Preparing a Poster Presentation
Important Considerations

The Audience

- Define the purpose

- Adapt materials to audiences expected knowledge (scope and depth)

- Expect 3-5 minutes per person at your poster

- Sell your work
Important Considerations (cont.)

The Content

- Focus on two or three key points
- Keep it concise
- Convey big picture
- Paraphrase complex methods
- Tables can speak a thousand words

- Use simplified tables and charts that are accompanied by bullets outlining important findings

- Avoid jargon

- Spell out acronyms

- For statistical results, use appropriate symbols for denoting statistical significance
Important Considerations (cont.)

The Design

- Clean, consistent and uniform look
- Similar to magazine or newspaper design
- Goal is to grab attention and be easy to read
Organization and Format

Banner

- Title, author(s), and affiliations

- Good titles should be short and can ask or answer a question

- Try not to use all capital letters for title, these are harder to read
Organization and Format (cont.)

Body

- Similar headings to research papers (qualitative and quantitative)
- Who, what, when, where and why
- Vertical sections (for easier reading and multiple readers simultaneously) of comparable shape and size
Organization and Format (cont.)

- 40+ font for title, 20 font for body, and 14+ for fine print text (i.e., chart)

- Select a legible font (i.e., Times Roman, Century, Tahoma)

- Use colour sparingly—avoid patterns and neon colours

- Use contrast—i.e., light background to dark text

- Leave some white space

- Include references and acknowledgements (i.e., funder)
Research poster examples
INTRODUCTION

A significant body of evidence suggests autobiographical memory (AM) impairment in individuals diagnosed with major depressive disorder, yet treatment-related mechanisms underlying this effect remain largely undefined.

Overgeneral AM retrieval is clinically significant in predicting poorer prognosis of future depressive symptoms.

Within the large body of AM retrieval literature, there has been little research done to systematically investigate the effect of psychiatric medication load on recall, making this project as novel in its field.

The objective of the current study is to examine the association between one potentially contributing factor, medication load, and autobiographical memory specificity (both episodic and semantic) in a sample of patients with major depressive disorder. It is hypothesized that increased medication load will improve overall cognition, and therefore yield increased episodic and semantic detail.

METHODS

1. Participants

Participants were recruited at a 1.008 hospital in a sample with MDD. In agreement with Almeida et al. (2009), Moussal (2012), and Sackeim’s (2001) Antidepressant

2. Autobiographical Interview

The Al (Levine et al., 2002; McKinnon et al., 2006) is a semi-structured clinical interview administered to distinguish elements of event recall into episodic and semantic detail within three categories of retrieval: Free Recall (FR), General Probe (GP) and Specific Probe (SP). autobiographical details were subsequently quantified as episodic (indexing details specific in time and place) or non-episodic (factual details unrelated to the recalled events, extraneous meta-cognitive details and repetitions). Participants recalled emotionally valenced events: two positive, two negative, and two neutral.

METHODS

RESULTS: FREE RECALL

Correlational analyses were performed between all emotionally valenced events [detail composite + emotion] vs. [medication load (ML)], however no significance emerged.

RESULTS: SPECIFIC PROBE

Correlational analyses were first performed on medication load (ML) and [detail composite + emotion], with positive significance emerging between ML and positive detail (r = 0.961, p = 0.003). Regression analysis inclusive of HAMD scores and number of depressive episodes showed ML as the only significant predictor of positive internal detail in the model. Number of depressive episodes combined with HAMD scores did not predict positive internal detail.

CONCLUSIONS/DISCUSSION

As little investigation into the effect of medication load on recall specificity has been conducted, this initiative yields relatively novel results within autobiographical memory literature. Medication load, number of depressive episodes and HAMD scores did not concurrently predict positive episodic details. Medication load alone, however, significantly predicted recollection of event-related details tangential to positive AMs retrieved. Higher medication load may be related to greater production of detail when recalling an emotionally valenced memory, particularly a positive memory. It is a possibility that those with greater burden of illness and therefore a higher medication load may be subjected greater management of cognitive tasks such as recalling a personal life event in a structured format, and that higher levels of medication may be related to retrieval style of emotionally related events.

ACKNOWLEDGEMENTS

This research is supported by grants from Ontario Mental Health Foundation (OMHF), Canadian Institute of Health Research (CIHR), and the Brain & Behavior Research Foundation.
INTRODUCTION

- Empathy is an essential part of social behaviour, allowing us to understand others by inferring and sharing their feeling states in reference to ourselves.
- Although preliminary studies point towards alterations in multiple social cognitive domains in posttraumatic stress disorder (PTSD), research focusing on empathic responding and its correlates in this population is limited.
- The present study investigated the relationship between parental bonding and empathic responding.

