

# Harmony of transitions in Assessing Interpersonal Motivations in Transcripts analysis can discriminate between Adult Attachment Interview secure and disorganized individuals

*Le transizioni armoniche valutate con l'Assessing Interpersonal Motivations in Transcripts sono in grado di discriminare tra individui sicuri e disorganizzati all'Adult Attachment Interview*

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**SUMMARY. Aim.** Assessing Interpersonal Motivations in Transcripts (AIMIT) is a validated coding system to assess the activation of interpersonal motivational systems (IMS) in the transcripts of psychotherapy sessions. The Transition Index (TI) is an AIMIT measure that reflects the levels of organisation, synchronisation and harmony amongst two or more IMS when they are rapidly shifting or simultaneously in the clinical dialogue. It is supposed to be a measure of integration and coherence of the patient's state of mind within the psychotherapeutic sessions. It has also been hypothesized that low TI could be a marker for disorganization of attachment of the patient leading to difficulties in the therapeutic relationships and ruptures in the therapeutic alliance. In order to assess this hypothesis we tested its capability to discriminate between Adult Attachment Interview (AAI) organized and disorganized individuals. **Methods.** Two groups of 15 transcriptions of AAI matched for age and sex, one classified as free-autonomous and one as disorganized, were analysed by the AIMIT method. **Results.** Compared to organized individuals, disorganized patients at AAI reported lower TI scores ( $3.7 \pm 0.63$  vs  $3.0 \pm 0.53$ ;  $F=2.98$ ,  $p=0.005$ ). Furthermore, TI showed a good discriminant capability (Wilks' Lambda=0.77,  $p=0.004$ ). **Discussion and Conclusion.** This result seems to confirm the usefulness and reliability of AIMIT analysis in evaluating the interpersonal difficulties which often characterize the therapeutic relationship with disorganized attachment patients.

**KEY WORDS:** Assessing Interpersonal Motivations in Transcripts, Transition Index, Adult Attachment Interview, disorganized attachment.

**RIASSUNTO. Obiettivo.** L'Assessing Interpersonal Motivations in Transcripts (AIMIT) è un valido sistema di codifica che valuta l'attivazione dei sistemi motivazionali interpersonali (IMS) nel trascritto della seduta psicoterapeutica. Il Transition Index (TI) è una misura dell'AIMIT che riflette il livello di organizzazione, sincronizzazione e armonia tra 2 o più IMS quando questi mutano rapidamente o simultaneamente all'interno del dialogo clinico. Tale indice è ritenuto essere una misura di integrazione e coerenza dello stato della mente del paziente all'interno della seduta terapeutica. È stato anche ipotizzato che un basso TI possa essere un marker della disorganizzazione dell'attaccamento del paziente che conduce a difficoltà nella relazione terapeutica e a una rottura dell'alleanza terapeutica. Al fine di verificare questa ipotesi, abbiamo valutato la capacità del TI di discriminare tra individui organizzati e disorganizzati secondo l'Adult Attachment Interview (AAI). **Metodo.** Due gruppi di 15 trascritti dell'AAI comparabili per età e per sesso, classificati rispettivamente come "sicuri" e "disorganizzati", sono stati analizzati secondo il metodo AIMIT. **Risultati.** Rispetto agli individui organizzati, quelli disorganizzati all'AAI hanno riportato punteggi più bassi nel TI ( $3,7 \pm 0,63$  vs  $3,0 \pm 0,53$ ;  $F=2,98$ ,  $p=0,005$ ). Inoltre, tale indice ha mostrato una buona capacità discriminativa (Wilks' Lambda=0,77,  $p=0,004$ ). **Discussione e conclusione.** Questo risultato sembra confermare l'utilità e l'affidabilità dell'analisi AIMIT nella valutazione delle difficoltà interpersonali che spesso caratterizzano la relazione terapeutica con i pazienti con attaccamento disorganizzato.

**PAROLE CHIAVE:** Assessing Interpersonal Motivations in Transcripts, Transition Index, Adult Attachment Interview, attaccamento disorganizzato.

## INTRODUCTION

The Assessing Interpersonal Motivations in Transcripts (AIMIT) method evaluates the activation of interpersonal motivational systems (IMS) in the transcripts of psychotherapy sessions as well as in any kind of human verbal interaction<sup>1</sup>. According to a multi-motivational approach of human relatedness, which has been developed on the basis of attachment theory<sup>2</sup>, IMS include five basic motivational systems that regulate social interactions in mammals<sup>3</sup>: care seeking and care giving systems for attachment relationships, rank system for the definition of dominance or submission, sexual mating and the cooperative system.

