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# Client and Therapist Interpersonal Behaviour in Cognitive Therapy for Depression
# Comportement interpersonnel du client et du thérapeute dans le cadre de la thérapie cognitive de la dépression

Katherine Thompson
Deborah Schwartzman
Debora D'Iuso
*McGill University*
Keith S. Dobson
*University of Calgary*
Martin Drapeau
*McGill University*

ABSTRACT

Individuals with depression can be interpersonally submissive, avoidant, unassertive, and aggressively hostile, characteristics that contribute to strained relationships with significant others. Although therapists' ability to implement effective interventions while maintaining dyadic cohesion is integral to treatment outcome, those working with depressed clients may face particular challenges related to the interpersonal style prevalent in this clinical population. This study examined the interpersonal behaviour of clients and therapists in cognitive therapy for depression using Structural Analysis of Social Behavior (SASB; Benjamin, 1974). Therapist interpersonal behaviour differed significantly across time and clinicians. As well, client hostility in early sessions was associated with treatment outcome. Post-hoc analyses suggest that client hostility was correlated with both compliance and assertion.

RÉSUMÉ

Dans leurs relations interpersonnelles, les personnes dépressives peuvent se montrer soumises, évitantes, incapables de s'affirmer et animées d'une hostilité agressive, toutes ces caractéristiques contribuant à compromettre leurs relations avec des tiers intéressants. Bien que l'aptitude du thérapeute à mettre en œuvre des interventions efficaces tout en maintenant la cohésion dyadique constitue un facteur inhérent au résultat du traitement, les personnes qui travaillent auprès de clients dépressifs peuvent affronter des difficultés particulières attribuables au style interpersonnel qui prévaut au sein de cette population clinique. La présente étude a consisté à analyser le comportement interpersonnel des clients et des thérapeutes dans le cadre d'une thérapie cognitive de la dépression au moyen de l'analyse structurale du comportement social (SASB; Benjamin, 1974). Le comportement interpersonnel du thérapeute a comporté de grandes différences en fonction du temps et du clinicien ou de la clinicienne en cause. De même, l'hostilité du client ou de la cliente au cours des premières séances était associée au résultat du traitement. Les analyses ultérieures semblent indiquer que l'hostilité du client ou de la cliente est à la fois fonction de l'acquiescement et de l'affirmation de soi.

Cognitive therapy (CT) has received substantial empirical support for the treatment of major depressive disorder (MDD; Butler, Chapman, Forman, & Beck, 2006), yet there is evidence to suggest that it is not uniformly beneficial for depressed patients (Beutler, Castonguay, & Follette, 2006; Hardy et al., 2001; Keijsers, Schaap, & Hoogduin, 2000). As a result, a greater emphasis has increasingly been placed on identifying variables that influence the effectiveness of cognitive and other treatments for MDD (Grosse Holtforth et al., 2013; McCullough, 2010; Saatsi, Hardy, & Cahill, 2007). In particular, interpersonal variables have been linked to the etiology, severity, and recurrence of depression, as well as to depressed patients' ability to forge productive therapeutic relationships and experience symptom relief through CT and other forms of therapy (Hardy et al., 2001; McEvoy, Burgess, & Nathan, 2013; Renner et al., 2012).

Research also indicates that therapists' interpersonal style, as well as their use of specific interpersonal strategies, can influence the process and outcome of therapy for depression (Beutler et al., 2006; Keijsers et al., 2000). These studies have examined a variety of therapeutic modalities and have demonstrated that clients who are open, friendly, and forthcoming in their communication experience better outcomes, and that interpersonal hostility typically has a deleterious effect on treatment (Critchfield, Henry, Castonguay, & Borkovec, 2007; Henry, Schacht, & Strupp, 1986, 1990; Tasca & McMullen, 1992; von der Lippe, Monsen, Rønnestad, & Eilertsen, 2008). Interestingly, the prevalence of hostility seems to vary across treatment modalities and is generally less frequent in CT dyads (Ahmed, Westra, & Constantino, 2012; Critchfield et al., 2007). For example, in one study of cognitive-behavioural therapy, Critchfield and colleagues (2007) reported rates of hostility among their poor outcome dyads ranging from 4% to 8%. By contrast, in studies of psychodynamic therapy, means for hostile behaviour have ranged from 9% to 13% for clients and 13% to 16% for therapists among poor outcomes pairs (Coady, 1991; Henry et al., 1986, 1990). Nonetheless, despite fewer instances of hostility in CT, it remained negatively related to treatment benefit (Ahmed et al., 2012; Critchfield et al., 2007). Thus, its deleterious effect appears to persist across modalities. It is possible that variations in the observed levels of interpersonal hostility reflect a divergence in the tempo, tasks, and goals of different treatment approaches. However, it is also possible that interpersonal animosity is manifested differently in CT (Ahmed et al., 2012; Critchfield et al., 2007; Safran et al., 2014).

There is a considerable body of evidence indicating that most clinicians struggle to identify and effectively resolve hostile interpersonal situations in therapy (Binder & Strupp, 1997; Hill, Thompson, & Corbett, 1992). In particular, many therapists respond with dominance and directiveness to covertly hostile client behaviour such as avoidance or submission (Binder & Strupp, 1997; Safran, Crocker, McMain, & Murray, 1990; Safran & Muran, 1995). For example, Castonguay, Goldfried, Wiser, Raue and Hayes (1996) observed that when clients expressed reluctance about the tasks of therapy, clinicians responded by adhering more strongly to their treatment protocols. More recently, Anderson, Knobloch-

Fedders, Stiles, Ordoñez, and Heckman (2012) identified a "*telling* rather than *listening*" pattern (p. 356), whereby therapists in moderate hostility cases adopted an expert stance while simultaneously ignoring or neglecting important aspects of the clients' narrative. Put differently, these findings suggest that therapy suffers when clinicians take a dogmatic approach (Ackerman & Hilsenroth, 2001; Binder & Strupp, 1997). Treatment benefits may also be mitigated when clients are more withdrawn, compliant, or even assertive (Coady, 1991; Henry et al., 1986, 1990; Wong & Pos, 2014).

One possible explanation for these patterns is that clinicians rely more strongly on techniques and interventions when they sense an adverse change in the interpersonal process (Anderson et al., 2012; Castonguay et al., 1996; Henry, Strupp, Butler, Schacht, & Binder, 1993; von der Lippe et al., 2008). Alternatively, or concomitantly, clients may yield to therapists to mask their discomfort or disagreement (Aspland, Llewelyn, Hardy, Barkham, & Stiles, 2008; Safran & Muran, 1996), or to avoid damaging the therapeutic relationship, jeopardizing treatment, or being perceived as difficult (Strong, Sutherland, & Ness, 2011). Patients with depression may be especially prone to compliance because they tend to be less assertive and more avoidant than normative groups (Barrett & Barber, 2007; Constantino et al., 2008). Consequently, therapists working with depressed clients may be miscued as to client engagement with treatment tasks, and with therapy as a whole.

Other studies have also shown that clinicians who rely on affirming behaviours and express understanding of their clients generally promote better outcomes (Ackerman & Hilsenroth, 2003; Anderson et al., 2012; Norcross & Wampold, 2011). Yet, Karpiak and Benjamin (2004) determined that, in some cases, affirmation can be detrimental to treatment outcome. These authors found that when cognitive therapists used validation in response to clients' maladaptive statements, clients continued to report on maladaptive themes. This sequence of interactions reduced the likelihood of clients' experiencing clinically significant change at both termination and 12 months after the end of treatment (Karpiak & Benjamin, 2004). Furthermore, evidence suggests that patients' interpersonal characteristics can influence their ability to benefit maximally from treatment (Hardy et al., 2001; Renner et al., 2012).

