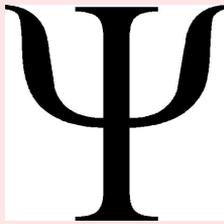# Clinical Psychology Graduate Research Showcase Day 2016

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Friday, April 8th, 2016

UNIVERSITY of
HOUSTON
DEPARTMENT of PSYCHOLOGY

Clinical Psychology
Research Showcase Day Schedule

Time	Activity
08:45am-09:00am	Welcome/Introductions
09:00am-10:00am	Faculty Speed 'Data-ing'
10:00am-10:45am	Poster Presentations
10:45am-11:00am	Break
11:00am-12:30pm	Keynote Speaker
12:30pm-01:30pm	Lunch Break
01:30pm-03:00pm	Student Talks/Presentations
03:00pm-03:15pm	Break
03:15pm-04:00pm	Student Talks/Presentations
04:00pm-05:00pm	Award Presentations
05:00pm-06:00pm	Social Hour

Faculty Speed-Data-ing
Presentation Schedule

Dr. Michael J. Zvolensky ………………09:00am-09:05am

Dr. Carla Sharp……………………….09:05am-09:10am

Dr. Candice A. Alfano…………………..09:10am-09:15am

Dr. Julia C. Babcock……………………09:15am-09:20am

Dr. Paul Cirino……………………….…09:20am-09:25am

Dr. Matthew W. Gallagher……………...09:25am-09:30am

Dr. Paul Massman………….…….……09:30am-09:35am

Dr. Anka A. Vujanovic…………….……09:35am-09:40am

Dr. Rheeda L. Walker…………….…….09:40am-09:45am

Dr. John Vincent………….…………...09:45am-09:50am

Dr. Andres Viana………….……...….…09:50am-09:55am

Dr. Michael J. Zvolensky

Title: Post-Disaster Stressful Life Events and WTC-related Posttraumatic Stress, Depressive Symptoms, and Overall Functioning Among Responders to the World Trade Center Disaster

Abstract

The current study examined contributions of post-disaster stressful life events in relation to the maintenance of WTC-related posttraumatic stress, depressive symptoms, and overall functioning among rescue, recovery, and clean-up workers who responded to the September 11, 2001 World Trade Center (WTC) terrorist attacks. Participants were 18,896 WTC responders, including 8,466 police officers and 10,430 non-traditional responders (85.8% male; 86.4% Caucasian; Mage = 39.5, SD = 8.8) participating in the WTC Health Program who completed an initial examination between July, 2002 and April, 2010 and who were reassessed, on average, 2.5 years later. Path analyses were conducted to evaluate contributions of life events to the maintenance of WTC-related posttraumatic stress, depressive symptoms, and overall functioning. These analyses were stratified by police and non-traditional responder groups and adjusted for age, sex, time from 9/11 to initial visit, WTC exposures (three WTC contextual exposures: co-worker, friend, or a relative died in the disaster; co-worker, friend, or a relative injured in the disaster; and responder was exposed to the dust cloud on 9/11), and interval from initial to first follow-up visit. In both groups, WTC-related posttraumatic stress, depressive symptoms, and overall functioning were stable over the follow-up period. WTC exposures were related to these three outcomes at the initial assessment. WTC-related posttraumatic stress, depressive symptoms, and overall functioning, at the initial assessment each predicted the occurrence of post-disaster stressful life events, as measured by Disaster Supplement of the Diagnostic Interview Schedule. Post-disaster stressful life events, in turn, were associated with subsequent mental health, indicating partial mediation of the stability of observed mental health. The present findings suggest a dynamic interplay between exposure, post-disaster stressful life events, and WTC-related posttraumatic stress, depressive symptoms, and overall functioning among WTC disaster responders.

Dr. Carla Sharp

Title: Does Borderline Personality Disorder exist? Locating BPD in the metastructure of personality pathology

Abstract

Recent editions of the *Diagnostic and Statistical Manual of Mental Dis-orders* (*DSM-5*; American Psychiatric Association, 2013) conceptualize personality disorders (PDs) as categorical constructs, but high PD co-occurrence suggests underlying latent dimensions, calling into question the very existence of personality disorder as defined in the DSM sys-tem. We evaluated a bifactor model of PD pathology in which a general factor and several specific factors of personality pathology (PD 'g' and 's' factors, respectively) account for the covariance among PD criteria. In particular, we examined the extent to which the borderline PD crite-ria would load exclusively onto the g-factor versus on both the g- and one or more s-factors. A large ($N = 966$) sample of inpatients were in-terviewed for six *DSM–IV* (American Psychiatric Association, 1994) PDs using the (Structured Clinical Interview for Personality Disorders (SCID-II; First, Spitzer, Gibbon, Williams, & Benjamin, 1994) with no skip-outs. In the bifactor analysis, borderline PD criteria loaded only on the general factor; the remaining PDs loaded either on both the general and a specific factor or largely only on a specific factor. Results are in-terpreted in the context of several possibilities to define BPD as well as the nature of the general factor.