AIMIT method allows the evaluation of the interpersonal styles of both the patient and the therapist as well as their interactions in sessions. It is considered a useful instrument for exploring the relational context, especially in the ruptures and repairs of the therapeutic alliance, where IMS are typically either improper or not synchronized<sup>4</sup>. Previous studies reported that AIMIT has good inter-rater/intra-rater reliability as well as content validity<sup>1</sup>.

The Transition Index (TI) is an AIMIT measure that reflects the levels of organisation, synchronisation and harmony among two or more IMS when they are rapidly shifting or simultaneously active in the speaker's mind. Hence, TI is supposed to be a measure of integration and coherence of the patient's state of mind<sup>1</sup> and a marker for disorganization of attachment of the patient leading to difficulties in the therapeutic relationships and to ruptures in the therapeutic alliance<sup>5</sup>.

It has been observed that another measure of loss of integration and coherence in the context of interpersonal motivational dynamics comes from the 'disorganized' classification of the Adult Attachment Interview (AAI). According to the AAI, individuals classified as 'disorganized' show incoherence in monitoring of reasoning or discourse during discussion of potentially traumatic events or oscillations between opposite and contradictory mental states related to attachment experiences<sup>6</sup>. Moreover, a significant aspect of AAI coding system, coherence of transcript (CT), is based on the violations of the principle of coherent and collaborative discourse<sup>7</sup>.

The aim of this study was to investigate the capability of the AIMIT TI to discriminate between AAI organized and disorganized individuals as well as the correlation between TI and CT.

## METHODS

Thirty transcriptions of AAIs were used: 15 (six men and nine women; mean age=34.80±9.18 years; age range=25-64 years) classified as free-autonomous (F) and 15 (five men and ten women; mean age=33.60±9.12 years; age range=22-52 years) as disorganized [namely, unresolved (U) or cannot classify (CC)]. The interviews were transcribed verbally, and three coders certified as reliable by Main and Hesse used Main et al. coding system<sup>6</sup>. Transcriptions of AAIs for disorganized individual were obtained from 15 patients who were referred to a mental health center in Rome. Transcriptions of AAIs for organized individual were obtained from a control group of healthy subjects (with no psychiatric diagnosis) matched for age and gender. Demographic data and diagnoses of disorganized participants are listed in Table 1.

Inclusion criteria were for inclusion were: both gender, age ≥18 years. Study participants contributed voluntarily and anonymously after providing informed consent. After receiving information about the aims of the study all subjects provided written consent to participate in the study, which was performed according to the Helsinki declaration standards and was approved by the ethics review board of the European University.

All 30 AAIs transcripts selected for this study were than analysed according to Fassone et al.<sup>1,4</sup>. TI were performed according to Pallini and Valcella<sup>5</sup>. It refers to the following: a) the degree of distinctiveness amongst IMS in the dialogue, b) the presence of self-reflective processes regarding one's own interpersonal motivation multiplicity, c) the intentionality of one's own motivational processes and d) the logical and linguistic coherence of the sentence in the dialogue<sup>5</sup>. When two or more IMS were identified in a single AAI answer, a TI score was assigned on a five-point scale, ranging from 0 (extremely disharmonic) to 4 (extremely harmonic). TI scores were assigned by three certified AIMIT coders. AAI and AIMIT coding were carried out in a double-blind procedure by different and independent coders.

Mean values of TI were compared using one-way ANOVA between groups. Mean values of TI were also entered into a single-factor discriminant analysis. Finally, Spearman's *rho* correlation coefficients were reported as measures of associations between CT and TI. All data were analysed with the IBM SPSS Statistical Package version 18.

## RESULTS

Compared to organized individuals, disorganized participants reported lower TI scores ( $3.7 \pm 0.63$  vs  $3.0 \pm 0.5$ ;  $F=2.98$ ,  $p=0.005$ ). Mean values of TI were entered into a single-factor discriminant analysis. Results showed that the harmony of transitions possesses had a significant discriminant capability (Wilks' Lambda=0.77,  $p=0.004$ ), with 66.7% of the organized subjects and 73.3% of the disorganized subjects properly assigned to their groups according to the discriminant function. Finally, TI and CT were significantly associated (Spearman's  $\rho=0.46$ ,  $p=0.010$ ).

## DISCUSSION

Our findings showed that the AIMIT TI is able to discriminate between organized and disorganized AAI, suggesting the usefulness and reliability of AIMIT analysis in evaluating the complexity of motivational dynamics and its potential to study the rapid and chaotic shifts of interpersonal attitudes, which often characterize the therapeutic relationship with disorganized attachment (DA) patients<sup>3</sup>.

