

IMPACT OF LIFE ACTIVITIES ON THE NECK DISABILITY INDEX IN FEMALES

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ABSTRACT: Objective: To find out the factors assisting in Neck pain in females. Methods: The sample consisted of 25 females. In this research study NDI (Neck Disability Index) had been selected as the measurement method. The NDI (Neck disability index) method is used to measure the pain on subjects. The NDI is a modification of the Oswestry Low Back Pain Disability Index . Results: 35% of pain is because of driving and 25% because of wrong sleeping technique. Conclusion: Driving is one the important factor for cause of pain in neck

Introduction

Neck pain affects about 330 million people globally as of 2010 (4.9% of the population). It is more common in women (5.7%) than men (3.9%). Neck pain (or cervical) is a common problem, with two-thirds of the population having neck pain at some point in their lives.

Neck pain, although felt in the neck, can be caused by numerous other spinal problems. Neck pain may arise due to muscular tightness in both the neck and upper back, and pinching of the nerves emanating from the cervical vertebrae. Joint disruption in the neck creates pain, as does joint disruption in the upper back. The head is supported by the lower neck and upper back, and it is these areas that commonly cause neck pain. The top three joints in the neck allow for movement of the neck and head. The lower joints in the neck and those of upper back create a supportive structure for the head to sit on. If this support system is affected adversely, then the muscles in the area will tighten, leading to neck pain.

At some time during our lives, most of us suffer from pain in the neck or pain originating in the neck that is felt across the shoulders, in a shoulder blade, or in the upper or lower arm. Pain coming from the neck can also be felt as far away as the hand, and symptoms such as 'pins and needles' and numbness can be felt in the fingers. Some people suffer from headaches that can be traced to problems in the neck. There may be different factors which may be the cause of neck pain. Thus, the present study is making a modest effort to deal with the factors assisting in Neck pain

Methods:

The sample consisted of 25 females attending Yoga training of different ages at Yoga Studio, Canada. In present sample of 25 females, there was 6 females aged below 35 years, 11 females aged between 36-50 years and 8 females aged 51 and above. The selected samples in this research process were suffering from cervical pain. All samples had given voluntarily primary agreement to join the Yoga for this research and to perform the Yoga postures as instructed. All samples had been informed about the Yoga poses and their consequences to avoid any kind of injuries during the practice, so that the samples can complete the training successfully and can give their best to complete this research process.

In this research study NDI (Neck Disability Index) had been selected as the measurement method. The NDI (Neck disability index) method is used to measure the pain on subjects. The NDI is a modification of the Oswestry Low Back Pain Disability Index . It is a patient-completed, condition-specific functional status questionnaire with 10 items including pain, personal care, lifting, reading, headaches, concentration, work, driving, sleeping and recreation. The NDI has a fair to moderate test-retest reliability in patients with mechanical neck pain but also for patients with cervical radiculopathy. Although intra class correlations can change between 0.50 and 0.98. These difference may occur because some studies do not separate chronic or acute neck pain or due to the fact that the study only used patients with acute neck pain and the retest interval was 72 hours.

The NDI is seen as a valid tool to measure neck pain and disabilities in patients with neck pain due to acute or chronic conditions as well as in patients suffering from musculoskeletal dysfunctions, whiplash ± associated disorders and cervical radiculopathy.

The NDI can be scored as a raw score or doubled and expressed as a percent. Each section is scored on a 0 to 5 rating scale, in which zero means 'No pain' and 5 means 'Worst imaginable pain'. All the points can be summed to a total score. The test can be interpreted as a raw score, with a maximum score of 50, or as a percentage.

0 points or 0% means: no activity limitations, 50 points or 100% means complete activity limitation. A higher score indicates more patient-rated disability.

There is no statement in the original literature on how to handle missing data. To use the NDI for patient decisions, a clinically important change was calculated as 5 points, with a sensitivity of 0.78 and a specificity of 0.80. Mean duration of the test was 3 to 7.8 minutes.

Confirmatory Factor Analysis was using first order zero order was used to determine the factors of neck pain.

Results :