Dr. Candice A. Alfano

Title: Sleep, Emotional Processing, and Risk for Affective Disorders in Childhood

Abstract

Disrupted sleep in childhood presages the development of anxiety disorders and depression up to decades later. Emerging experimental data in adults highlight the role of maladaptive emotional processing as a critical mechanistic link between sleep and affective functioning. However, understanding of these relationships in childhood, when sleep and emotion regulatory systems are developing, is essential for delineating specific risk mechanisms. This presentation will include description of a novel, ongoing NIH-funded study that utilizes an experimental sleep restriction paradigm to identify emotion-based mechanisms of affective risk among 50 children, ages 7 to 11 years. All children undergo comprehensive psychosocial and sleep evaluation, including clinical interviews, polysomnography (PSG), and one week of actigraphy. A battery of novel tasks assessing discrete aspects of emotional processing (e.g., appraisal, reactivity, regulation, recall) is completed twice; following a week of normal sleep and again after 2-nights of sleep restriction. The design also considers the presence and interaction of multiple protective factors including children's cognitive response style, typical sleep onset latency, and preferred sleep patterns (i.e., chronotype). The long term goal of this work is to advance existing prevention/early intervention protocols beyond non-specific targets toward more explicit mechanisms of risk.

Dr. Julia C. Babcock

Title: A Proximal Change Experiment Testing Interventions with Intimate Partner Violent Men

Abstract

This study tests the efficacy of two interventions for intimate partner violent (IPV) men in affecting immediate behavioral and emotional change during conflict with their partners. Couples with an abusive male partner (N = 100) discussed an area of conflict in the lab. Men were randomly assigned to either an intervention designed to teach Accepting Influence skills, Editing out the Negative skills, or a Control/Time Out condition, then were asked to resume their conflict discussion. IPV men in both intervention conditions reported greater increases in positive and decreases in aggressive feelings than IPV men in the control condition. Women also reported feeling less aggressive when their husbands were assigned to one of the treatment conditions as compared to the control (Time Out) condition. Similarly, observational coding revealed that IPV men displayed more positive behavior and less aggressive behavior in the subsequent discussion following one of the interventions as compared to IPV men in the Time Out condition. The interventions had little impact on women's observed behavior, however. Results suggest that IPV men can learn to adopt new communication behaviors and that they do appear to have a positive impact on the emotional tone of their arguments. Clinically, communication skills training may be useful additions to battering interventions programs, although they may need to be taught to both men and women in violent relationships.

Dr. Paul Cirino

Title: A Structural Framework for Executive Functions in Children.

Abstract

Executive functions (EF) are domain general control processes important for managing goal directed behavior. EFs have traditionally been approached in neuropsychology via their relation to the frontal lobes, but similar constructs have also considered from the perspective of cognitive psychology (e.g., working memory), or from developmental or educational perspectives (e.g., self-regulation). There have been older (e.g., Brown, 1987) and newer (e.g., Ylvisaker & Feeney, 2002) attempts to integrate these perspectives. The goal here is to evaluate the structural relations among domains of EF. 846 late-elementary students participated. There were 34 EF measures selected from 8 domains (working memory, inhibition, shifting, planning, fluency, self-regulated learning, metacognition, and behavioral regulation) reflecting different perspectives on EF. The primary approach was confirmatory factor analysis, with and without a bifactor component. Results revealed that a correlated factor model produced strong latent correlations among several of the factors. The best fitting model was a bifactor model with 5 specific factors (working memory storage/planning, working memory update/inhibition, fluency, self-regulated learning, metacognition). Results are conceptually consistent with the unity/diversity model of Miyake and Friedman (2012), though with different patterning of specific factors. The results emphasize the challenge of combining specific measurement with global inferencing, with both theoretical and clinical implications.

Dr. Matthew W. Gallagher

Title: Transdiagnostic Treatments for Anxiety Disorders

Abstract

There is now robust evidence supporting the efficacy of single-disorder cognitive-behavioral treatments for anxiety disorders, but there are important practical and theoretical limitations of using single-disorder treatment protocols. The Unified Protocol for Transdiagnostic Treatment of Emotional Disorders (UP; Barlow et al., 2011) is a cognitive-behavioral treatment that was recently developed to address the full range of emotional disorders by targeting underlying dimensions of vulnerability (e.g., neuroticism) that contribute to the development and maintenance of emotional disorders, rather than surface-level, DSM diagnostic symptoms. This talk will briefly summarize findings from a recently completed RCT that examined the statistical equivalence of the UP and existing single disorder CBT protocols in a diagnostically heterogeneous clinical sample of 223 patients with a principal anxiety disorder diagnosis. Results at post-treatment indicated that the UP had robust effects on clinician and self-report ratings of anxiety, depression, and functional impairment. The effects of the UP and single disorder CBT protocols were statistically equivalent across diagnostic categories. These findings provide the most robust evidence to date that transdiagnostic treatments may provide a viable alternative to existing treatment approaches. Implications for the treatment of emotional disorders will be discussed.

