

# Short-Term Benefits of Telecounseling in a Rural, Low-SES Texas Community

Kevin R. Tarlow<sup>1</sup> • Carly E. McCord<sup>2</sup> • Timothy R. Elliott<sup>1</sup>

<sup>1</sup>Educational Psychology, Texas A&M University, <sup>2</sup>School of Public Health, Texas A&M Health Science Center

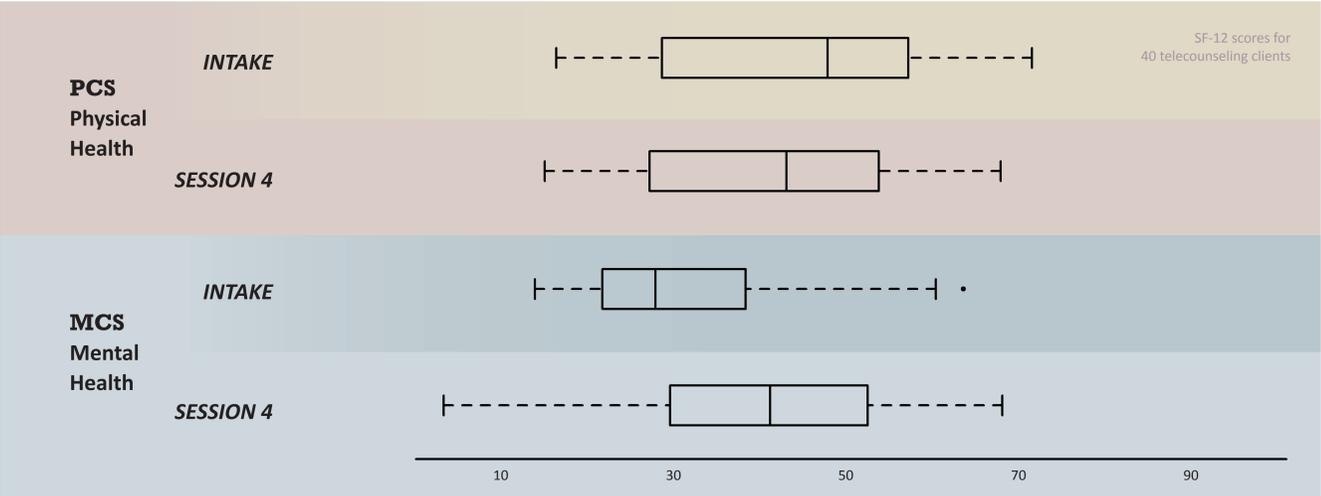
**ABSTRACT** Sixty million U.S. residents live in rural areas, but health policies and interventions developed from an urban mindset often fail to address the significant barriers to health experienced by these communities. Telepsychology, or psychological services delivered by distance via technology, is an emerging treatment modality with special implications for underserved rural areas. This study found that a sample of rural residents seeking telepsychology services had low health-related quality of life (HRQOL), often due to co-occurring physical and mental health diagnoses including high rates of depression. However, a brief telepsychology treatment was associated with an improvement in mental health-related quality of life. These results indicate that, despite the complex health needs of these underserved communities, telepsychology interventions may help offset the disparities in health service access in rural areas •

**INTRODUCTION** Texas has more rural residents than any other state. Approximately one in four rural U.S. residents has a mental health or substance abuse problem. Resources available to rural residents are not equivalent to those available in urban areas due to barriers such as lack of transportation, geographic isolation, low SES, low educational attainment, and low rates of insurance coverage. Health care providers are also less likely to deliver services in rural areas • Based on community health survey research conducted at Texas A&M University, it was expected that many Leon County, Texas, residents seeking telepsychology services would present with co-occurring physical and mental health conditions. Assessment of client needs and response to telepsychology treatment therefore required an evaluation of client health-related quality of life (**HRQOL**), a multi-dimensional construct of well-being encompassing physical and mental health status • Three other studies have evaluated telepsychology and telemedicine for mental health care using the SF-12v2. While all three studies found moderate to large effects of telehealth interventions on mental health status, no effects on physical health status were detected • The American Psychological Association recognized the benefits of using telepsychology to increase access to underserved areas. The purpose of this study is to (1) better understand the health needs of rural clients, and (2) establish an evidence basis for telepsychology's effectiveness with rural clients • <sup>3</sup>Ware, J. E., Kosinski, M., & Keller, S. D. (1996). "A 12-item short-form health survey: construction of scales and preliminary tests of reliability and validity." *Medical Care*, 34, 220-233 • <sup>4</sup>Kroenke, K., Spitzer, R., & Williams, J. "The PHQ-9: Validity of a brief depression severity measure. *J Gen Intern Med*, 16, 606-613 •

