

Reasons for job separations in a cohort of workers with psychiatric disabilities

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Workers with disabling mental health conditions have high rates of job termination, and this research explored the reasons why this happens. Results indicated that most people quit their jobs voluntarily rather than being fired or laid off. However, few people quit their jobs to take better positions. The most important factors associated with quitting were not liking the job and low pay. Married people, younger workers, and members of racial and/or ethnic minority groups were also more likely to quit. The study's findings suggest that employment services aimed at avoiding job leaving should help people find jobs with which they are satisfied and those that pay well.
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Effects of prosthetic limb prescription on 3-year mortality among Veterans with lower-limb amputation

Jibby E. Kurichi, MPH, et al.

Lower-limb amputation (LLA) is a life-altering event, affecting the patient's quality of life and health and their functional, economic, and psychosocial status. This study found that Veterans with LLA who received a prescription for a prosthetic limb within 1 yr after surgical amputation were less likely to die within 3 yr of surgical amputation, after adjustment. Moreover, our time-varying variable of receipt for prescription for a prosthetic limb was associated with lower hazards of mortality. Patient-centered care, including patient's choice, opinion, and acceptance of prosthesis, can lead to higher prosthetic use and longer survival.
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Surface electrical stimulation to evoke referred sensation

Johanna C. Forst, et al.

Surface electrical stimulation is being investigated as a noninvasive method to evoke sensations in the phantom limb. Future work will involve development of a treatment for phantom limb pain. This research could significantly affect the quality of life for individuals with amputations, many of whom are veterans. Subjects tested with intact limbs experienced sensation in their hand with stimulation at the elbow. Strength-duration curves were calculated for each subject to define the lower boundary of the effective parameter space. Since most subjects reported paresthesia-like sensations, future studies will focus on obtaining more natural sensations.
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Fifteen years of experience with Integral-Leg-Prosthesis: Cohort study of artificial limb attachment system

Dora-Lisa Juhnke, MD, et al.

The Department of Veterans Affairs cares for more than 340,000 Veterans with limb loss, including 1,500 from current conflicts. Many have transfemoral amputation, often with bilateral, short residual limbs. Many are never able to walk again because they cannot be successfully fitted with prostheses using the currently available socket suspension technologies. Because the Integral-Leg-Prosthesis system allows direct skeletal attachment of the prosthesis into the remaining residual limb bone, it solves the problem of socket-induced skin breakdown. It provides the ability to fit persons with multiple amputations and short residual limbs with artificial limbs and vastly improves patient lifestyles.
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Immediate video feedback on ramp, wheelie, and curb wheelchair skill training for persons with spinal cord injury

Yong Tai Wang, PhD, et al.

This study investigated the effects of immediate video feedback (IVF) on training three manual wheelchair skills (ramping, wheelie, and curbing) for persons with spinal cord injury (SCI). Participants were matched and randomly assigned to the control or experimental group. The findings of this study suggest that IVF for training manual wheelchair skills may produce similar results as conventional training. Thus, IVF may be an alternative training method for advanced wheelchair skills in persons with SCI. Future study of wheelchair skill training may include video feedback models with verbal cues and computer graphic instructions.

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Endogenous pain inhibition is unrelated to autonomic responses in acute whiplash-associated disorders

Margot De Kooning, MSc, et al.

Patients with whiplash often experience persistent pain and disability. Up to 50 percent of these patients will not fully recover and continuously experience multiple symptoms such as chronic neck pain, fatigue, dizziness, concentration difficulties, and headaches. In the search for effective treatments, the understanding of the mechanisms involved in this disorder is crucial. Therefore, we investigated whether the response of the autonomic nervous system is disturbed in patients with an acute whiplash. There was no dysfunction at rest and the activity of the autonomic nervous system was not related to pain in these patients.

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Cross-sectional study of alteration of phantom limb pain with visceral stimulation in military personnel with amputation

Michael Rafferty, MRCS, et al.

Phantom limb pain is a common finding in military personnel with limb amputations. Less well recognized is the phenomenon of phantom limb pain increasing when the bowels or bladder are stimulated, either by filling or emptying. In this study, 75 inpatients at a military rehabilitation hospital were asked whether they had phantom limb pain that increased with bowel or bladder stimulation. In total, 42 of the 75 reported that they did. It is hoped that wider recognition of this phenomenon may lead to further research that will benefit those who experience it.

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Novel postural control algorithm for control of multifunctional myoelectric prosthetic hands

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This article presents a novel myoelectric control algorithm to be used with state of the art prosthetic hands. Various design parameters of the algorithm were tested and determined empirically. The usefulness of the algorithm in a clinical setting was tested. This article will hopefully provide insight for engineers, prosthetists, and users of prosthetic hands. The likely benefits of this work include a broader understanding of the benefits and pitfalls of myoelectric control systems and a possible new control system for myoelectric hand users.

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Interrater reliability of mechanical tests for functional classification of transtibial prosthesis components distal to the socket

Matthew J. Major, PhD, et al.

The common standard of clinical practice for prosthesis recommendation is to appropriately match prosthesis design and patient needs. For this matching process to be effective, accurate and reliable methods for classifying prostheses by their function is necessary. This study evaluated the differences in measurement between two administrators who tested 10 prosthetic components using the mechanical test procedures designed by the American Orthotic & Prosthetic Association. The results of this study suggest high reliability between administrators and support the use of these tests for prosthesis classification. Such tests will help improve the prosthesis-patient matching process for ensuring successful rehabilitation.

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Mixed methods study examining work reintegration experiences from perspectives of Veterans with mental health disorders

Marina Kukla, PhD, et al.

Veterans have difficulty reintegrating and having success in the civilian workplace after returning from deployment or separation from the military. This study sought to explore this issue by examining the experiences of 40 Veterans with mental health disorders. Results indicated that Veterans who served in combat experienced more work barriers, particularly health barriers, compared with Veterans who did not serve in combat. Veterans who served in combat had subjective experiences that were consistent with this finding; these Veterans experienced substantial difficulty during the early transition after leaving the military, which often negatively affected their success at work and in their interpersonal lives.

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