Dr. Paul Massman

Title: Cognitive and functional correlates of NPI-Q symptom clusters in mildly demented Alzheimer's patients

Abstract

We aimed to identify associations between neuropsychiatric symptoms, as measured by the Neuropsychiatric Inventory-Questionnaire (NPI-Q), and cognitive and functional abilities in 256 mildly demented Alzheimer's disease patients. Factor analysis of the NPI-Q yielded two factors, 'Anxiety/Restlessness' and 'Negative/Oppositional'. Greater severity of Anxiety/Restlessness symptoms was associated with worse performance on measures of visuospatial functioning, immediate visual recall, and basic and instrumental activities of daily living. In contrast, Negative/Oppositional scores were not related to cognitive or functional abilities.

Dr. Anka A. Vujanovic

Title: Multi-Modal Examination of Distress Tolerance and Emotional Reactivity in Low-Income, Inner-City Adults with Posttraumatic Stress and Substance Use Disorders

Abstract

Posttraumatic stress disorder (PTSD) and substance use disorders (SUD) represent a highly prevalent and especially difficult-to-treat comorbidity. Better understanding cognitive-affective processes underlying this co-occurrence has the potential to meaningfully inform advances in clinical research and treatment. Distress tolerance (DT), defined as the perceived or actual capacity to withstand negative emotional states or uncomfortable physical sensations (Vujanovic et al., 2015), is malleable via intervention and relevant to both PTSD and SUD. The present investigation investigated the role of perceived and behavioral distress tolerance in terms of trauma- and drug-cue reactivity among adults with moderate-severe SUD (APA, 2013) and at least four symptoms of PTSD (APA, 2013). Specifically, DT was measured multi-modally via the Distress Tolerance Scale (Simons & Gaher, 2005), Mirror-Tracing Persistence Task (Quinn et al., 1996), Paced Auditory Serial-Addition Task-Computerized Version (Lejuez et al., 2003), and Breath-Holding Task (Hajek et al., 1987). Emotional reactivity was indexed in the context of an experimental laboratory paradigm. It was hypothesized that each of the DT indices would be inversely related to trauma - and drug-cue reactivity, indexed via both physiological and self-reported ratings. Covariates included sex, subjective social status, PTSD symptom severity, and substance use severity. Structured diagnostic interviews (i.e., SCID-I, CAPS-5) were conducted to determine diagnostic study eligibility criteria. Participants were asked to compose one-minute trauma, drug, and neutral scripts, which served as 'cues' during the experimental laboratory procedure, wherein heart rate and respiration were continually monitored. Participants rated their levels of adaptive (e.g., safety, control) and maladaptive (e.g., anxiety, fear, drug craving) coping, using a100-point Likert-style Visual Analog Scale, measured pre- and post-cue presentations. A total of 54 participants (*M*age = 47.4; 47% women; 78% African American) have been enrolled in the study to date, and data collection is ongoing. Preliminary analyses demonstrate significant, negative (inverse) - though differential - associations between DT indices and trauma- and drug-cue reactivity. No significant associations with physiological measures were documented. Clinical implications will be discussed.

Dr. Rheeda L. Walker

Title: Depression and Self-care Among African American Adults Diagnosed with Type 2 Diabetes

Abstract

The overall aim of this emerging program of research is to develop theoretically- and culturally-informed models of clinical care leading to reduction of diabetes-related health disparities. Diabetes is a leading cause of disability and death for 1.5 million African Americans. The projected number of new cases is expected to increase by 363% for African American males and 217% for African American females through 2050. High levels of glycated hemoglobin (HbA1c), a biomarker for diabetes control, are attributed to poor medical self-care and is predictive of adverse health outcomes and premature death. African Americans are disproportionately affected by diabetes-related morbidity and mortality despite research advances and well-established guidelines for Type 2 Diabetes Mellitus (T2DM) self-management. However, self-management is undermined by depression pathology for which adults diagnosed with T2DM are twice as likely to be diagnosed compared to health adults. Healthcare providers are urged to treat both depression and diabetes, simultaneously, to address the growing diabetes epidemic. However, African Americans are significantly less likely than European Americans to receive treatment for depression. Though there have been some efforts to integrate depression and diabetes care intervention, depression among African Americans diagnosed with T2DM remains grossly understudied. Importantly, diabetes self-management plans should align with patients' life goals and values. Among persons who holistically value body, mind, and spirit, non-traditional methods of healthcare are preferred. Spiritual and religious attributions about the cause of depression have been found to impact treatment preferences in general and beliefs about depression-related treatment in particular. African Americans are more likely than European Americans to believe in "divine" intervention. However, specific associations between spiritually-related coping (rather than medically indicated coping) and diabetes self-management is unknown though preferences for "prayer" has been cited as a specific barrier to diabetes self-management.

