TASIT-R: The Awareness of Social Inference Test Revised

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Pearson Assessment

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Why TASIT Was Developed

- Social skills deficits are common in many clinical groups, e.g. autism, traumatic brain injury, learning disabilities

- Social skills comprise
  - Expression (behaviour)
  - Perception

- There are few tools available that measure perception
What Is Social Perception?

- Social perception is the ability to read selected social cues in order to make judgements about the behaviour, attitudes and emotions of others (McFall, 1982)

- Social cues include
  - Facial expression and tone of voice
  - Gesture and “body language”
  - Contextual information
  - Knowledge of the world
Why Does Social Perception Matter?

- Verbal messages alone are insufficient to convey meaning
- A single utterance e.g. “Thankyou!” may be meant
  - Sincerely to end an encounter
  - As a request for further assistance
  - As a sarcastic insult
- Nonverbal cues determine this meaning
- Failure to read these = Failure of communication
TASIT Comprises Three Parts:

- PART 1: Emotion Evaluation Test
- PART 2: Test of Social Inference - Minimal
- PART 3: Test of Social Inference - Enriched

- Each with parallel forms
EET is an ecologically valid test of emotion recognition.

There are 28 videoed vignettes of professional actors enacting ambiguous scripts representing 7 basic emotions.

These stimuli:
- Are dynamic
- Portray naturalistic, complex expressions
- Provide intonation and gestural cues
PART 1: EET
Response format

- Respondents choose the perceived emotion from the following descriptors:
  - Happy
  - Surprised
  - Sad
  - Angry
  - Anxious
  - Revolted
  - Neutral
PART 1: EET
Normative Data

- 134 normal adults aged 14-60
  - 88 tested on Form A
  - 46 tested on Form B

- Normal speakers achieved high scores on both forms of the EET
  - Form A: 24.9 (Maximum = 28)
  - Form B: 24.2 (Maximum = 28)
Traumatic brain injury is known to impair emotion recognition.

12 adults with severe traumatic brain injury were compared to 12 matched control speakers on the EET.

The TBI group were significantly worse than controls, especially on fear and neutral items.
PART 2: SI-M
Social Inference – Minimal

- SI-M examines understanding of conversational meanings that are determined by paralinguistic cues (facial expression, tone of voice, gesture etc)

- SI-M comprises 15 videoed vignettes of everyday conversational exchanges

- 10 vignettes use neutral scripts such as the following:
PART 2: SI-M
Example of Neutral Script

- **Ruth:** Great movie, wasn’t it?
- **Michael:** Oh yeah, great.
- **Ruth:** I thought it was terrific I was on the edge of my seat.
- **Michael:** Oh me too, on the edge of my seat.
- **Ruth:** Weren’t you surprised by the ending?
- **Michael:** Oh yeah, the ending was a huge surprise.
These scripts are enacted by professional actors to represent either

- Sincere exchanges (5 examples)
- Sarcastic exchanges (5 examples)
In addition there are 5 examples of paradoxical scripts e.g.

- Gary: *Are you sure you’ve got your passport?*
- Keith: (sarcastically) *Oh, yes, I tore it up and threw it away.*
- Gary: *Good, that’s OK then.*

These are nonsensical unless it is recognised that one speakers is sarcastic.
PART 2: SI-M
Comprehension Probes

- Comprehension is assessed via 4 questions for each vignette.
- These cover 4 facets of understanding, i.e. the speakers’
  - Beliefs (what s/he knows)
  - Meaning (what s/he means by what is said)
  - Intentions (what s/he intends to do: to insult, to reassure etc)
  - Feelings (what s/he feels)
PART 2: SI-M
Normative Data

- 171 Normal speakers aged 14-50 took part
  - 98 viewed Form A
  - 73 viewed Form B

- They achieved generally high scores on each form.
  - 54 for Form A (maximum = 60)
  - 53 for Form B (maximum = 60)
PART 2: SI-M Validity Study

- Traumatic Brain Injury rarely causes language disturbances but can impair the ability to understand conversational inference.

- 12 speakers with severe TBI were compared to 12 normal speakers.

