

CALCULATING DYADIC COMPLEMENTARITY SCORES  
USING THE FOUR OCTANT, BRIEF VERSION OF THE CLOIT-R OR CLOPT-R

Donald J. Kiesler, James A. Schmidt & Christopher C. Wagner  
Virginia Commonwealth University  
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I. CALCULATING AXIS SCORES USING THE FOUR OCTANT BRIEF VERSION OF CLOIT-R

(1) The 16 scale version of the CLOIT-R/CLOPT-R measures 8 octants using two scales to measure each octant as follows: DOM (Assured + Dominant), HOSTILE-DOMINANT (Competitive + Mistrusting), HOSTILE (Cold + Hostile), HOSTILE-SUBMISSIVE (Detached + Inhibited), SUBMISSIVE (Unassured + Submissive), FRIENDLY-SUBMISSIVE (Deferent + Trusting), FRIENDLY (Warm + Friendly), FRIENDLY-DOMINANT (Sociable + Exhibitionistic). Each of the 16 scales is measured with 6 items; each octant thus is measured with 12 items – a total of 96 items.

(2) The 48-item Brief Version of CLOIT-R/CLOPT-R measures the 4 octants that anchor the two axes (Control, Affiliation) of the interpersonal circumplex. The four octants (each measured by 12 items – 2 scales of 6 items each) are:

**DOM** (Dominant) = ASS + DOM

**FRI** (Friendly) = WAR + FRI

**SUB** (Submissive) = UNA + SUB

**HOS** (Hostile) = COL = HOS

(3) A different set of “Axis Formulas” (different from those used when all 8 octant scores are available) are used with the 4-Octant Brief Version CLOIT-R/CLOPT-R:

**CON** (CONTROL) = DOM - SUB

**AFF** (AFFILIATION) = FRI - HOS

(4) These CON (Control) and AFF (Affiliation) axis scores are then entered directly into the formulas used to calculate complementarity as described below.

## II. FORMULAS FOR CALCULATING COMPLEMENTARITY BETWEEN INTERACTANTS' INTERPERSONAL BEHAVIOR (C.C. WAGNER, 2001)

(1) An analysis of the degree of complementarity present between two interactants' sets of CLOIT-R scores (between their CLOIT-R profiles) is extremely important for tests of interpersonal theory and for general analysis of patterns present between a pair of interactants' interpersonal behavior.

(2) We have found to be especially useful analyses of complementarity that use each of the interactant's Axis scores (Control, Affiliation) as well as their combined Axis scores (Control + Affiliation). The formulas below use Absolute scores ("ABS"). Subscripts "1" and "2" refer to the IMI scores from each of the two interactants. Subscripts "C" and "A" refer to "control" and "affiliation."

$$\begin{aligned}\mathbf{ABS}_C &= \text{ABS} (\text{CON}_1 + \text{CON}_2) \\ &= \text{ABS} [(\text{DOM}_1 - \text{SUB}_1) + (\text{DOM}_2 - \text{SUB}_2)]\end{aligned}$$

$$\begin{aligned}\mathbf{ABS}_A &= \text{ABS} (\text{AFF}_1 - \text{AFF}_2) \\ &= \text{ABS} [(\text{FRI}_1 - \text{HOS}_1) - (\text{FRI}_2 - \text{HOS}_2)]\end{aligned}$$

(3) These absolute scores are then inserted into the formulas below to obtain the three complementarity scores : "reciprocity" complementarity on the Control axis, "correspondence" complementarity on the Affiliation axis, and "total" complementarity for all the interpersonal behavior categorized on the full interpersonal circle (control and affiliation).

$$\begin{aligned}\mathbf{COMP}_C &= \text{ABS}_C \\ &= \text{ABS} (\text{CON}_1 + \text{CON}_2)\end{aligned}$$

$$\begin{aligned}\mathbf{COMP}_A &= \text{ABS}_A \\ &= \text{ABS} (\text{AFF}_1 - \text{AFF}_2)\end{aligned}$$

$$\begin{aligned}\mathbf{COMP}_{\text{TOT}} &= \text{ABS}_C + \text{ABS}_A \\ &= \text{ABS} (\text{CON}_1 + \text{CON}_2) + \text{ABS} (\text{AFF}_1 - \text{AFF}_2)\end{aligned}$$

(4) In each case, the score obtained characterizes "**deviation from complementarity**": that is, the higher the score, the less the complementarity present among the pair of interactants; the lower the score, the more the complementarity present among the pair of interactants. For example, the possible obtainable range of total complementarity scores is "0" (perfect complementarity) to "12" (maximum non-complementarity).

(5) Comparison of the two separate axis complementarity scores ( $\text{COMP}_C$  and  $\text{COMP}_A$ ) – "reciprocity" in control, "correspondence" in affiliation – helps the investigator determine which of the circle axes is contributing more to the level of total complementarity ( $\text{COMP}_{\text{tot}}$ ) obtained. In some cases, complementarity may be found primarily for only one of the axes, but not for the other axis or for total complementarity. Some previous complementarity studies (e.g. in psychotherapy) have shown that it is crucial to examine the axes separately to tease out the (e.g. client-therapist) patterns that are present.