Dr. John P. Vincent

Title: Forensic psychology research.

Abstract

The purpose of this presentation is to provide an overview of the research and practice activities in forensic clinical psychology at the University of Houston. Forensic clinical psychology occupies a unique niche in the field, since it addresses how clinical psychology can inform the legal profession in matters where psychological issues are relevant in the criminal and civil courts. Application of psychological assessment is at the heart of the approach, although standard assessment tools that are used in clinical contexts are supplemented by review of medical records, court documents, witness depositions, input from third party collateral sources, and detailed assessment of response biases that can undermine the validity of assessment information. Following the landmark ruling in Daubert v. Merrell Dow Pharmaceuticals, Inc. the scientific methodology that underpins forensic evaluations is of prime importance and is subject to careful scrutiny by the courts to determine the admissibility of expert testimony. The specific research questions addressed by our group at the University of Houston are based on questions commonly encountered by forensic psychologists. Recent research has addressed predictors of recidivism among juvenile offenders, psychosocial correlates of violence in adolescents, risk assessment for institutional misconduct among incarcerated juvenile sex offenders, the role of pre-existing trauma history in psychological symptoms claimed in personal injury litigation, factors affecting juror decision making in sexual harassment cases, and the assessment of malingering in personal injury litigation. Our current research examines item response theory analyses of standard malingering measures used in forensic contexts as well as the comparability of effort-based vs. over reporting detection measures in the assessment of malingered psychological symptoms and cognitive impairment. Directions for future research will be discussed.

Dr. Andres Viana

Title: Maternal Interpretation Biases and Child Anxiety and Related Responses

Abstract

Research shows that childhood anxiety disorders lead to significant and chronic impairment, including school underachievement and early dropout; peer difficulties; physical health problems; depres-sion and substance use; and increased risk for suicide. Conse-quently, there is a strong need to identify potential mechanisms in-volved in the development of childhood anxiety disorders, from pub-lic health, prevention, and economic standpoints. Given the central role of cognitive interpretations in childhood AD, as well as the im-portance of the parent-child relationship in shaping how children interpret their environment, researchers have highlighted the need for research specifically examining how maternal interpretations heighten the risk for childhood anxiety. This presentation will pro-vide an overview of an ongoing NIMH-funded trial examining whether experimental manipulation of maternal interpretations of ambiguous events influences maternal behavior during mother-child interactions as well as children's manifest anxiety and perfor-mance during an anxiety provoking task. In this study, mothers are randomly assigned to either a training program that teaches them to interpret child-related ambiguous situations in a positive direction or a neutral condition that does not train mothers to interpret situa-tions in either a positive or negative manner. Children are subse-quently asked to participate in an anxiety-provoking speech task. Mothers and their children discuss how they will approach the task, while maternal behavior during the discussion is coded by observ-ers "blind" to training condition. Finally, children's anxious behavior, physiological arousal, and performance during the speech task is assessed. We expect that clinically anxious mothers who are trained to interpret child-related ambiguous situations in a positive manner (vs. those who do not receive such training) will exhibit re-duced anxious behavior and rate the speech task as less threatening.

We also expect that children of clinically anxious mothers who are trained to interpret child-related ambiguous situations in a positive manner will rate the speech task as less threatening than children of clinically anxious mothers who do not receive interpretation bias training. We also predict that children of clinically anxious mothers who receive positive interpretation bias training (vs. those who do not receive such training) will exhibit lower anxiety during the speech task, as evidenced by (a) lower observer-rated anxious behavior, (b) increased respiratory sinus arrhythmia, and (c) higher observer-rated performance during the speech task. A total of 35 children (ages 8 – 12) with anxiety disorders and their clinically anxious mothers have been recruited to date. By examining the effects of maternal cognitive processes on interpretation biases and related anxiety responses among children with AD, this study hopes to improve our understanding of the intergenerational transmission of cognitive risk for AD from parent to child. In addition, by improving our understanding of the role of maternal interpretation biases in children's anxiety, results from this study may facilitate the development of targeted prevention and intervention programs that focus on parental cognitive vulnerabilities known to hinder children's treatment gains.

Poster Presentations

1. Schuhmann, B., Paulus, D.J., Banks, K., Vujanovic, A.A. Childhood trauma severity and impulsivity: The mediating role.