Although CT is a prominent modality in treating depression (Hunsley, Elliott, & Therrien, 2014; Parikh et al., 2009), few studies have investigated the interpersonal process of treatment dyads within this specific modality. Because CT is a structured, didactic, and problem-oriented approach (Watzke, Rueddel, Koch, Rudolph, & Schulz, 2008), it may be inherently more difficult for some clients, especially those with depression, to voice their hesitation about treatment, or to disclose their discomfort. The risk of depressed clients complying with therapists' dominant stance may also be particularly elevated. Further inquiry is needed to understand the interpersonal process of CT for MDD and its effect on the outcome. Such research can provide additional information about how it is effective in treating depression.

## METHOD

### *Participants*

The data for this project were collected for a landmark component study of cognitive-behavioural therapy for depression (see Jacobson et al., 1996, 2000). Participants were diagnosed with MDD as per the Structured Clinical Interview for DSM-III-R (SCID)[1] (Spitzer, Williams, & Gibbon, 1987); each participant scored at least 20 on the Beck Depression Inventory (BDI; Beck, Rush, Shaw, & Emery, 1979) and at least 14 on the 17-item Hamilton Rating Scale for Depression (HRSD; Hamilton, 1967). Both the SCID and HRSD were administered by trained clinical psychology graduate students and supervised by an experienced evaluator. Individuals were excluded from the study for the following reasons: (a) concurrent diagnoses of panic disorder, bipolar, or psychotic subtypes of depression; (b) alcohol or other substance abuse; (c) past or present schizophrenia or schizophreniform disorder; and (d) organic brain syndrome or mental retardation. Likewise, patients already receiving psychotherapy or pharmacotherapy, as well as those requiring hospitalization due to psychosis or imminent suicide risk, were also excluded from the sample (Jacobson et al., 1996, 2000).

Participants were randomly assigned to one of three treatment groups with weekly sessions: CT, Behavioural Activation (BA), or Automatic Thoughts (AT). Participants in the CT condition received the complete cognitive treatment package as described by Beck and colleagues (1979); the other two arms consisted of treatments derived from key components of the cognitive model (Jacobson et al., 1996, 2000). Therapist competence was assessed, and therapist adherence to treatment was monitored throughout treatment delivery and found to be adequate. Details about the original study can be found in Jacobson et al. (1996, 2000).

The CT arm was chosen for the present study to more closely approximate cognitively oriented therapy in clinical practice. Second and third sessions were selected as a baseline time point to examine interpersonal patterns at the beginning of treatment and because cognitive restructuring exercises are infrequently started before the fourth session (Beck & Alford, 2009; Beck et al., 1979). Sampling from Session 3 is also consistent with previous psychotherapy research studies (Henry et al., 1986; Hilliard, Henry, & Strupp, 2000; von der Lippe et al., 2008). Participants were provided with up to 20 sessions of treatment; most completed between 18 and 20 sessions, and three attended between 11 and 15 sessions. When possible, penultimate sessions were used to gather information about dyadic behaviour at the end of treatment. Depending on the clarity and availability of the recordings, such as when patients did not complete the full course of treatment, penultimate-adjacent sessions were selected for analysis.

Participants in the current study ($N$ = 44) were predominantly female ($n$ = 34; 77.30%) with a mean age of 38.91 years ($SD$ = 8.88). Most were Caucasian (77.27%), while the others were Native American (6.81%), African American (4.54%), and Asian (2.27%).[2] Before beginning the study, patient mean scores on

the BDI and HRSD were 29.86 (*SD* = 6.37) and 18.99 (*SD* = 4.25), respectively, indicating moderate to severe depression (Beck, Steer, & Garbin, 1988).

*Therapists*. The four clinicians (2 male, 2 female) ranged in age from 37 to 49 years and were experienced in the provision of psychotherapy. They had substantial postdegree clinical experience (*M* = 14.8; range 7–20 years), including an average of 9.5 years of experience specific to CT (range 8–12 years). Treatment integrity was maintained through monthly meetings between the therapists and the two primary authors of the original study (N. Jacobson & K. Dobson), in which ambiguities in the protocol and questions about its application in past and future sessions were resolved (Jacobson et al., 1996, 2000).

*Measures*

*Beck Depression Inventory* (BDI; Beck et al., 1979). The BDI measures the severity of specific symptoms and attitudes associated with depression; it has excellent psychometric properties, and it is widely used (Beck et al., 1988; Yin & Fan, 2000). Participants in the present study completed the BDI before the commencement of therapy and after its completion (Jacobson et al., 1996, 2000).

*Hamilton Rating Scale for Depression* (HRSD; Hamilton, 1967). Clinical evaluators administered the 17-item version of the HRSD before and after treatment (Jacobson et al., 1996, 2000). This widely used instrument provides an index of the severity of patients' somatic, vegetative, and cognitive depressive symptoms and has robust psychometric properties (Bagby, Ryder, Schuller, & Marshall, 2004; López-Pina, Sánchez-Meca, & Rosa-Alcázar, 2009; Santor & Coyne, 2001).

*Composite Scores for Depression*. Because the BDI and HRSD have been shown to measure different but related constellations of symptoms, a composite measure of depression was derived using a procedure described by Blatt, Zuroff, and colleagues (Blatt, Zuroff, Quinlan, & Pilkonis, 1996; Zuroff & Blatt, 2006). Using a composite measure of depression increased the reliability and sensitivity of the results and reduced the likelihood of obtaining spurious findings (Streiner & Norman, 2011; Zuroff & Blatt, 2006). First, pre-and post-treatment *z* scores were calculated using the pooled means and standard deviation for BDI: parallel calculations were carried out with the HRSD scores. Next, intake and outcome depression scores were calculated by taking the average of the pre- and post-treatment *z* scores, respectively. Finally, residual change scores for the BDI and HRSD were calculated by regressing the standardized post-treatment BDI and HRSD scores onto their respective pre-treatment *z* scores (Blatt et al., 1996; Zuroff & Blatt, 2006). A principal components analysis of these residual change scores revealed that a single factor with an eigenvalue of 1.67 accounted for 83.52% of the variance in predicting symptom improvement. Therefore, the composite measure was retained.

*Structural Analysis of Social Behavior* (SASB; Benjamin, 1974, 1987, 1996). Client and therapist interpersonal behaviour were measured using SASB, a widely used and robust observer-rated instrument with good psychometric properties (Benjamin, 1994; Benjamin, Rothweiler, & Critchfield, 2006). Briefly, SASB is a

circumplex model that describes all interpersonal behaviour in terms of its inherent friendliness and autonomy. This system can be used to identify individuals' interpersonal profiles and traits as well as to perform a fine-grained analysis of the therapeutic process (Benjamin et al., 2006; Constantino, 2000; Henry, 1996). It consists of three surfaces[3]: (1) **Focus on Other** describes interpersonal behaviour directed toward a real or imagined other. Clusters on this "parent-like" plane describe actions done to, for, or about another person (e.g., **Affirm**, **Protect**, **Blame**, **Ignore**); (2) Focus on Self is prototypically "child-like"; clusters on this surface describe how an individual reacts or responds to someone else (e.g., Disclose, Trust, Sulk, Wall-Off); and (3) *Introject Focus* describes self-directed behaviour.[4] As illustrated in Figure 1, each surface is centred upon the interpersonal axes of Affiliation (x-axis) and Autonomy (y-axis) (Benjamin, 1987, 1996). In the typical therapy setting, therapists predominantly use other-focused interpersonal behaviour (**Surface 1**), whereas client communication is focused primarily on the self (Surface 2).