**METHOD PARTICIPANTS** » Forty residents of rural Leon County, Texas, between 2009 and 2012. Ages 14 to 62 years (M = 40.6, SD = 13.2); with 34 women (85.0%) and 6 men (15.0%); 34 white (85.0%), 2 black or African American (5.0%), 2 Hispanic or Latino (5.0%), 1 Asian (2.5%), and 1 biracial participant (2.5%). The sample reflected the racial and ethnic composition of the region • **MEASURES** » The **SF-12v2** is a 12 item, self-report measure for HRQOL that yields a Physical Component Summary score (PCS) and Mental Component Summary score (MCS).<sup>3</sup> The brief Patient Health Questionnaire (**PHQ-9**) was administered at intake to assess depressive symptomatology; scores range from 0 to 27, with a score of 10 or greater indicating moderate or severe depression • **PROCEDURES** » Clients attended four or more counseling sessions via secure videoconferencing technology. The SF-12v2 was administered at intake and at the fourth session. The PHQ-9 was administered at intake. Counselors were doctoral-level students in the counseling psychology program at Texas A&M University •

**Depression Severity of Rural Clients (PHQ-9)**

PHQ-9	Depressive Symptoms	#	%
0-9	mild or none	5	12.5%
10-19	moderate (MDD)	17	42.5%
20-27	severe	18	45.0%
	reported suicidality	17	42.5%



**HRQOL (SF-12) Outcomes for Telecounseling**

	Intake	4th Session	p	d
PCS	44.12 (16.86)	40.80 (14.64)	ns	--
MCS	31.50 (12.81)	40.23 (14.83)	<.001	0.70

Note: n = 40; d = Cohen's d for repeated measures

**Lower Mental Health Status (SF-12) in Rural Clients than in National Depression Sample**

	Current Study (at intake)		National Depression Sample	
	PCS	MCS	PCS	MCS
M (SD)	44.1 (16.9) <sup>5</sup>	31.5 (12.8) <sup>6</sup>	45.7 (12.1) <sup>5</sup>	36.8 (10.8) <sup>6</sup>
n	40	40	1,000	1,002

<sup>5</sup>Welch's t(40.6) = -0.59, ns  
<sup>6</sup>Welch's t(41.2) = -2.58, p = .01

**CONCLUSIONS** Results of the current study suggest that telecounseling may be an effective and practical treatment option for many individuals living in historically underserved rural communities. Due to its high accessibility, telecounseling has the potential to overcome many of the barriers that lead to poor health outcomes in these areas • HRQOL of rural Texas residents presenting for telepsychology services is poor. Clients' mental health status was exceptionally low, with over 85% meeting cutoff criteria for major depressive disorder (MDD). Individuals in the study had even lower mental health status scores than a national sample of individuals diagnosed with major depressive disorder. Many reported comorbid chronic physical health concerns as well • Despite the complexity of their presenting physical and mental health concerns, a brief telepsychology treatment was associated with an improvement in the mental health status of clients who were assessed after four sessions of therapy. These results add to the growing evidence base for telepsychology, and they show that this emerging treatment modality may be effective specifically for rural residents living in underserved areas. These findings may be of special importance to health care providers in rural areas who have been encouraged to utilize telepsychology •