2. Talavera, C., Paulus, D.J., Garza, M., Ochoa-Perez, M., Lemaire, C., Valdivieso, J., Bogiaizian, D., Robles, Z., Walker, R., Zvolensky, M. J. The impact of rumination in relation to anxiety and depressive symptoms and disorders among primary care Latinos: The moderating role of subjective social status.

3. Snead, A.L., Armenti, N. A., Babcock, J.C. The role of empathy as a moderator between trait anger and IPV.

4. Mellick, W., Sharp, C. Mental state decoding in adolescent boys with major depressive disorder versus sex-matched healthy controls.

5. Mellick, W., Venta, A., Sharp, C. A comparison of suicidal behaviors and negative life events in inpatient adolescents with major depression, borderline personality disorder, and comorbid diagnoses.

6. Mellick, W., Sharp, C., Ernst, M. The relation between adolescent depression and interpersonal trust.

7. Huston-Warren, E.A., Kesler, S.R. Cognitive impairment in pediatric acute lymphoblastic leukemia is associated with altered structural connectome organization.

8. Child, A., Cirino, P.T., A cognitive dimensional approach to MD, RD, ADHD comorbidity.

Poster Presentations

9. Faytell, M.P., Doyle, K.L., Naar-King, S., Outlaw, A.Y., Nichols, S.L., Twamley, E.W., Woods, S.P., calendaring and cueing can improve naturalistic time-based prospective memory for youth infected with HIV.

10. Cirino, P.T., Gerst, E.H. Structure of processing speed in middle childhood; a confirmatory factor analytic approach.

11. Kauffman, B.Y., Farris, S.G., Zvolensky, M.J. Negative affect and emotion dysregulation sequentially mediate the relation between insomnia symptoms and affect-regulatory expectancies and motives for smoking.

12. Kordovski, V.M., Woods, S.P., Doyle, K.L., Cameron, M.V., Weber, E. Combined effects of HIV disease and aging on employment status.

13. Iyican, S. The proximal effect of alcohol on intimate partner violence.

14. Rosenblatt, A.S., Pastorel, N.J. Evidence for clinical utility of neuropsychological data despite performance validity failures.

15. Lau, S., Beidel, D.C., Alfano, C.A. The impact of parental military deployment on children: what have we learned from more than a decade at war?

16. Tierney, S.M., Woods, S.P., Beltran, J., Cameron, M.V. semantic memory in HIV-associated neurocognitive disorders.

17. Alverson, W.A., Massman, P.J., Doody, R.S. Longitudinal stability of cognitive asymmetry in Alzheimer's disease patients.

Poster Presentations

18. Jardin, C., Garey, L., Zvolensky, M.J. The psychometric properties of the Sexual Motives Scale.

19. Robles, Z., Garey, L., Hogan, J., Bakhshaie, J., Aminian, B., Schmidt, N.B., Zvolensky, M.J. Examining an underlying mechanism between perceived stress and smoking cessation-related outcomes.

20. Raines, E., Viana, A.G., Palmer, C.A., Zvolensky, M.J., Alfano, C.A., Dixon, L.J. Children's behavioral inhibition and anxiety disorder symptom severity: The role of individual differences in basal respiratory sinus arrhythmia.

21. Davis, J.K., Fox, K. Sexual minority status as a moderator between social factors and teen dating violence victimization.

22. Fischer, J. Sleep Disturbances and Internalizing Problems in Children Following Traumatic Injury.

23. Kalpakci, A., Vanwoerden, S., Sharp, C. The differential effects of paternal and maternal invalidation on psychological inflexibility in adolescent Inpatients.

24. Hatkevich, C., Mellick, W., Mathai, B., Kazimi, I., Walker, R., Pettit, J., Sharp, C. Clinical and demographic characteristics differentiating single suicide attempters, repeat attempters, and non-attempters in adolescent inpatients.

25. Armenti, N.A., Snead, A.L., Babcock, J.C., An exploration of interactions between jealousy and two types of empathy in predicting intimate partner violence.

Poster Presentations

26. Noblin, J.L. The role of cultural worldview to morality salience.

27. Clementi, M.A. Addressing childhood sleep problems in the context of anxiety interventions.

28. Sommer, J.M., Iyican, S., Babcock, J.C. The relation between contempt, anger, and intimate partner violence: A dyadic approach.

29. Bakhshaie, J., Zvolensky, M.J., Langdon, K.J., Leventhal, A.M., Schmidt, N.B. Reduction of anxiety sensitivity in relation to nicotine withdrawal symptoms during smoking cessation.

30. Cheref, S. & Walker, R. Perceived discrimination and suicidal ideation: Moderating role of anxiety symptoms among Asian, Black, Hispanic, and White individuals.