Prior to coding, transcripts were segmented into *thought units*, which are brief portions of text that communicate a complete thought that usually consist of a subject, an object, and a verb (Benjamin & Cushing, 2000). Coders begin by identifying the participants in a given interaction; then they determine the focus of communication and the degree to which it was affiliative and autonomous. Raters then assign a two-digit code to each thought unit and verify that it accurately reflects the interpersonal quality of the interaction.

The first digit of SASB cluster codes indicates the focus of the behaviour (1 = **Other**; 2 = Self). The second digit (numbered 1 to 8) represents the location of the behaviour around the circumplex based on the specific combination of affiliation and autonomy. Codes with the same second digit fall in parallel regions of the interpersonal circumplex. To illustrate, a 6 in the second digit of the code represents a moderately negative position regarding both autonomy and affiliation. Thus, when the Focus is on **Other**, an individual acts in a somewhat controlling and moderately hostile manner by **Blaming (1-6 Blame)**. However, when the Focus is on the Self, an individual reacts with moderate submission and moderate hostility by Sulking (2-6 Sulk). The SASB method can be used to describe both process and content of therapy sessions. The present study is focused on the here and now interpersonal processes of clients and therapists in CT for MDD.

Using verbatim transcripts of therapy sessions from the CT arm of the Jacobson study (Jacobson et al., 1996, 2000), four trained graduate students and one doctoral-level clinical supervisor coded the interpersonal behaviour of clients and therapists at the beginning and end of treatment. Trainees spent approximately five months learning SASB, using materials purchased from the developer of the method as well as transcripts unrelated to this study (Benjamin & Cushing, 2000). Their practice codes were compared to those provided by an expert rater. Interrater reliability was established using Cohen's weighted kappa (1968), a conservative measure of unit-by-unit agreement. Trainees rated study transcripts after meeting an established reliability criterion (Cohen's weighted kappa ≥ .60). Once reliable,

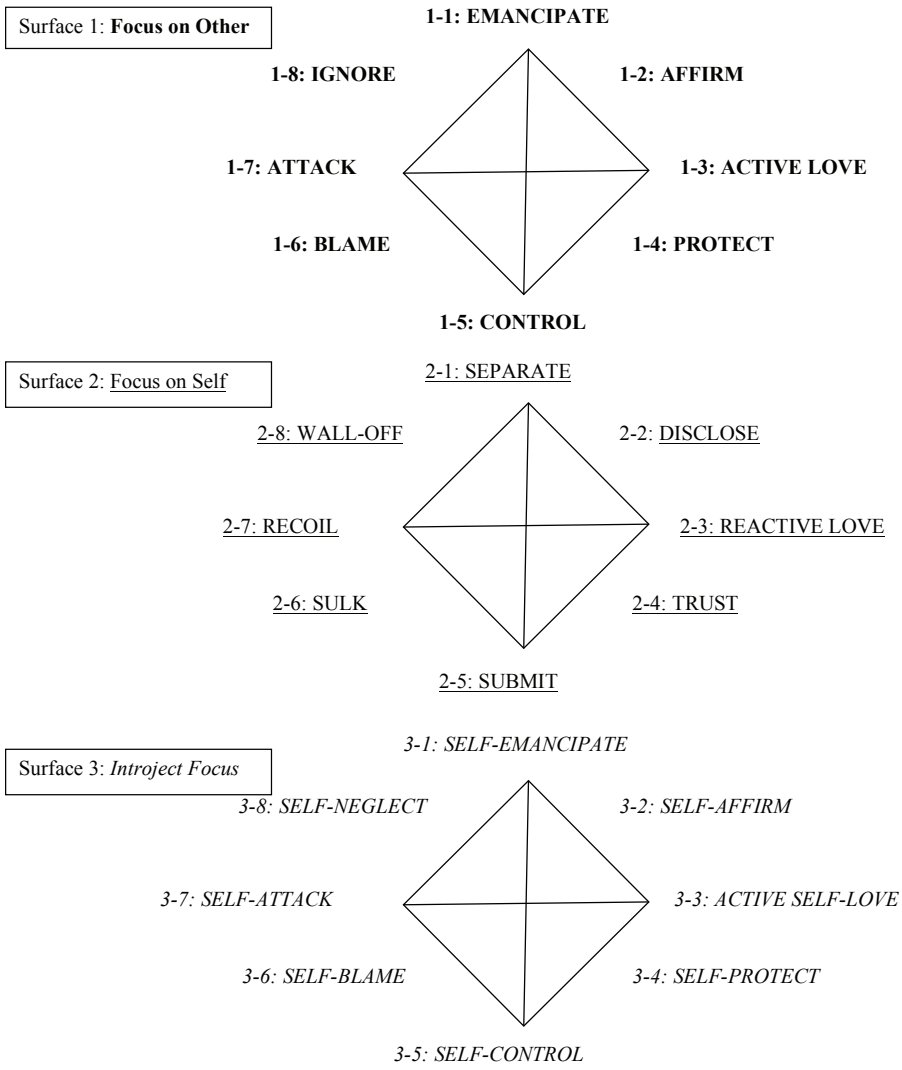


*Figure 1*. Structural Analysis of Social Behavior (SASB; Benjamin, 1974). This figure is the two-word version of SASB that appeared in Benjamin (1987), using single words from the one-word version in Benjamin (1996/2003) instead of the two words in Benjamin (1987). In all versions of SASB, the 3 surfaces represent 3 types of focus (other, self, introject). Within each focus, vertical axes describe interdependence; and horizontal axes describe affiliation. Copyrights for both of these versions are held by the Guilford Press. Benjamin, L.S. (1987). Use of the SASB Dimensional Model to Develop Treatment Plans for Personality Disorders. I: Narcissism. *Journal of Personality Disorders, 1*(1), 43–70: and Benjamin, L.S. (1996/2003). *Interpersonal diagnosis and treatment of personality disorders* (2nd ed.). New York: The Guilford Press. Reprinted with permission of The Guilford Press.

coders rated transcripts individually and participated in consensus meetings to maintain reliability and prevent rater drift. Approximately 20% of the transcripts were analyzed in consensus meetings wherein two coders compared their ratings and discussed discrepancies.

Due to the intensive and detailed nature of the coding process, Benjamin and Cushing (2000) suggested that coding a small sample of interactions, minimally 10 minutes in length, provides a representative sample of interpersonal behaviour. Consistent with procedures implemented by other scholars (Henry et al., 1986; Hilliard et al., 2000), the middle third of each transcript, representing approximately 15 to 20 minutes of therapy, was coded. By sampling from the middle of therapy sessions, we increased the likelihood of observing clinical discourse, rather than coding administrative and housekeeping tasks that typically occur at the beginning and end of sessions.