METHODS

**Study Participants**

1. Females with a primary diagnosis of PTSD due to complex, interpersonal trauma
2. Females with PTSD due to complex, interpersonal trauma
3. Female controls with no history of psychiatric illness

**Materials**

- Interpersonal Reactivity Index (IRI: Davis, 1980)
  - 28-item, self-report questionnaire based on the multi-dimensional model of empathy
  - Four subscales: 1) perspective taking (PT) 2) fantasy (F) 3) personal distress (PD) 4) empathic concern (EC)
- The Toronto Empathy Questionnaire (TEQ: Spreng et al., 2009)
  - 40-item, self-report questionnaire that measures empathic responses, emphasizing the emotional components
- Parental Bonding Instrument (PBI: Parker et al., 1979)
  - 16-item, self-report questionnaire that measures empathic responses, emphasizing the emotional components
- Parental Bonding Style (PBI: Parker et al., 1979)
  - 25-item, self-report questionnaire on parenting styles: i) care and ii) overprotection
- Four subscales: 1) paternal care 2) paternal overprotection 3) maternal care 4) maternal overprotection

**RESULTS**

**Group Differences on Empathy Measures**

- Women with PTSD reported significantly lower levels of perspective taking and empathic concern, and higher levels of personal distress on the IRI, relative to controls. There were no significant group differences between mean scores on the fantasy subscale.

- Compared to controls, women with PTSD reported significantly lower levels of paternal and maternal care during childhood, yet significantly higher levels of paternal and maternal overprotection.

**Group Differences in Parental Bonding**

- Note: High care scores and low overprotection scores represent optimal parental bonding.

**SUMMARY**

- This study is the first to investigate alterations in empathic responding among a sample of women with PTSD following exposure to childhood trauma.
- Women with PTSD reported a reduced ability to identify the cognitive perspectives of others (PT) and reduced feelings of care and concern in response to another’s emotional experience.
- Women with PTSD reported higher levels of personal distress (PD) in response to learning of other’s negative experiences.
- According to responses on the PBI, women with PTSD reported significantly higher levels of maternal and paternal overprotection during their childhood and significantly lower levels of maternal and paternal care, as compared to healthy controls.
- Paternal care mediates the relation between PTSD diagnosis and reduced perspective taking ability.

**REFERENCES**

Emergency over the Atlantic:
Altered Attentional Tuning Following a Single Traumatic Event

Daniel H Lee¹, R M Todd², M C McKinnon²,³, B Levine⁴, & Adam K Anderson¹ ¹Department of Psychology, University of Toronto.

Examining the cognitive effects of trauma is difficult due to issues in controlling real life trauma.

On August 24, 2001, Air Transat Flight 236 ran out of fuel over the Atlantic Ocean, while carrying 336 passengers. The aircraft was forced to make an emergency landing on an island airport, surviving all passengers.

6 years after the flight, we tested these passengers for enduring changes in attentional tuning toward related to the traumatic event.

In contrast, control participants were hypothesized to have no such attentional bias.

Attentional Blink Experiment

Each trial measured rapid perceptual encoding of a target number (T1) and a critical target word (T2) displayed among distractor words. T2 words were displayed after T1 either early or late.

Accuracy of T2 is reduced when shown early after T1 from limited attentional resources ("attentional blink"). (Raymond et al., 1992)

Attentional enhancement of T2 for emotionally arousing words (Anderson, 2003)

Hypothesis

Subject Groups

Passengers

Controls

T2 accuracy

T2 Word Log

Passengers

Controls

Word Ratings

T2 accuracy

T2 Word Log

Passengers

Controls

Word Condition

Passengers

Controls

Conclusion

The passengers of Air Transat 236 all experienced the same singular trauma.

These results show that a single, emotionally traumatic event can result in enduring changes in perceptual experience, by way of an altered attentional tuning to ideas surrounding the event.


Comprehension of Affective Prosody in Women with Posttraumatic Stress Disorder Related to Childhood Abuse

Nazarov A1,3, Frewen P1, Oremus C1,3, Schellenberg G1, McKinnon MC1,3, Lanius R4

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INTRODUCTION

Difficulties in emotion regulation are considered central to the onset and maintenance of PTSD2 and are thought to contribute to the interpersonal dysfunction (e.g., family, friendship) often observed among trauma survivors. Accumulating evidence suggests that emotional competence contributes to psychological and social well-being4, pointing towards social cognition as an important area of investigation.

Recent studies suggest that patients with PTSD display altered performance across several social cognitive domains, including theory of mind5, empathy6, and emotion recognition7. Most studies examining the ability to recognize emotion among patients with psychopathology focus primarily on the ability to recognize emotion only as depicted in facial expressions, with the ability to recognize prosody (emotion conveyed through speech) being largely overlooked.