31. Odafe, M. Perceived discrimination and hopelessness in African Americans: Moderating role of social support.

Keynote Speaker

Dr. Carl Weems

Professor and Chair, Department of Human Development and Family Studies, Iowa State University

Talk Title: *Using Developmental and Affective Science to Inform the Prevention and Intervention of Youth Emotional Difficultie*s.

<u>Oral Talks/Presentations</u>

David P. Sheppard…………...…… 01:30pm-01:50pm

Chad Brandt……………….……01:50pm-02:10pm

Jennifer Cowie…………..……….02:10pm-02:30pm

Katharine C. Reynolds…….……….02:30pm-02:50pm

Allison Kalpakci…………...…….03:15pm-03:30pm

William Mellick…………...…….03:35pm-03:55pm

David P. Sheppard, M.A.

Title: Pill Burden Influences the Association Between Time-Based Prospective Memory and Antiretroviral Adherence in Younger but not Older HIV-Infected Adults

Abstract

Time-based prospective memory (PM) is important for optimal antiretroviral adherence in HIV infection, but little is known about how age, pill burden, and environmental cofactors may moderate this relationship. 117 older (age $\geq$ 50) and 82 younger (age $\leq$ 40) HIV-infected adults completed a standardized measure of prospective memory (Memory for Intentions Screening Test [MIST]) in the context of a comprehensive neurocognitive, psychiatric, and neuromedical evaluation. Participants also underwent 30 days of antiretroviral adherence tracking using an electronic pill bottle (Medication Event Monitoring System [MEMS]), with adherence classified as taking at least 90% of prescribed doses. Analyses included identical logistic regressions in each age group (i.e., older and younger) predicting the outcome variable MEMS-based adherence status (i.e., adherent or non-adherent), with MIST time-based or event-based subscale (conducted separately), total medication pill burden, and their interaction as predictors of interest. In the older HIV+ group, better time-based PM performance was associated with higher likelihood of adherence, irrespective of pill burden (p=.004, d=0.55). Within the younger HIV+ sample, time-based PM was positively related to adherence in participants with lower (p<.001, d=1.05), but not higher (p=.626, d=0.29), pill burden. Further exploring this unexpected relationship, we observed that younger HIV-infected individuals with low antiretroviral pill burden were less likely to use memory-based compensatory strategies to manage their medications than younger HIV+ individuals with high pill burden (p=.001, d=.81). Younger HIV-infected individuals with higher pill burden may overcome the normal effects of time-based PM on adherence through compensatory medication taking strategies, whereas suboptimal use of these strategies among younger HIV-infected individuals with lower pill burden may heighten their risk of antiretroviral non- adherence secondary to deficits in time-based PM. Future studies should investigate potentially novel screening measures or interventions using time-based PM with the aim of characterizing and increasing medication adherence.

Charles Brandt, M.A.

Title: The Utility of a Six-Week Therapy Protocol for Reducing Anxiety and Increasing Medication Adherence among Persons Living with HIV/AIDS: A Randomized Clinical Trial

Abstract

With proper adherence to HIV medications, persons living with HIV/AIDS (PLWHA) can be expected to live full lifespans. Despite this, current research indicates that up to 50% of HIV+ persons are under-adherent to their HIV medications leading to disease, early mortality, and increased burden on the national health care system. Mental health problems may partially explain medication under-adherence among PLWHA. For instance, PLWHA experience much higher rates of anxiety and its disorders than the general population. Research has additionally noted that, anxiety symptoms and disorders predict lower HIV medication adherence. Although anxiety has indicated as an important factor in medication adherence among PLWHA, to date there has been limited research examining the efficacy and effectiveness of a programed aimed at reducing anxiety among PLWHA in order to increase their medication adherence. In order to test this relation, a six-session transdiagnostic Cognitive-Behaviorally based therapy program aimed at reducing anxiety and increasing HIV medication adherence was developed and administered to PLWHA recruited from community clinics in the greater Houston community. Data has been collected on 40 individuals who were randomized to a waitlist-control or active-therapy group. Assessments were collected at pre-randomization mid-, and post-group time points, as well as 1-, 3-, and 6-months post-treatment. All individuals randomized to the control group were offered therapy services after the waitlist control session had concluded. Findings indicate that anxiety - reduction therapy is more effective at increasing HIV medication adherence than a waitlist-control condition. Findings also indicate that those completing the waitlist condition who sought services showed similar gains. Additionally, results indicate that therapeutic gains are generally maintained over time. This research is the first to integrate treatment/management of HIV with treatment for anxiety problems that impede success of HIV management and indicates the utility in changing physical health behaviors therapeutically.

Jennifer Cowie, M.A.