Previous studies have used SASB to identify interpersonal variables that promote and inhibit treatment benefit (e.g., Critchfield et al., 2007; Henry et al., 1986, 1990; Karpiak & Benjamin, 2004). However, few studies have directly examined these variables in CT using SASB. Additionally, although depressed patients may have interpersonal qualities that interfere with their ability to work effectively with their clinician (Hardy et al., 2001; McEvoy et al., 2013; Renner et al., 2012), there is little research documenting the moment-by-moment interpersonal process of treatment among depressed patients using SASB. Hence, the primary purpose of the current study was to describe the interpersonal behaviour of clients and therapists in CT for depression. The analyses (see below) used in this study illustrate client and therapist communication strategies at the beginning and end of treatment. A second set of exploratory analyses aimed to determine whether client interpersonal behaviour at the beginning of therapy was related to treatment outcome.

Consistent with previous SASB research, clients and therapists were expected to use friendly interpersonal mechanisms most frequently (Ahmed et al., 2012; Critchfield et al., 2007; von der Lippe et al., 2008). Specifically, clients were expected to use clusters 2-2 Disclose and 2-4 Trust most often; therapists were expected to use **1-2 Affirm** and **1-4 Protect** most often. Given that the format of manualized CT involves teaching clients about the cognitive model of depression (Beck et al., 1979), therapists were expected to use more friendly influence (**1-4 Protect)** at the beginning of treatment when clients were unfamiliar with the approach. Likewise, clients were expected to use trusting and relying (2-4 Trust) mechanisms more often in early sessions than in late ones. As therapists in this study followed a treatment manual and were experienced in the provision of CT, we anticipated that therapist interpersonal behaviour would be relatively consistent across clinicians and between patients (Critchfield et al., 2007). Finally, the frequency of hostile behaviour was expected to be lower than rates observed in studies of dynamically-oriented treatments and similar to those observed in other studies of CT (Ahmed et al., 2012; Critchfield et al., 2007). Clients were expected to use hostile behaviour more frequently than therapists (Tasca & McMullen, 1992; von der Lippe et al., 2008), and hostility, even in

small amounts, was expected to be negatively related to the alleviation of depressive symptoms (Critchfield et al., 2007; von der Lippe et al., 2008).

## RESULTS

### *Preliminary Analyses*

The average level of agreement between the raters for SASB cluster codes was acceptable ($M_{Kw}$ = .67) and comparable to kappa values reported in past research (range .52–.91) (Benjamin, 1994; Critchfield et al., 2007; Greenberg, Ford, Alden, & Johnson, 1993; Henry et al., 1986, 1990; Henry et al., 1993; Hilliard et al., 2000). To account for differences in client volubility within and between sessions, the frequency of each SASB cluster code was counted and then divided by the number of client thought units in that session. The relative frequencies of therapist SASB cluster codes were computed in the same manner. The resulting values represent the proportion of each cluster, relative to the entirety of the speaker's codes in a given session. As per previous studies, the cluster codes are considered discrete but dimensionally related variables (Critchfield et al., 2007). Because the Shapiro-Wilk test for normality indicated that most SASB cluster variables were not normally distributed, nonparametric tests were used in the initial analyses.

As demonstrated in Table 1, several codes were present in less than one quarter of therapy transcripts and most were omitted from individual analysis. SASB clusters representing hostility were observed in less than one quarter of the cases. Nevertheless, because previous studies have evidenced the deleterious effect of hostility on treatment outcome (Ahmed et al., 2012; Critchfield et al., 2007), we collapsed these codes into an index of hostility. Client and therapist hostility scores were calculated for early and late sessions by tallying the per-session frequencies of the six hostility clusters (**1-6 Blame**, **1-7 Attack**, **1-8 Ignore**, 2-6 Sulk, 2-7 Recoil, and 2-8 Wall-Off), then dividing the sum by the total thought units for each speaker (i.e., client and therapist) in that session. As anticipated, clients used hostility relatively rarely in both early ($M$ = .013; $SD$ = .023) and late sessions ($M$ = .019; $SD$ = .041). The same was true of therapists in early ($M$ = .007; $SD$ = .023) and late sessions ($M$ = .010; $SD$ = .024). Although there were no significant differences in the level of hostility across time points, we found trends suggesting that clients used more hostility than did therapists in both early ($Z$ = -1.838, $p$ = .066) and late sessions ($Z$ = -1.762, $p$ = .078).

### *Client Interpersonal Behaviour*

Table 1 also illustrates the mean percentages and standard deviations for each SASB cluster code. As demonstrated, clients generally communicated using affiliative codes on the self-focused surface (Surface 2). They used friendly autonomous strategies (2-2 Disclose) most often; as well as friendly submissive (2-4 Trust), assertive (2-1 Separate) and submissive (2-5 Submit) behaviours. A Wilcoxon Signed Rank Test determined whether client interpersonal behaviour in early ses-

sions differed from their behaviour in late sessions. Despite a trend suggesting a decrease in client-friendly submission (2-4 Trust; $Z = -1.56$, $p = .118$), there were no significant differences in client interpersonal behaviour across time.

*Therapist Interpersonal Behaviour*

Therapists (see Table 1) generally used mechanisms of friendly control (**1-4 Protect**) and friendly autonomy granting (**1-2 Affirm**); less often, they used direc-

Table 1
*Base Rates, Mean Percents, and Standard Deviations of Client and Therapist SASB Cluster Codes*

| | Client | | | | Therapist | | | |
|---|---|---|---|---|---|---|---|---|
| | Early Session | | Late Session | | Early Session | | Late Session | |
| | BR | *M (SD)* | BR | *M (SD)* | BR | *M (SD)* | BR | *M (SD)* |
| **Focus on Other** | | | | | | | | |
| **1-1 Emancipate**[a] | 0 | 0.00 (0.00) | 0 | 0.00 (0.00) | 11 | 0.82 (1.99) | 14 | 0.88 (1.57) |
| **1-2 Affirm** | 16 | 0.73 (1.17) | 21 | 1.00 (1.50) | 44 | 42.69 (20.80) | 44 | 45.52 (22.53) |
| **1-3 Active Love**[c] | 1 | 0.04 (0.24) | 0 | 0.00 (0.00) | 1 | 0.04 (0.24) | 2 | 0.11 (0.56) |
| **1-4 Protect**[a] | 9 | 0.39 (0.96) | 1 | 0.02 (0.12) | 44 | 49.94 (21.09) | 44 | 41.58 (22.12) |
| **1-5 Control**[a] | 2 | 0.10 (0.54) | 13 | 0.40 (0.71) | 35 | 6.29 (7.33) | 40 | 13.49 (12.03) |
| **1-6 Blame** | 1 | 0.03 (0.18) | 0 | 0.00 (0.00) | 2 | 0.24 (1.12) | 5 | 0.50 (1.87) |
| **1-7 Attack** | 0 | 0.00 (0.00) | 0 | 0.00 (0.00) | 0 | 0.00 (0.00) | 0 | 0.00 (0.00) |
| **1-8 Ignore** | 1 | 0.08 (0.51) | 2 | 0.19 (0.92) | 8 | 0.42 (1.22) | 5 | 0.43 (1.44) |
| Focus on Self | | | | | | | | |
| 2-1 Separate[b] | 34 | 3.50 (4.23) | 35 | 4.20 (5.18) | 4 | 0.17 (0.57) | 6 | 0.33 (0.95) |
| 2-2 Disclose | 44 | 81.17 (13.17) | 44 | 81.48 (12.77) | 37 | 3.72 (4.47) | 37 | 4.99 (4.90) |
| 2-3 Reactive Love[c] | 6 | 0.15 (0.40) | 7 | 0.18 (0.44) | 2 | 0.14 (0.63) | 1 | 0.02 (0.16) |
| 2-4 Trust[b] | 41 | 12.11 (9.99) | 44 | 10.54 (10.91) | 5 | 0.12 (0.35) | 4 | 0.08 (0.26) |
| 2-5 Submit[b] | 20 | 1.67 (2.96) | 31 | 1.54 (1.63) | 4 | 0.10 (0.33) | 9 | 0.46 (1.01) |
| 2-6 Sulk | 10 | 0.65 (1.61) | 13 | 1.01 (2.89) | 1 | 0.04 (0.27) | 0 | 0.00 (0.00) |
| 2-7 Recoil | 1 | 0.02 (0.13) | 1 | 0.06 (0.38) | 0 | 0.00 (0.00) | 0 | 0.00 (0.00) |
| 2-8 Wall Off | 10 | 0.52 (1.41) | 14 | 0.61 (1.30) | 1 | 0.03 (0.18) | 1 | 0.08 (0.54) |

