



### (188) Preliminary assessment of standardized patterns for the study of memory for pain

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Memory for pain is an important tool in the assessment of the pain experience. It is not uncommon for an individual with persistent pain to be asked to provide a rating that summarizes their previous pain experiences. In doing so, it is assumed that the individual is as accurate in recalling their pain experiences as they are at describing their current pain experiences. Studies have shown, however, that the recall of pain may not be as precise as previously presumed. There are a common approach to the general study of memory is to provide participants with an objective stimulus which is to be recalled or recognized later. In memory for pain research, there is a lack of a standard, objective stimulus. If standard pain stimuli could be developed, there is also the potential to assess the recognition of pain stimuli as well as recall. The purpose of this current study was to create and assess the reliability of a series of brief patterns of experimental noxious stimuli that can be used as standard stimuli in memory for pain studies. A Forgiene-Barber device was used to elicit pain. Three different conditions were created where participants were asked to distinguish between: 1) 3 different patterns of stimuli, 2) 5 different patterns of stimuli, and 3) 9 different patterns of stimuli. Thirty undergraduate students participated in this study. Kappa Measures of Agreement determined that the 3-pattern and 5-pattern conditions had the best overall reliability. Additional analyses also showed that the 3-pattern and 5-pattern conditions also showed the highest levels of percent correct compared to the 9-pattern condition. The results of this study supported the hypothesis that this methodology can be used as a reliable means of studying memory for pain. Further, the 5-pattern condition provided the most variability without sacrificing reliability and accuracy.

### (189) Predictive utility of the pain sensitivity questionnaire

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There are large individual differences in pain perception, and pain responsiveness or pain sensitivity is a potentially useful construct for understanding individual variability in the experience of pain. Recently, the Pain Sensitivity Questionnaire (PSQ) has been developed as a simple and economical alternative to more time-consuming experimental testing methods that involve expensive equipment. This project further investigated aspects of the psychometric properties of the PSQ. 539 undergraduate students (72% females, age  $M = 21.3 \pm 3.7$  yrs) completed a variety of self-report instruments assessing emotional functioning (depression, anxiety, perceived stress), personality traits (e.g., neuroticism, optimism, anxiety sensitivity), pain per se (e.g., Short Form-McGill Pain Questionnaire-2), and other potentially relevant pain-related measures (e.g., Pain Catastrophizing Scale, Pain Anxiety Symptoms Scale-20, Fear of Pain Questionnaire-Short Form, Illness/Injury Sensitivity Index). PSQ Total scores correlated significantly with anxiety sensitivity, illness/injury sensitivity, pain anxiety symptoms, specific fears associated with pain, and pain catastrophizing, but not depression, anxiety, or perceived stress scores, or personality traits of neuroticism or optimism. Regression analyses testing various models suggested the PSQ sometimes adds a modest amount of prediction to pain intensity ratings above and beyond other established correlates (e.g., anxiety sensitivity), but is often eclipsed in predictive contributions by certain pain-specific measures such as pain catastrophizing and pain-related anxiety and fear symptoms. PSQ scores appear to be relatively independent of personality traits of neuroticism and optimism, as well as specific general affective/mood states. On the other hand, PSQ scores appear to be significantly associated with pain catastrophizing, and pain anxiety and fear scores. Additional research in both clinical and healthy control samples is needed to further establish the unique contribution of pain sensitivity as measured by the PSQ for the prediction of pain outcomes relative to other established predictors.

### (190) Do opioid prescribing policies affect primary care clinic follow up visit rates?

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We mined electronic medical record data to establish a timeline of patient medical visits to their primary care provider before and after a stepwise series of opioid prescribing policies were instituted. Goals were 1) determine if progressive implementation of clinic guidelines and policies affected patients return visits to the clinic and 2) determine prescribing practices for patients of different levels of experience (year of training for resident physicians and relative experience level of attending physicians). We reviewed number of completed visits before and after initiation of no opioids at first visit, required urine drug screens, review of Board of Pharmacy scheduled drug records, requiring medical records from outside prescribers, participation in a required group medical visit for pain, and finally initiation of required opioid risk evaluation by clinic psychologist prior to receiving opioid prescription. Review of findings will include recommendations for primary care clinic opioid prescribing policies and educational suggestions for resident physician training.

### A11 Other

#### (191) Youth health risk behaviors associated with the nonmedical use of prescription pain relievers

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Because measures of nonmedical use of prescription pain relievers (NMUPPR) have been absent from the Youth Risk Behavior Survey (YRBS), which assesses health risk behaviors, little is known about whether NMUPPR is associated with other problem behaviors connected to the leading causes of morbidity and mortality among adolescents. This investigation examined associations between NMUPPR and risk behaviors related to injury, violence, tobacco, alcohol, illicit drug use, risky sexual behaviors, and physical activity. Self-report data were collected from 4,178 9th-12th grade students enrolled in 5 schools in 5 States using a modified version of the 2011 YRBS. Logistic regression (controlling for sex, race/ethnicity, and grade covariates) was used to assess independent associations with lifetime and 30-day NMUPPR and the other risk behaviors. Prevalence of lifetime and past 30 day NMUPPR was 19% and 10%, respectively. Students reporting NMUPPR during the past 30 days were 7 times more likely to report cigarette use (AOR=7.41), 6 times more likely to report marijuana use (AOR=6.62), driving after drinking (AOR=5.81), binge drinking (AOR=5.79), and ~4 times more likely to report carrying a weapon (AOR=3.69) in the 30 days preceding the survey. Moreover, students reporting 30 day-NMUPPR were 9 times more likely to report using cocaine (AOR=8.95), 12 times more likely to report using methamphetamine (AOR=11.71), and 18 times more likely to report using heroin (AOR=17.64) during their lifetime. Findings suggest that NMUPPR is a salient drug-use behavior among adolescents. Furthermore, it clusters with other activities, suggesting that NMUPPR may be part of a syndrome of risk behaviors. To better inform policy, prevention, and treatment activities, NMUPPR items should become part of the YRBS. This project was supported by a grant from Purdue Pharma L.P.