Title: Parental Involvement in Infant Sleep Routines Predicts Differential Sleep Patterns in Children with and without Anxiety Disorders

Abstract

Over-involvement in infant settling strategies has been shown to longitudinally predict sleep problems (Sadeh & Tikotzky, 2010). Despite significant sleep complaints among clinically-anxious children (Alfano, Ginsburg, & Kingery, 2007), the specific origins and etiology of sleep problems in this population is unknown. Therefore, the overall aim of this study was to compare parents' retrospective reports of their involvement in infant settling strategies and their relation to current sleep patterns among children with GAD and healthy controls. Children (ages 7-11) with GAD (n=44) versus healthy controls (n=41) participated. Diagnoses were determined from structured interviews. Measures of parent-reported parental anxiety, child-reported parental disciplinary practices, and child-reported subjective sleep problems were included. Parents completed a sleep history questionnaire created for this study that assessed settling strategies and infant health factors in the first six months of life. Children also wore an actigraph for one week to measure objective sleep patterns. Parental anxiety, maternal education, and preterm birth were entered as covariates in analyses due to pre-existing group differences. Results from ANCOVAs found that parents of children with GAD were significantly more likely to report rocking their infants to sleep (F=4.75, p<.05) and putting infants down when they were already asleep (F=4.02, p<.05) than parents of healthy controls. Hierarchical regression models indicated that greater involvement in infant sleep routines predicted poorer objective sleep in control children but better objective sleep for children with GAD, even after controlling for current parenting practices. Significant relationships were not found for subjective sleep problems. Contrary to previous studies, findings suggest differential effects of early sleep- related parenting for children with and without later anxiety disorders with implications for early intervention. Greater involvement in infant settling strategies may help to regulate sleep-wake cycles of at-risk children but have detrimental effect for children who are less temperamentally vulnerable.

Katharine C. Reynolds, M.A.

Title: REM Sleep and Stressful Life Events Interact Differently for Youth with GAD and Healthy Controls

Abstract

During rapid eye movement (REM) sleep, emotional events occurring during wakefulness are selectively reactivated. Memory consolidation happens over weeks and years, strengthening these memories over time. Re-activation of emotional events may underlie the well-established presence of increased REM sleep in both depressed and at-risk populations. REM-based memory consolidation may be critical for anxious youth as well, who show high levels of negative emotionality and negatively-biased recall of previous events. We therefore examined associations between REM sleep, lifetime events, and depressive symptoms in children with generalized anxiety disorder (GAD) and healthy controls. Participants (6-11 years; Mage=8.78, SDage=1.36; 56% female) included healthy children (n=37) and children with GAD without comorbid depression (n=29). All children completed diagnostic interviews, measures of lifetime events, depressive symptoms, and one night of polysomnography to assess the percentage of REM sleep (REM%) and latency to the first REM period (REML). Groups did not differ on lifetime events or REM sleep variables. Among children with GAD only, negative life events were negatively correlated with REML (r=-0.37, p=.047). Regression models further revealed that more negative life events (beta=.40, p=.045) and increased REM% (beta=.46, p=.01) predicted greater levels of depressive symptoms in the GAD group. In healthy children, a significant interaction (beta=-.36, p=.04) emerged indicating that for youth experiencing a high number of negative life events, greater REM% predicted fewer depressive symptoms (beta=-2.09, p=.003). Increases in REM sleep are related to greater depressive symptoms in non-depressed anxious children, irrespective of the number of negative lifetime events. Conversely, increased REM may buffer against depressive symptoms in healthy children in the presence of greater lifetime stressors, possibly through adaptive emotional processing/memory consolidation. Rather than pure quantitative differences in REM sleep characteristics, future studies examining relationships between REM sleep and emotional processing/memory among anxious youth are needed.

Allison Kalpakci, M.A.

Title: Shame and borderline personality disorder in adolescent inpatients

Abstract

Shame is thought to be a central component of borderline personality disorder (BPD; Linehan, 1993); however few studies have examined shame-based BPD dysfunction, particularly in adolescents. Moreover, studies have not examined how shame relates to specific BPD symptoms, which would lend greater specificity to our understanding of how shame functions in this pathology. Given that shame is linked to negative outcomes (Rizvi & Linehan, 2011), it is important to understand the relation between shame and BPD in this age group. Further, as both BPD and shame are related to gender, age, and psychiatric severity (Gilbert, 2000), BPD's relation to shame, independent of these correlates, should be examined. Thus, the overall aim of this study was to examine the relation between BPD and shame in inpatient adolescents, controlling for gender, age, and psychiatric severity. Specifically, the first aim was to compare adolescents with and without BPD on a latent variable of shame. The second aim was to examine whether shame differentially predicted specific DSM-IV BPD symptoms. To this end, $N = 81$ inpatient adolescents were administered four shame measures (i.e. PFQ, TOSCA-A, ESS, TSI), as well as the CBCL, and the CIBPD. An exploratory factor analysis revealed a single latent factor of shame. An ANCOVA comparing the groups on the resultant shame factor score revealed higher shame in adolescents with BPD, $F(1, 80) = 5.29$, $p =.015$, controlling for covariates. A multivariate regression with the shame latent factor score and covariates as independent variables, and the 9 DSM-IV BPD symptoms as dependent variable revealed a multivariate effect of shame on the BPD symptoms, Wilks' $\lambda = .46$, $F(9, 33) = 4.28$, $p = .001$, $\eta p2 = .54$. At the univariate level, shame only predicted affective instability, emptiness, and identity disturbance. Findings empirically support the long-held theoretical supposition that shame relates to BPD and suggest that shame may specifically maintain the internalizing symptomology of BPD pathology.