*Note.* BR = base rate indicating the number of sessions ($N = 44$) in which each cluster was observed
[a]Excluded from client analyses
[b]Excluded from therapist analyses
[c]Excluded from both client and therapist analyses

tive strategies (**1-5 Control**) and self-disclosure (2-2 Disclose). Wilcoxon Signed Rank tests determined whether therapist interpersonal behaviour changed over time. Relative to their behaviour early in treatment, therapists used less friendly influence (**1-4 Protect**; $Z$ = -2.28, $p$ = .023) and more neutral control (**1-5 Control**; $Z$ = -2.91, $p$ = .004) in late sessions.

*Differences Between Therapists*

The Kruskal-Wallis test examined whether the four therapists in this study differed in their use of various interpersonal clusters. As illustrated in Table 2, clinicians differed in their use of affirmation (**1-2 Affirm)** and friendly influence (**1-4 Protect**) in early sessions. Post-hoc Mann-Whitney tests with the Bonferroni correction ($\alpha$ = .05/7) confirmed that Therapist 4 used affirmation (**1-2 Affirm**) more often than did Therapist 3 ($p$ = .006, $r$ = .4114) or Therapist 2 ($p$ = .001, $r$ = .4934). Therapist 4 also used less friendly influence (**1-4 Protect**; $p$ = .006, $r$ = .4114) than Therapist 2. While not significant after correcting for multiple comparisons, Therapist 4 used less friendly influence (**1-4 Protect**) than Therapist 3 ($p$ = .022, $r$ = .3443) or Therapist 1 ($p$ = .040, $r$ = .3089).

Therapists also differed in their use of neutral control (**1-5 Manage**) and disclosure (2-2 Disclose) in late sessions. Post-hoc Mann-Whitney tests with the

Table 2
*Mean Percents and Standard Deviations of SASB Cluster Codes Across Therapists*

| | **1-1 Emancipate** | | **1-2 Affirm** | | **1-4 Protect** | | **1-5 Control** | | 2-2 Disclose | |
|---|---|---|---|---|---|---|---|---|---|---|
| | *Mean* | *SD* | *Mean* | *SD* | *Mean* | *SD* | *Mean* | *SD* | *Mean* | *SD* |
| *Early Sessions* | | | | | | | | | | |
| Therapist 1 ($n$ = 7) | 0.29 | 0.77 | 45.34 | 16.26 | 49.75 | 17.17 | 2.33 | 1.67 | 7.83 | 6.96 |
| Therapist 2 ($n$ = 13) | 0.82 | 2.62 | 39.30 | 21.41 | 54.00 | 20.46 | 8.35 | 7.67 | 1.82 | 2.24 |
| Therapist 3 ($n$ = 14) | 1.13 | 2.08 | 31.64 | 18.05 | 57.90 | 22.28 | 8.79 | 9.44 | 3.90 | 3.44 |
| Therapist 4 ($n$ = 10) | 0.77 | 1.66 | 60.73 | 15.34 | 33.67 | 15.43 | 2.91 | 2.66 | 3.06 | 4.54 |
| | $\chi^2(3) = 2.025$ $p = .567$ | | $\chi^2(3) = 13.426$ $p = .004$ | | $\chi^2(3) = 8.873$ $p = .031$ | | $\chi^2(3) = 4.377$ $p = .224$ | | $\chi^2(3) = 6.370$ $p = .095$ | |
| *Late Sessions* | | | | | | | | | | |
| Therapist 1 ($n$ = 7) | 0.89 | 1.25 | 41.04 | 9.12 | 35.54 | 12.28 | 24.11 | 7.50 | 10.43 | 4.30 |
| Therapist 2 ($n$ = 13) | 0.95 | 2.04 | 47.51 | 25.12 | 39.61 | 25.62 | 12.91 | 11.34 | 3.79 | 3.81 |
| Therapist 3 ($n$ = 14) | 0.76 | 1.48 | 35.50 | 17.53 | 50.82 | 19.57 | 14.16 | 14.48 | 3.80 | 4.31 |
| Therapist 4 ($n$ = 10) | 0.93 | 1.41 | 60.07 | 25.91 | 35.43 | 24.52 | 5.87 | 5.04 | 4.41 | 5.36 |
| | $\chi^2(3) = .558$ $p = .906$ | | $\chi^2(3) = 5.703$ $p = .127$ | | $\chi^2(3) = 4.254$ $p = .235$ | | $\chi^2(3) = 10.606$ $p = .014$ | | $\chi^2(3) = 8.974$ $p = .030$ | |

Bonferroni correction ($\alpha$ = .05/7) indicated that Therapist 1 was significantly more directive than Therapist 4 (**1-5 Control**; $p$ = .002, $r$ = .4708) and used significantly more disclosure than either Therapist 2 (2-2 Disclose; $p$ = .005, $r$ = .4190) or Therapist 3 (2-2 Disclose; $p$ = .007, $r$ = .4051). The results also suggest that Therapist 2 was less directive than Therapist 1 (**1-5 Control**; $p$ = .013, $r$ = .3763), though this finding failed to meet significance after correcting for multiple comparisons.

