Sig.	Partial Eta Squared
Corrected Model	10.400[a]	3	3.467	4.839	.003	.055
Intercept	287.536	1	287.536	401.363	.000	.617
Degree	10.400	3	3.467	4.839	.003	.055
Error	178.383	249	.716			
Total	2879.000	253				
Corrected Total	188.783	252				

Physical therapists were also asked to report if and in what format they had received training on how to screen for mental health issues. These results are listed in Table 13. Some respondents endorsed multiple training items (40.2%, $N = 106$). Further details are presented in Table 14.

The number of training items reported was correlated with both confidence ($r = .345$, $p < .01$) in recognizing mental health issues and comfort in discussing mental health issues ($r = .340$, $p < .01$).

Table 13

Training in Mental Health

Format	Frequency	Percentage
Personal exploration	101	38.3%
Continuing education	99	37.5%
Undergraduate coursework	94	35.6%
No training	61	23.1%
Graduate coursework	56	21.2%

Table 14

Sum of Training in Mental Health

Number of Training Items Endorsed	Frequency	Percent
0	60	22.7%
1	98	37.1%
2	68	25.8%
3	36	13.6%
4	2	0.8%

Note. Excludes "No Training" item.

Chapter 4

Discussion

The purpose of the survey was a) to assess the perceived importance of mental health to the success of physical therapy, b) to determine if there was a relationship between valuing mental health and taking action to address the psychological needs of patients, c) to assess past training in regards to mental health issues, and d) to gauge interest in additional training.

Importance of Mental Health to the Success of Physical Therapy

The majority of physical therapists surveyed indicated that a patient's mental well-being had an important impact on the success of physical therapy treatment, there was little variance in the responses.

Questions addressing the presence of mental health indicated that physical therapists perceive that a substantial amount of patients experience mental health issues which interfere with treatment. The majority of respondents estimated that between 1-50% of their patients both experience mental health issues that interfere with treatment, and that these mental health issues remain undiagnosed. This finding is consistent with literature supporting a mind-body connection and the biopsychosocial model of pain (Melzack & Wall, 1965).

Depression and anxiety were the most highly endorsed by physical therapists in their assessment of patients (92% and 76%, respectively). Both of these disorders are highly comorbid with chronic pain (Gatchel, 2005), suggesting an accurate report from physical therapists. Substance abuse and PTSD were also endorsed (23.9% and 14.45, respectively), but less

frequently than depression or anxiety. This may be due to the presentation of symptoms in the disorders; substance abuse and PTSD are largely situation specific, where as depression and anxiety symptoms tend to appear in more public ways. Additionally, 77% of physical therapists endorsed 2 or more mental health issues being relevant to their patients. This later statistic suggests that 1) physical therapists may have some difficulty differentiating between specific mental health symptoms, or 2) patients may present with multiple mental health issues.

Action

While there was a strong correlation (.338) between the importance of mental health issues and the frequency at which mental health issues are considered, results indicated that higher frequency of consideration was correlated with increased action on the part of the physical therapist. In other words, the more likely a physical therapist is to consider their patient's mental health into account, the more likely they are to discuss it with the patient, incorporate the issues into treatment, consult with colleagues and/or a mental health professional, and refer to social support and/or a mental health professional. The discrepancy between the relationship of importance and action, and frequency and action may have several explanations. First, as previously stated the survey item addressing the importance of mental health to treatment contained little variability. This leads any further data analysis involving this item subject to be interpreted with extreme caution. Second, the two items differ in that the item addressing the frequency of considering mental health issues is an action in itself. Thus, it would be more likely that if a physical therapist takes the time to consider a patient's well being, they would be more likely to take action to help incorporate any mental health issues that arise.

Strong relationships were also found between a physical therapist's comfort and confidence levels in discussing and recognizing mental health issues in patients, and in taking

action to address a patient's mental health issues. The correlations varied depending on whether comfort or confidence was being addressed with respect to the type of action. Those with higher comfort levels had a stronger relationship with actions that imply comfort, such as discussing the issue with the patient. Those with higher confidence had stronger relationships with referring the patient to a mental health provider or consulting with a mental health provider.

Previous Training

Items addressing previous training in screening for mental health issues suggested that physical therapists receive little formal training. Only 21% of respondents reported that they received training as part of their graduate coursework, indicating a lack of recognition of the role of mental health in treatment. This contradicts the opinions of the majority of physical therapists surveyed and suggests a potential weakness in training. The most commonly endorsed training types were personal exploration and continuing education (38.3% and 37.5%, respectively). Both of these training types require motivation on the part of the physical therapist, as well as additional resources to obtain this training (i.e., finances, access to training). Personal exploration received the highest endorsement, but this type of training is also the least regulated. Of the participants, 23% indicated they had no training in mental health screening. These numbers represent a large disconnect between the presence of mental health issues in the physical therapy environment and physical therapist education about these issues.

While training was limited, there were significant differences between a physical therapist's confidence and comfort levels depending on their degree level. Both the average comfort and confidence levels were significantly lower for those with Master's level degrees than for those with Doctoral level degrees. This finding may be based on the number of training types endorsed by participants. Doctoral level physical therapists endorsed significantly more

training items than Master's level physical therapists. This indicates that while current training is minimal, there is a strong relationship with a physical therapist's level of confidence and/or comfort. And as stated above, higher confidence and/or comfort levels are positively correlated with various actions taken to address mental health needs in the physical therapy environment.

Further Training

The majority of respondents (67%) indicated that they would attend a training on how to screen for mental health issues. Of those who declined this training, the most common reason was (a) that mental health issues were not a high enough priority ($N = 37$), and (b) lack of resources (i.e., time, money; $N = 30$).

Implications

The majority of respondents indicated that mental health issues are relevant to their patients and have an effect on the success of physical therapy treatment. Results suggest that there is an increased need for training in how to identify mental health concerns in physical therapy patients, and how to refer these patients to the appropriate treatment provider. In this study, increased training had a positive relationship with physical therapist confidence and comfort in identifying and discussing mental health issues, which in turn had positive relationships with taking action to address mental health concerns in patients. A high number of respondents also requested additional training, indicating a willing and teachable audience.

Limitations of the Study

One limit of the study was the participants. All participants were active members of the American Physical Therapy Association (APTA), the primary professional organization for the field. Because of their participation in APTA it could be speculated that these individuals have a

higher investment in their field. Therefore, the sample may not be as representative of all physical therapists.

Another limitation is a physical therapist's ability to accurately assess their patient's mental health diagnoses, symptoms, and needs. Given that the majority of physical therapists endorsed little training in this area, their perceptions of mental health may not be representative of the reality of their patient's mental health states.

A third limitation was the participant's report of the importance of mental health in the success of physical therapy. All responses were either 4 or 5 on a Likert scale of 1-5, which may have indicated a high level of social desirability, making this item a less reliable indicator of the importance of mental health.

Further Research Recommendations

Given the startling lack of training in respect to the presence of mental health issues, further research is recommended on education and training. Additionally, it may be beneficial to assess the actual presence of mental health diagnoses in the physical therapy environment, as opposed to physical therapist perception.

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