The primary aim of the present study was to investigate the comprehension of affective prosody in patients with PTSD due to early life adversity. Given that the development of decoding abilities of prosodic comprehension develops over the course of childhood and adolescence8, we predicted that exposure to chronic childhood trauma during this developmentally critical period would disrupt emotion comprehension derived from speech.

METHODS

We employed computer-based behavioral tasks assessing affective prosody recognition and discrimination. Accuracy and reaction time (RT) were recorded. Only correct responses were used for RT analysis. No computer-based behaviour was assessed for prosody.

Prosody Identification Task

Instructed to identify the basic emotion conveyed (happy/sad/angry/afraid) in each speech excerpt. Total of 16 trials (4 per emotion).

Prosody Matching Task

Instructed to identify whether two consecutively played excerpts conveyed the same emotion or different emotions. Total of 24 trials (12 “same” and 12 “different” emotions).

RESULTS

Figure 1. Mean RT for identification of affective prosody between groups (n=24).

In comparison to controls, women with PTSD related to childhood abuse were slower to identify fearful, happy, and sad but not angry prosody.

No group differences in accuracy of prosodic identification.

Increased severity of childhood trauma was associated with longer latencies in identifying affective prosody and decreased sensitivity in discriminating between different emotions in speech.

The presence of dissociative symptoms (identity disconnection and depersonalization) was related to decreased sensitivity in discriminating between different emotions in speech.

CONCLUSIONS

The preservation of a normal reaction to anger in contrast to slowed reactions for other emotions pertain the attentional salience of anger found in facial expression paradigms of childhood maltreatment, suggesting that maltreatment may be related to sensitization rather than to habituation to anger, consecutively allowing individuals to anticipate aversive encounters.

Chronicity of childhood trauma may create further alterations in higher-cognitive networks that contribute to global psychosomatic slowing and attentional deficits, manifesting in slowed reaction times to emotional stimuli.

Individuals presenting with higher dissociation symptoms may have experienced overmodulation of affective processing, in turn decreasing sensitivity to incoming emotional stimuli thus leading to discrimination errors between different emotions.

The strong finding of prosodic alterations found in our sample may afford to developmental changes in prosodic function in response to exposure to childhood trauma and may have implications for the intergenerational transmission of trauma.

REFERENCES


Values are in mean ± standard deviation. Abbreviations: BDI (Beck Depression Inventory); CAPS (Clinician-Administered PTSD Scale); MDI (Multiscale Dissociation Inventory); PTSD (posttraumatic stress disorder); RT (reaction time)
Comprehension of Affective Prosody in Women with Posttraumatic Stress Disorder Related to Childhood Abuse

Nazarov A¹,², Frewen P³, Oremus C¹,², Schellenberg G⁴, McKinnon MC¹,²*, Lanius R³*
¹Department of Psychiatry and Behavioral Neurosciences, McMaster University, Hamilton, Ontario, Canada; ²Mood Disorders Program, St. Joseph’s Healthcare Hamilton, Hamilton, Ontario, Canada; ³Department of Psychiatry, University of Western Ontario, Canada; ⁴Department of Psychology, University of Toronto Mississauga, Mississauga, Ontario, Canada *Shared last authorship

**INTRODUCTION**

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Recent studies suggest that patients with PTSD display altered performance across several social cognitive domains, including theory of mind⁴, empathy⁵, and emotion recognition⁶.

Most studies examining the ability to recognize emotion among patients with psychopathology focus primarily on the ability to recognize emotion only as depicted in facial expressions, with the ability to recognize prosody (emotion conveyed through speech) being largely overlooked.

The primary aim of the present study was to investigate the comprehension of affective prosody in patients with PTSD due to early life adversity. Given that the development of decoding abilities of prosodic comprehension develops over the course of childhood and adolescence⁷, we predicted that exposure to chronic childhood trauma during this developmentally critical period would disrupt emotion comprehension derived from speech.

**RESULTS**

Figure 1. Mean RT for identification of affective prosody between groups (+/-
St.Err.)

- **PTSD**
- **HC**
- **p < .001**

![Graph showing mean reaction time (RT) for affective prosody between PTSD and HC groups](image)

1. In comparison to controls, women with PTSD related to childhood abuse were slower to identify fearful, happy, and sad but not angry prosody.

2. No group differences in accuracy of prosodic identification.

Figure 2. Correlation matrix between childhood trauma scores (on the CTQ) and comprehension of prosody. Shaded area indicates p < 0.05.
Increased severity of childhood trauma was associated with longer latencies in identifying affective prosody and decreased sensitivity in discriminating between different emotions in speech.