*Interpersonal Hostility*

The incidence of hostility codes in the present study ranged from zero to 7% of all observed codes ($M$ = 1.22%, $SD$ = 1.71%). Specifically, client hostile behaviour accounted for less than 4% of their total cluster codes across sessions, and therapist hostility clusters accounted for less than 2% of their total communication. Despite similarly low base rates for hostility, previous studies of early sessions of CT have determined that hostility is associated with less successful treatment outcome (Ahmed et al., 2012; Critchfield et al., 2007). A multiple regression analysis examined whether client hostility in early sessions predicted symptom change in the present study. Patient pre-treatment depression scores were entered into the first step of the regression model to control for differences in symptom severity. The results of this model indicate that pre-treatment depression influenced symptom improvement ($F_{(1, 42)}$ = 22.369; $p$ < .001; $R^2$ = .348), but the strength of the model was improved when client hostility in early sessions was included ($F_{(2, 41)}$ = 14.333; $p$ < .001; $R^2$ = .411). Therefore, the level of client hostility observed in early sessions of CT was related to symptom improvement ($\beta$ = -0.258, $p$ = .041) such that clients demonstrating greater hostility in early sessions experienced smaller treatment gains.[5]

Although the low prevalence of hostility in our sample is consistent with previous studies of CT (Ahmed et al., 2012; Critchfield et al., 2007), using verbatim transcripts may have limited our ability to identify more subtle elements of hostility. Alternatively, or simultaneously, hostility may be expressed differently in this population; in particular, based on the proclivity of depressed clients toward avoidant and submissive interpersonal mechanisms (Barrett & Barber, 2007; Cain et al., 2012; Constantino et al., 2012; Constantino et al., 2008), they may have been more likely to withdraw from, or yield to, the therapist in moments of discord than express opposition or dissatisfaction. Thus, in SASB terms, hostility among this population might also be manifested through neutral submission (2-5 Submit), accepting friendly influence (2-4 Trust), or withdrawal (2-1 Separate). Post-hoc spearman correlations indicate that client hostility in early sessions was positively correlated with their use of affirmation (**1-2 Affirm**; $r_s$ = .329, $p$ = .029) and negatively correlated with their use of disclosure (2-2 Disclose; $r_s$ = -.331, $p$ = .028). This suggests that hostility was positively associated with clients diverting the focus of the conversation to the therapist (i.e., away from themselves) and negatively associated with their engaging in open disclosure. Client hostility in late sessions was negatively related to their use of disclosure (2-2 Disclose; $r_s$ = - .340,

$p$ = .024), and positively correlated with their use of assertion (2-1 Separate; $r_s$ = .324, $p$ = .032), accepting friendly influence (2-4 Trust; $r_s$ = .318, $p$ = .035), and compliance (2-5 Submit; $r_s$ =.452, $p$ = .002).

## DISCUSSION

The interpersonal processes observed in this study of CT for MDD were consistent with the expected dynamics of psychotherapy. Client communication was self-focused, and therapists primarily used other-focused communication; both used affiliative strategies most of the time. Except for a trend suggesting that clients demonstrated less reliance on therapists in later sessions (2-4 Trust), there were no significant differences in clients' self-focused behaviour in early and late sessions.

The hypotheses that therapists would use more friendly influence and directive strategies in early sessions and more affirmation in later sessions (Gibbons et al., 2002) were partly confirmed. Therapists used fewer friendly influence strategies (**1-4 Protect**) and increased their use of neutral control (**1-5 Control**) in later sessions. The stability in affirmation (**1-2 Affirm**), while unexpected, highlights its importance throughout the therapeutic process. Indeed, affirmation is integral in validating patients' adaptive statements and acknowledging their efforts throughout treatment (Karpiak & Benjamin, 2004; Safran, Muran, & Eubanks-Carter, 2011).

The finding that cognitive therapists used fewer friendly influence strategies and more neutral control mechanisms in later sessions likely reflects changes in their role across treatment. At the beginning of therapy, clinicians explain both the cognitive model and treatment rationale and teach clients to use the skills and techniques of CT (Beck et al., 1979). As clients become aware of the parameters of therapy and become experienced in the use of the CT skill set, they no longer need detailed explanations of treatment tasks. Data now indicate that therapists rely on briefer and more specific reminders to guide clients in using the CT skills, and to manage the tempo and content of later sessions.

Although the therapists' communicative behaviour was relatively consistent, there were significant differences in their use of interpersonal strategies. In early sessions, therapists differed in their use of friendly autonomy-granting (**1-2 Affirm**) and friendly influence (**1-4 Protect**). In late sessions, therapists differed in their directiveness (**1-5 Control**) and self-disclosure (2-2 Disclose). Together, these findings indicate that despite intensive training and excellent adherence to the treatment manual (Jacobson et al., 1996, 2000), the clinicians in this study differed in the ways they delivered the protocol. Because treatment outcome was consistent across therapists (Jacobson et al., 1996, 2000), it would seem that clinicians effectively translated, or transmitted, the treatment protocol through their respective interpersonal styles. These results are concordant with previous findings that therapist variance exists even when implementing stringent treatment protocols (Connolly Gibbons, Crits-Christoph, Levinson, & Barber, 2003; Gibbons et al., 2002). Nevertheless, they also highlight that although treatment

can be manualized, clinicians will necessarily vary in the interpersonal strategies they use when providing treatment. As such, the findings from this study underscore the need to consider therapist variables separately from treatment variables in outcome studies (Krause & Lutz, 2009). From a training perspective, these findings can be used to encourage therapists to learn and adopt evidence-based practices while assuaging worries that doing so might "entail a robotization" of therapy (Pagoto et al., 2007, p. 700).

Consistent with previous studies of interpersonal variables in CT (Critchfield et al., 2007), hostility was relatively uncommon in this sample compared to studies of other treatment modalities (e.g., Henry et al., 1986, 1990; von der Lippe et al., 2008). Nevertheless, findings from the current study point to a negative relationship between client hostility and symptom improvement. Although the in-session communication patterns of depressed patients in CT may differ from those found in other diagnostic groups or treatment modalities (Tasca et al., 2011; Watson & McMullen, 2005), findings from this study confirm that interpersonal hostility has deleterious effects on CT for MDD. Furthermore, post-hoc correlations suggest that depressed patients may express their hostility through more innocuous interpersonal behaviour.

In particular, client hostility was associated with lower rates of disclosure, with diverting attention away from the self, and with clients' asserting their distinctness from the clinician. It also was associated with clients demonstrating help-accepting and compliant behaviour. While these findings are preliminary and necessitate replication, they correspond with literature indicating that depressed clients are more likely to disengage from treatment through passive acquiescence than engage in an open confrontation (Aspland et al., 2008). Therefore, clinicians working with this population should be vigilant as to the interpersonal motives of clients' compliance, because it may reflect hostility rather than engagement. Furthermore, these findings reinforce the importance of teaching novice therapists to consider how their interventions are received, to remain vigilant as to the frequency of patient compliance, and to consider the depth and breadth of patient disclosure when assessing patient engagement. Finally, because hostility is linked to weaker improvement, both novice and experienced clinicians should immediately attend to client hostility, address clients' concerns, and endeavour to resolve any hostility occurring during treatment.

*Limitations*

While the findings from the present study offer interesting avenues for further investigation, they are not without limitations. First, although the sample for this study ($N$ = 44 dyads) was respectable relative to previous research using SASB (Critchfield et al., 2007; Henry et al., 1986, 1990; von der Lippe et al., 2008), a larger sample would likely have resulted in more significant and robust findings. Alternatively, selecting and comparing good and poor outcome dyads might have highlighted notable differences in patient and clinician behaviour across time. In fact, most studies using SASB have demonstrated significant effects using extreme

outcome groups (Coady, 1991; Critchfield et al., 2007; Henry et al., 1986; von der Lippe et al., 2008). Thus, the identification of significant effects for hostility using the entire CT arm and, accordingly, a broader range of clinical outcomes, lend strength to our conclusions regarding the nefarious effects of client disaffiliation on their treatment prognosis.

Second, the exploratory nature of this study necessitated the analysis of many interpersonal variables, which limited the statistical power and increased the likelihood of incurring Type I error. Although these risks were attenuated by creating a composite measure of depression and by testing the effect of specific interpersonal variables on the outcome, replication using a more explicit set of hypotheses would provide further support for these preliminary findings (Streiner & Norman, 2011).