William Mellick, M.A.

Title: Experiential avoidance in the vulnerability to depression among adolescent females

Abstract

Children of mothers with a history of major depressive disorder (MDD) are at significantly greater risk for developing MDD. An extensive body of work has investigated various mechanisms in the maternal transmission of depression yet the plausible role of experiential avoidance (EA) has yet to be examined. In both adults and adolescents, EA has been positively related to depressive symptoms. However, it remains unknown whether EA is more likely to occur in the biological offspring of mothers with a history of MDD as compared to healthy controls. Moreover, the relation between maternal EA and adolescent EA in the context of depression is in need of investigation. The present study therefore employed a high-risk design to elucidate the role of EA in the vulnerability to depression. Methods: A total of $N = 146$ biological mother/adolescent daughter dyads comprised three groups who differed in diagnostic status: mothers with a history of MDD and their depressed daughters (MDD: $n = 21$), mothers with a history of MDD and their never-depressed daughters (high-risk, HR; $n = 69$), and healthy controls (HCs; $n = 56$). Mothers and daughters completed structured clinical interviews and self-report measures of EA, depression, and anxiety. Results: All groups significantly differed on daughter EA such that the MDD group reported greater EA than the HR group, $p < .001$, which in turn reported greater EA than HCs, $p = .019$. Dimensional analyses revealed daughter EA to mediate the relation between maternal EA and daughter depressive symptoms after controlling for symptoms of maternal anxiety and depression, $CI = -.3914$ to $-.0141$. Conclusions: Findings did not support EA as a vulnerability factor for MDD. However, the fact that daughter EA served as a mediator highlights the potential role of intergenerational EA in promoting adolescent depressive symptoms.

Research Award Winners

Salome Vanwoerden

Advisor: Carla Sharp, Ph.D.

Daniel J. Paulus

Advisor: Michael J. Zvolensky, Ph.D.

Salome Vanwoerden, B.A.

Social cognition as a cause, correlate, and malleable treatment target in adolescent psychopathology

Social cognition refers to the processes involved with understanding mental states in the self and other. Social cognition is included in the NIMH's Research Domain Criteria under Systems for Social Processes due to the surge of research demonstrating that social cognition is a transdiagnostic process contributing to the development and presentation of a range of pathology. While research is clear in the impact and importance of social cognition for the spectrum of normal to abnormal development, Systems for Social Processes remains understudied compared to the other RDoC domains. The overarching goal of my developing program of research is to further establish Systems for Social Processes as a transdiagnostic and malleable mechanism for psychopathology. In this talk, I will present work that showcases this line of work. First, I will present findings from several studies that have contributed to the understanding of social cognitive impairments characteristic of personality pathology in adolescence, given the strong interpersonal core of personality pathology. Second, I will discuss methodological limitations in the ways we measure and conceptualize social cognition within clinical psychology research and discuss studies conducted to address these limitations to specifically improve our understanding of social cognitive impairments in youth personality pathology. Finally, I will discuss the developmental basis of social cognition as originating from parent-child interactions through childhood. The talk will finish with directions for future research.

Daniel J. Paulus, M.A.

Transdiagnostic Vulnerability Factors: Common Road to The Treatment of Affective Syndromes and Substance Use

My research is centered on the comorbidity of affective (e.g., anxiety, depression) syndromes and substance use (e.g., alcohol use, smoking). I am interested in studying both the psychological underpinnings and treatment of these conditions. One promising approach is to focus on transdiagnostic vulnerability factors *common* to the development of affective and substance use disorders. In addition to giving one or more common intervention targets cross cutting diagnoses/domains, this approach allows for a dimensional approach rather than a focus only on categorical diagnoses. I will present a synopsis of my work to date including basic studies aimed at understanding mechanisms underlying the affective/substance comorbidity as well as recent intervention outcome studies. I will discuss the limitations of the approaches I have used thus far and outline steps for future work.