To determine impact of Life Activities on the Neck Disability Index in female

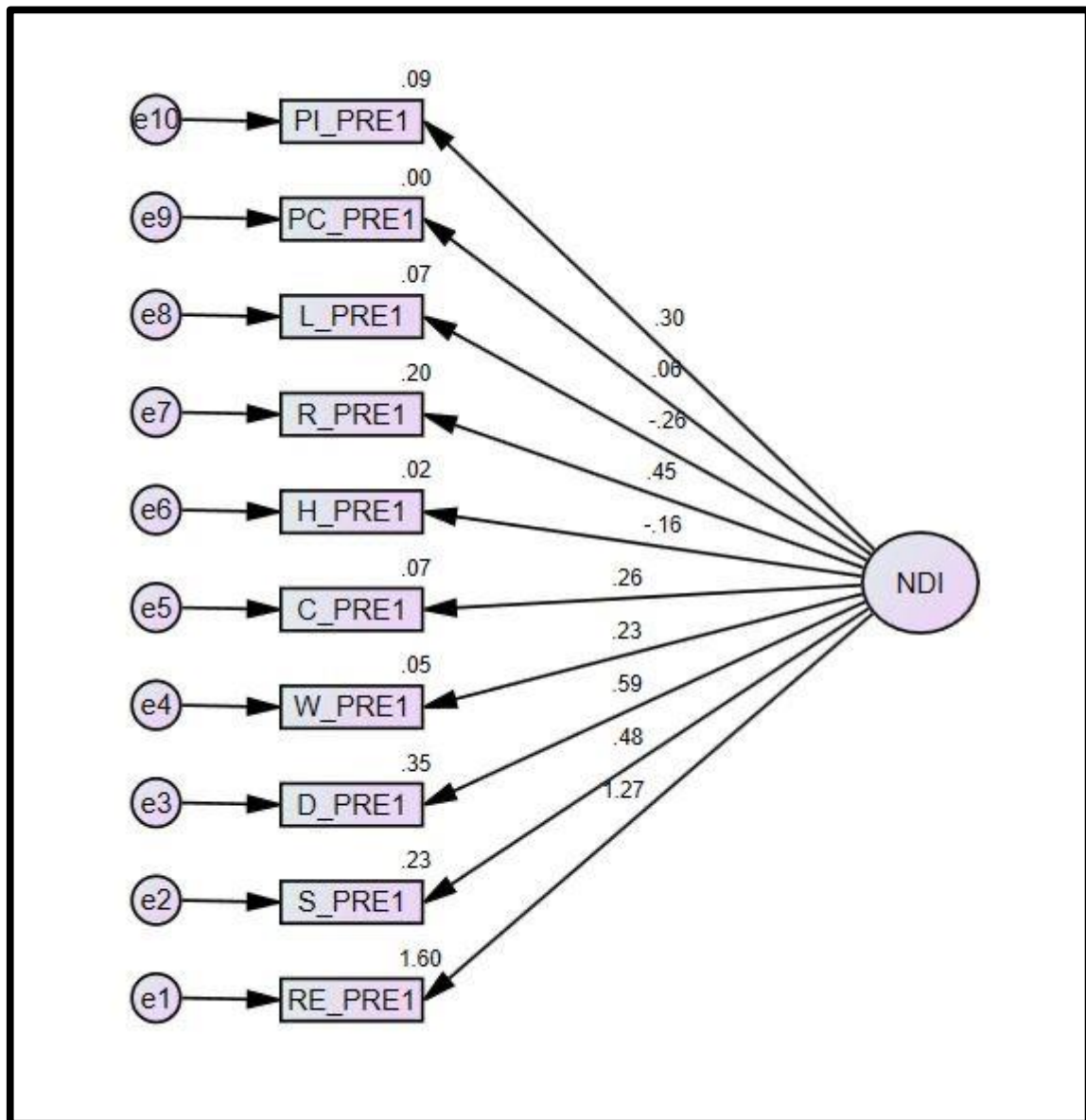


Figure 1 Model of Life Activities and latest variable NDI

Table 1 Regression Weights: (Group number 1 - Default model)

			Estimate	Std. Regression Weights	S.E.	C.R.	P	Squared Multiple Correlation
Recreation	<--	NDI	1.000	1.267				1.61
Sleeping	<--	NDI	.373	.482	.120	3.113	.002	0.23
Driving	<--	NDI	.299	.589	.079	3.802	***	0.35
Work	<--	NDI	.102	.233	.052	1.956	.050	0.05
Concentration	<--	NDI	.145	.264	.069	2.110	.035	0.07
Headache	<--	NDI	-.108	-.158	.072	-1.505	.132	0.03
Reading	<--	NDI	.302	.450	.102	2.949	.003	0.02
Lifting	<--	NDI	-.232	-.259	.111	-2.087	.037	0.07
Personal Care	<--	NDI	.042	1.267	.062	.677	.498	0
Pain Intensity	<--	NDI	.226	.482	.100	2.269	.023	0.09

The above table reveals that the significant relationship was found in Driving in relation to Neck Disability Index . 35% of pain is because of driving and 25% because of wrong sleeping technique. Whereas no significant relationship was found in other variables.

Discussion of Findings:

Cramer H¹ stated that The Neck Disability Index (NDI) is the most commonly used outcome measure for neck pain. Thus, the scholar found this questionnaire better for the present study.

Secondly, **Cramer H² states in his study on Randomized-controlled trial** comparing yoga and home-based exercise for chronic neck pain states, Chronic neck pain is a significant public health problem with only very few evidence-based treatment options. There is growing evidence for the effectiveness of yoga for relieving musculoskeletal disorders. Sharan D's³ study on Effect of yoga on the Myofascial Pain Syndrome of neck states - Myofascial Pain Syndrome (MPS) refers to pain attributed to muscle and its surrounding fascia, which is associated with "myofascial trigger points" (MTrPs). MTrPs in the trapezius has been proposed as the main cause of temporal and cervicogenic headache and neck pain. Binder

Al⁴, states in his study on Neck Pain, non-specific neck pain has a postural or mechanical basis and affects about two thirds of people at some stage, especially in middle age. Thus, most of the researcher has reported that neck pain is one of the important issue healthy lifestyle and in this regard, the scholar found that the driving is one of the important factor for neck pain in females.

References

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³ Sharan D, Int J Yoga, Jan 2014, www.ncbi.nlm.nih.gov

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