Third, although the interrater reliability for this study was commensurate with comparable investigations, data were collected using transcribed therapy sessions without the benefit of audio information. It is possible that the use of written transcripts limited coders' ability to notice subtle nuances in the tone or timing of the session. In particular, this may have limited raters' ability to identify and code subtle instances of hostility (Anderson et al., 2012; Kiesler & Auerbach, 2003). Similarly, there is emerging evidence to suggest that sampling from the middle of therapy sessions may not fully capture all the significant interpersonal events occurring during the therapy hour (Wong & Pos, 2014).

Finally, this study considered patients with MDD enrolled in a study of manualized therapy with strict inclusion criteria. As such, the findings may not be directly applicable to broader clinical samples. Nonetheless, there is some evidence that participants in clinical research projects are comparable to clients in naturalistic samples (Stirman, DeRubeis, Crits-Christoph, & Rothman, 2005). As well, findings from this study are broadly consistent with findings from other research with SASB across various therapeutic modalities (Henry et al., 1986, 1990; Wong & Pos, 2014) and with different clinical populations (Ahmed et al., 2012; Critchfield et al., 2007; Macdonald, Cartwright, & Brown, 2007). The commonalities between the findings for these studies suggest that the interpersonal processes of psychotherapy may be largely comparable across modalities. Moreover, since the findings from this study describe the in-session interpersonal behaviour of clients and therapists, they are not contingent on the particular treatment manual used in this study. As such, these preliminary findings are likely to be accessible and relevant to most practitioners working with depressed patients.

*Conclusions*

There is a body of evidence suggesting that client and therapist interpersonal characteristics independently influence the process and outcome of therapy (Anderson, Ogles, Patterson, Lambert, & Vermeersch, 2009; Hardy et al., 2001; Renner et al., 2012). Identifying clinically relevant interpersonal cues that herald negative process and poor treatment outcomes stands to improve clinicians' ability to recognize obstacles to therapeutic success.

To our knowledge, the present study is the first to examine the interpersonal behaviour of both therapists and clients in CT for MDD using SASB. Although few changes were observed in client interpersonal behaviour over time, therapists used different communication strategies in early and late session. Moreover, consistent with previous studies, despite intensive training and monitored adherence to manuals, there were significant differences in therapist interpersonal behaviour (Critchfield et al., 2007; Henry et al., 1993).

These findings highlight the importance of considering therapist effects within studies of manualized treatments (Connolly Gibbons et al., 2003; Gibbons et al., 2002). Also, this study demonstrated that client hostility was significantly related to treatment outcome in a sample of depressed patients undergoing CT. Perhaps more importantly, the findings also offer interesting insights into the correlates of hostility in this population and indicate that hostility may be associated with communication mechanisms that are outwardly suggestive of good treatment outcomes (e.g., 2-4 Trust). As such, further research is warranted to clarify the manifestation of hostility in depressed patients and to understand its impact on treatment outcome.

*Notes*

1 The DSM-III-R was current when participants were recruited for the original Jacobson study (Jacobson et al., 1996, 2000). The diagnostic criteria for depression outlined in the DSM-III are comparable to those described in the DSM-V.

2 Four participants (9.09%) did not report their ethnicity.

3 In keeping with recommended descriptions of the SASB, **Surface 1** is reported using bold type, Surface 2 with underlined type, and *Surface 3* in italics.

4 *Introject Focus* was not used in this study

5 The same procedure examined therapist hostility in early sessions but found no significant relationship between therapist hostility and treatment outcome.

*References*

Ackerman, S. J., & Hilsenroth, M. J. (2001). A review of therapist characteristics and techniques negatively impacting the therapeutic alliance. *Psychotherapy: Theory, Research, Practice, Training, 38*(2), 171–185. https://doi.org/10.1037/0033-3204.38.2.171

Ackerman, S. J., & Hilsenroth, M. J. (2003). A review of therapist characteristics and techniques positively impacting the therapeutic alliance. *Clinical Psychology Review, 23*(1), 1–33. https://doi.org/10.1016/S0272-7358(02)00146-0

Ahmed, M., Westra, H. A., & Constantino, M. J. (2012). Early therapy interpersonal process differentiating clients high and low in outcome expectations. *Psychotherapy Research, 22*(6), 731–745. https://doi.org/10.1080/10503307.2012.724538

Anderson, T., Knobloch-Fedders, L. M., Stiles, W. B., Ordoñez, T., & Heckman, B. D. (2012). The power of subtle interpersonal hostility in psychodynamic psychotherapy: A speech acts analysis. *Psychotherapy Research, 22*(3), 348–362. https://doi.org/10.1080/10503307.2012.658097

Anderson, T., Ogles, B. M., Patterson, C. L., Lambert, M. J., & Vermeersch, D. A. (2009). Therapist effects: Facilitative interpersonal skills as a predictor of therapist success. *Journal of Clinical Psychology, 65*(7), 755–768. https://doi.org/10.1002/jclp.20583

Aspland, H., Llewelyn, S., Hardy, G. E., Barkham, M., & Stiles, W. (2008). Alliance ruptures and rupture resolution in cognitive-behavior therapy: A preliminary task analysis. *Psychotherapy Research, 18*(6), 699–710. https://doi.org/10.1080/10503300802291463

Bagby, R. M., Ryder, A. G., Schuller, D. R., & Marshall, M. B. (2004). The Hamilton Depression Rating Scale: Has the gold standard become a lead weight? *American Journal of Psychiatry, 161*(12), 2163–2177. https://doi.org/10.1176/appi.ajp.161.12.2163

Barrett, M. S., & Barber, J. P. (2007). Interpersonal profiles in major depressive disorder. *Journal of Clinical Psychology, 63*(3), 247–266. https://doi.org/10.1002/jclp.20346

Beck, A. T., & Alford, B. A. (2009). *Depression: Causes and treatment*. Philadelphia, PA: University of Pennsylvania Press.

Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. New York, NY: Guilford Press.

Beck, A. T., Steer, R. A., & Garbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review, 8*(1), 77–100. https://doi.org/10.1016/0272-7358(88)90050-5

Benjamin, L. S. (1974). Structural analysis of social behavior. *Psychological Review, 81*(5), 392–425. https://doi.org/10.1037/h0037024

Benjamin, L. S. (1987). Use of the SASB Dimensional Model to develop treatment plans for personality disorders. I: Narcissism. *Journal of Personality Disorders, 1*(1), 43–70. https://doi.org/10.1521/pedi.1987.1.1.43

Benjamin, L. S. (1994). SASB: A bridge between personality theory and clinical psychology. *Psychological Inquiry, 5*(4), 273–316. https://doi.org/10.1207/s15327965pli0504_1

Benjamin, L. S. (1996). *Interpersonal diagnosis and treatment of personality disorder* (2nd ed.). New York, NY: Guilford Press.

Benjamin, L. S., & Cushing, G. (2000). *Reference manual for coding social interactions in terms of Structural Analysis of Social Behavior*. Salt Lake City, UT: University of Utah.