Compared to F subjects, individuals classified as disorganized at the AAI showed signs of disorientation and disorganization in the monitoring of reasoning, difficulties in emotion regulation related to activation of attachment system and/or discussions of potentially traumatic events such as loss or abuse<sup>6</sup>. Conversely, it has been hypothesized that activation of DA into the psychotherapy sessions could lead to difficulties in the therapeutic relationship<sup>3</sup>. It has been supposed that transference activation of unconscious memories of DA towards

*AIMIT can discriminate AAI disorganized individuals*

Table 1. Diagnosis and AAI scoring.

| Free-autonomous individuals |     |     |                     |          | Disorganized individuals |     |     |                             |                   |
|-----------------------------|-----|-----|---------------------|----------|--------------------------|-----|-----|-----------------------------|-------------------|
|                             | Age | Sex | DSM-IV-TR diagnosis | AAI      |                          | Age | Sex | DSM-IV-TR diagnosis         | AAI               |
| <b>1</b>                    | 29  | M   | N.a.                | F2       | <b>1</b>                 | 50  | F   | Conversion Disorder, DD NOS | U/E1/E2           |
| <b>2</b>                    | 31  | M   | N.a.                | F2/F5    | <b>2</b>                 | 24  | M   | Conversion Disorder         | U/CC/E1/DS3/F5    |
| <b>3</b>                    | 26  | F   | N.a.                | F2       | <b>3</b>                 | 40  | F   | DD NOS                      | U/CC/DS3/E1       |
| <b>4</b>                    | 32  | F   | N.a.                | F2/F4    | <b>4</b>                 | 31  | F   | DD NOS                      | U/CC/E2/E1/DS2    |
| <b>5</b>                    | 28  | F   | N.a.                | F5/F4/F2 | <b>5</b>                 | 25  | F   | Borderline PD               | U/CC/E1/DS3/E2    |
| <b>6</b>                    | 36  | F   | N.a.                | F4/F2    | <b>6</b>                 | 22  | F   | DD NOS                      | U/CC/E1/E3/E2/DS2 |
| <b>7</b>                    | 25  | F   | N.a.                | F4       | <b>7</b>                 | 52  | M   | Borderline PD               | U/CC/E2/DS2       |
| <b>8</b>                    | 64  | M   | N.a.                | F2/F4    | <b>8</b>                 | 32  | F   | Dependent PD                | CC (U)            |
| <b>9</b>                    | 33  | F   | N.a.                | F3/F4    | <b>9</b>                 | 34  | F   | Dissociative amnesia        | U/CC/E1/E2/DS3    |
| <b>10</b>                   | 33  | F   | N.a.                | F2/F4    | <b>10</b>                | 37  | F   | Schizoid PD                 | CC (U)            |
| <b>11</b>                   | 36  | F   | N.a.                | F2       | <b>11</b>                | 33  | F   | Borderline PD               | U/E2/E1/F4        |
| <b>12</b>                   | 40  | M   | N.a.                | F2/F5    | <b>12</b>                | 41  | M   | Avoidant PD                 | U/F4/F2/F5        |
| <b>13</b>                   | 34  | F   | N.a.                | F3/F4    | <b>13</b>                | 29  | M   | Avoidant PD, DD NOS         | U/E1/E2           |
| <b>14</b>                   | 37  | M   | N.a.                | F3       | <b>14</b>                | 31  | M   | DD NOS                      | U/E1              |
| <b>15</b>                   | 38  | M   | N.a.                | F2       | <b>15</b>                | 23  | F   | Narcissistic PD             | U/DS1             |

*Legenda:*

AAI= Adult Attachment Interview; DDNOS= Dissociative Disorder Not Otherwise Specified; PD= Personality Disorder; F= Free/Autonomous; Ds= Dismissing; E= Preoccupied; U= Unresolved with respect to loss or trauma; CC= Cannot Classify.

the therapist could generate rapid shifts from fear of loss to fear of attachment as well as the related senses of mistrust and powerlessness that usually lead to difficulties in the therapeutic relationship<sup>3</sup>. Indeed, the loss of harmony and coherence of IMS detected by TI could be interpreted as a sign of disorganization of mental state and chaotic interpersonal attitudes induced by DA. The significant correlation between TI and CT would suggest that extremely disharmonic exchanges in IMS, as observed in the therapeutic dialogue with disorganized subjects, are characterized by low coherence.

Regardless of its limitations (i.e. a small number of participants), this study suggests the possible role of the TI as an early marker of difficulties in the therapeutic relationship because, differently from AAI, TI could be measured directly from the transcriptions of the sessions.

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