- As predicted, the TBI group performed normally on sincere exchanges but were poor on sarcastic exchanges.
PART 2: SI-M
Sincere vs Sarcastic Exchanges

- SINCERE
- SARCASTIC

NBD Speakers
TBI Speakers
PART 3: SI-E
Social Inference – Enriched

- SI-E assesses the ability to use contextual knowledge, i.e. visual and verbal information to derive meaning.

- SI-E comprises 16 videoed vignettes of everyday exchanges.

- In each of these there is a literally untrue comment.
PART 3: SI-E
Literally untrue scripts

These comments: e.g.

- “Yes Cal has finished his dinner!” (when he has not)
- “No of course you don’t look fat” (when he does)

are enacted in one of two ways:

1. As sarcasm meant to amplify the truth
2. As a lie meant to conceal or minimise the truth
PART 3: SI-E

Contextual cues

- SI-E provides two sources of non-verbal cues to determine meaning
  - Paralinguistic features (like Part 2)
  - Contextual cues
    - Visual edit indicating the true state of affairs
      e.g. a view of Cal’s still full dinner plate
    - Prologue that reveals the speaker’s true thoughts
      e.g. Ruth confiding to a third person that Garry has put on weight
PART 3: SI-E Comprehension Probes

- 4 probes are used to assess comprehension of each vignette covering the same facets of understanding as PART 2, i.e. speaker
  - Beliefs
  - Meanings
  - Intentions
  - Feelings
PART 3: SI-E
Normative Study

- 186 normal speakers aged 14-50 took part
  - 123 viewed Form A
  - 63 viewed Form B

- They achieved generally high scores on both forms
  - Form A: 55.6 (maximum of 60)
  - Form B: 55.1 (maximum of 60)
PART 3: SI-E Validity Study

- 12 adults with severe traumatic brain injury were compared to 12 matched control speakers on the SI-E

- The TBI speakers were poorer than normal speakers on sarcasm but not lies
PART 3: SI-E
Sarcasm Versus Lies
Additional studies of TASIT: Reliability and construct validity

- **Reliability** (32-38 adults with TBI)
  - Test-retest reliability ranged from 0.74 to 0.88.
  - Alternate forms reliability ranged from 0.62-0.83.

- **Validity** (up to 116 people with TBI)
  - TASIT was associated with
    - face perception,
    - information processing speed
    - working memory.
  - Socially relevant new learning and executive tasks were significantly associated with TASIT performance
  - Non-social tasks showed little association.
  - Ekman photos and theory of mind stories were also associated.

McDonald, Bornhofen, Shum, Long, Saunders & Neulinger (2006)
Additional Studies using TASIT with TBI

- Poor TASIT performance predicts poor social interaction skills (McDonald et al, 2003)
- Poor emotion recognition (EET) is associated with reduced communicative competence on relative report (Watts & Douglas, 2006)
- A study of 35 people with TBI confirmed problems on TASIT following TBI and examined relations between emotion, mentalising and conversational understanding (McDonald & Flanagan, 2004)
- There are clear differences in the ability to recognise emotion from dynamic and static visual displays as well as voice only (McDonald & Saunders, 2005).
Studies using TASIT with other populations

- TASIT performance is indicative of frontotemporal dementia (Kipps et al, 2009)
- In a large group of people with differing forms of dementia only those with semantic dementia had particular difficulty with sarcasm (Rankin et al, 2009)
- Right hemisphere pathology appears to disrupt performance on TASIT especially (Fournier et al, 2008)
- People with schizophrenia are more impaired than people with FTD (Kosmidos et al, 2008)
Uses of TASIT

- TASIT appears to be sensitive to a range of deficits in social perception
- It can be used to assess social perception
- It can also be used to treat such deficits
Treatment Applications

- Common scripts on Form A and B of TASIT denote contrasting meanings:
  - sad versus angry, etc
  - sarcastic versus sincere
  - lie versus sarcastic

- These can be used to help clients appreciate the importance of contextual cues
The audio channel can be muted or the visual channel obscured to assist clients concentrate on information from one channel alone.
Contact Details

For purchasing:

- Pearson Assessment

Contact Details

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References