The presence of dissociative symptoms (identity dissociation and depersonalization) was related to decreased sensitivity in discriminating between different emotions in speech.

Conclusions

The preservation of a normal reaction to anger in contrast to slowed reactions for other emotions pattern the attentional sensitivity to anger found in facial expression paradigms of childhood maltreatment, suggesting that maltreatment may be related to sensitization rather than to habituation to anger, consecutively allowing individuals to anticipate averse encounters.

Chronicity of childhood trauma may create further alterations in highercognitive networks that contribute to global psychomotor slowing and attentional deficits, manifesting in slowed reaction times to emotional stimuli. Individuals presenting with higher dissociation symptoms may have experienced overmodulation of affective processing, in turn decreasing sensitivity to incoming emotional stimuli thus leading to discrimination errors between different emotions.

The strong finding of prosodic alterations found in our sample may allude to developmental changes in prosodic function in response to exposure to childhood trauma and may have implications for the intergenerational transmission of trauma.

References

Theory of Mind Performance in Individuals with Complex Post-Traumatic Stress Disorder

Nazarov A1,2, McKinnon MC1,3, Frewen P, Parlar M1,4, Gremus C1,4, MacQueen GM1,4, Lanis R5

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INTRODUCTION

Between 25% of people exposed to trauma subsequently develop post-traumatic stress disorder (PTSD), an illness that can have debilitating effects on multiple facets of daily living, including sleep, work or school, and interpersonal relationships. Despite knowledge of alterations in memory and information processing in PTSD, key questions remain unanswered concerning the nature of interpersonal functioning experience in trauma survivors, including the ability to engage in social cognition (understanding and responding to the thoughts and feelings of others) central to successful social responding. Theory of Mind (ToM), the ability to attribute complex mental states to self and others is a central dimension of social cognition and is thought to rely upon the joint contribution of cognitive and affective processing resources. Since individuals with PTSD experience deficits in several cognitive and affective processes, we are interested in investigating whether these alterations extend to ToM performance.

PARTICIPANTS

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Control (n=29)</th>
<th>PTSD (n=31)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>n=20 (10M/10F)</td>
<td>n=31 (16M/15F)</td>
</tr>
<tr>
<td>Age (Mean±SD)</td>
<td>34.5±12.0</td>
<td>32.3±13.0</td>
</tr>
<tr>
<td>Childhood Trauma Questionnaire (Mean±SD)</td>
<td>5.0±1.2</td>
<td>5.1±1.3</td>
</tr>
<tr>
<td>Emotional Abuse (Mean±SD)</td>
<td>5.0±1.2</td>
<td>5.1±1.3</td>
</tr>
</tbody>
</table>

METHODS

Interpersonal Perception Task (IPT-15): A measure of social intelligence consisting of 15 videotaped scenes - 1 to 4 people interacting in each scene - 15 common types of social judgements: knowledge, intimacy, competition, deception, and scrutiny - Each scene is followed by a multiple choice (with an objectively correct answer)

RESULTS

Figure 1. Mean performance on IPT-15 categories (x± ‒ mean)

- Individuals with PTSD showed decrements in the kinship category compared to healthy controls (Figure 1)
- Higher depression symptom severity (BDI) was associated with decreased judgements of intimacy
- Blunted affect (Multiscale Dissociation Inventory) and childhood physical neglect (Childhood Trauma Questionnaire) were associated with lower subjective appraisals of IPT-15 performance

Figure 2. Mean reaction times on RMB (x± ‒ mean)

- No group differences in accuracy of judgements of complex mental states were observed, yet PTSD patients display shorter reaction times on the RMB, potentially due to shorter reaction times on the entire test with poorer task accuracy. Additionally, depression symptom severity was associated with lower accuracy for negatively valenced items on the RMB.

CONCLUSIONS

To date, there have been no previous investigations of ToM performance in patients with PTSD due to complex childhood trauma. We predicted that relative to healthy controls, patients with PTSD would display impaired ToM performance. However, the observed pattern of impairments on ToM tasks was expected to correspond with PTSD symptomatology. The results supported our hypotheses. Results demonstrate that individuals with complex PTSD have selected deficits in ToM, particularly in situations involving family relationships. PTSD patients displayed slower reaction times on the RMB. These results may translate to the development of non-pharmacological treatment interventions for reductions in social cognition performance and social responding among patients with complex PTSD.

REFERENCES

[References listed here]

Figure 1. Mean performance on IPT-15 categories (x± ‒ mean)

Figure 2. Mean reaction times on RMB (x± ‒ mean)
Qualitative research example
Fabric Posters

- Great option, especially for international poster conferences

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