Benjamin, L. S., Rothweiler, J. C., & Critchfield, K. L. (2006). The use of Structural Analysis of Social Behavior (SASB) as an assessment tool. *Annual Review of Clinical Psychology, 2*, 83–109. https://doi.org/10.1146/annurev.clinpsy.2.022305.095337

Beutler, L. E., Castonguay, L. G., & Follette, W. C. (2006). Therapeutic factors in dysphoric disorders. *Journal of Clinical Psychology, 62*(6), 639–647. https://doi.org/10.1002/jclp.20260

Binder, J. L., & Strupp, H. H. (1997). "Negative process": A recurrently discovered and underestimated facet of therapeutic process and outcome in the individual psychotherapy of adults. *Clinical Psychology: Science and Practice, 4*(2), 121–139. https://doi.org/10.1111/j.1468-2850.1997.tb00105.x

Blatt, S. J., Zuroff, D. C., Quinlan, D. M., & Pilkonis, P. A. (1996). Interpersonal factors in brief treatment of depression: Further analyses of the National Institute of Mental Health Treatment of Depression Collaborative Research Program. *Journal of Consulting and Clinical Psychology, 64*(1), 162–171. https://doi.org/10.1037/0022-006x.64.1.162

Butler, A. C., Chapman, J. E., Forman, E. M., & Beck, A. T. (2006). The empirical status of cognitive-behavioral therapy: A review of meta-analyses. *Clinical Psychology Review, 26*(1), 17–31. https://doi.org/10.1016/j.cpr.2005.07.003

Cain, N. M., Ansell, E. B., Wright, A. G. C., Hopwood, C. J., Thomas, K. M., Pinto, A., … Grilo, C. M. (2012). Interpersonal pathoplasticity in the course of major depression. *Journal of Consulting and Clinical Psychology, 80*(1), 78–86. https://doi.org/10.1037/a0026433

Castonguay, L. G., Goldfried, M. R., Wiser, S., Raue, P. J., & Hayes, A. M. (1996). Predicting the effect of cognitive therapy for depression: A study of unique and common factors. *Journal of Consulting and Clinical Psychology, 64*(3), 497–504. https://doi.org/10.1037/0022-006x.64.3.497

Coady, N. F. (1991). The association between client and therapist interpersonal processes and outcomes in psychodynamic psychotherapy. *Research on Social Work Practice, 1*(2), 122–138. https://doi.org/10.1177/104973159100100202

Cohen, J. (1968). Weighted kappa: Nominal scale agreement provision for scaled disagreement or partial credit. *Psychological Bulletin, 70*(4), 213–220. https://doi.org/10.1037/h0026256

Connolly Gibbons, M. B., Crits-Christoph, P., Levinson, J., & Barber, J. (2003). Flexibility in manual-based psychotherapies: Predictors of therapist interventions in interpersonal and cognitive-behavioral therapy. *Psychotherapy Research, 13*(2), 169–185. https://doi.org/10.1093/ptr/kpg017

Connolly Gibbons, M. B., Crits-Christoph, P., Levinson, J., Gladis, M., Siqueland, L., Barber, J. P., & Elkin, I. (2002). Therapist interventions in the interpersonal and cognitive therapy sessions of the Treatment of Depression Collaborative Research Program. *American Journal of Psychotherapy, 56*(1), 3–26. https://doi.org/10.1176/appi.psychotherapy.2002.56.1.3

Constantino, M. J. (2000). Interpersonal process in psychotherapy through the lens of the Structural Analysis of Social Behavior. *Applied and Preventive Psychology, 9*(3), 153–172. https://doi.org/10.1016/s0962-1849(05)80002-2

Constantino, M. J., Laws, H. B., Arnow, B. A., Klein, D. N., Rothbaum, B. O., & Manber, R. (2012). The relation between changes in patients' interpersonal impact messages and outcome in treatment for chronic depression. *Journal of Consulting and Clinical Psychology, 80*(3), 354–364. https://doi.org/10.1037/a0028351

Constantino, M. J., Manber, R., DeGeorge, J., McBride, C., Ravitz, P., Zuroff, D. C., … Arnow, B. A. (2008). Interpersonal styles of chronically depressed outpatients: Profiles and therapeutic change. *Psychotherapy: Theory, Research, Practice, Training, 45*(4), 491–506. https://doi.org/10.1037/a0014335

Critchfield, K. L., Henry, W. P., Castonguay, L. G., & Borkovec, T. D. (2007). Interpersonal process and outcome in variants of cognitive-behavioral psychotherapy. *Journal of Clinical Psychology, 63*(1), 31–51. https://doi.org/10.1002/jclp.20329

Greenberg, L. S., Ford, C. L., Alden, L. S., & Johnson, S. M. (1993). In-session change in emotionally focused therapy. *Journal of Consulting and Clinical Psychology, 61*(1), 78–84. https://doi.org/10.1037/0022-006x.61.1.78

Grosse Holtforth, M., Altenstein, D., Krieger, T., Flückiger, C., Wright, A. G. C., & Caspar, F. (2013). Interpersonal differentiation within depression diagnosis: Relating interpersonal subgroups to symptom load and the quality of the early therapeutic alliance. *Psychotherapy Research, 24*(4), 429–441. https://doi.org/10.1080/10503307.2013.829253

Hamilton, M. (1967). Development of a rating scale for primary depressive illness. *British Journal of Social and Clinical Psychology, 6*(4), 278–296. https://doi.org/10.1111/j.2044-8260.1967.tb00530.x

Hardy, G. E., Cahill, J., Shapiro, D. A., Barkham, M., Rees, A., & Macaskill, N. (2001). Client interpersonal and cognitive styles as predictors of response to time-limited cognitive therapy for depression. *Journal of Consulting and Clinical Psychology, 69*(5), 841–845. https://doi.org/10.1037/0022-006x.69.5.841

Henry, W. P. (1996). Structural Analysis of Social Behavior as a common metric for programmatic psychopathology and psychotherapy research. *Journal of Consulting and Clinical Psychology, 64*(6), 1263–1275. https://doi.org/10.1037//0022-006x.64.6.1263

Henry, W. P., Schacht, T. E., & Strupp, H. H. (1986). Structural Analysis of Social Behavior: Application to a study of interpersonal process in differential psychotherapeutic outcome. *Journal of Consulting and Clinical Psychology, 54*(1), 27–31. https://doi.org/10.1037/0022-006X.54.1.27

Henry, W. P., Schacht, T. E., & Strupp, H. H. (1990). Patient and therapist introject, interpersonal process, and differential psychotherapy outcome. *Journal of Consulting and Clinical Psychology, 58*(6), 768–774. https://doi.org/10.1037/0022-006X.58.6.768

Henry, W. P., Strupp, H. H., Butler, S. F., Schacht, T. E., & Binder, J. L. (1993). Effects of training in time-limited dynamic psychotherapy: Changes in therapist behavior. *Journal of Consulting and Clinical Psychology, 61*(3), 434–440. https://doi.org/10.1037/0022-006x.61.3.434

Hill, C., Thompson, B., & Corbett, M. (1992). The impact of therapist ability to perceive displayed and hidden client reactions on immediate outcome in first sessions of brief therapy. *Psychotherapy Research, 2*(2), 143–155. https://doi.org/10.1080/10503309212331332914

Hilliard, R. B., Henry, W. P., & Strupp, H. H. (2000). An interpersonal model of psychotherapy: Linking patient and therapist developmental history, therapeutic process, and types of outcome. *Journal of Consulting and Clinical Psychology, 68*(1), 125–133. https://doi.org/10.1037/0022-006X.68.1.125

Hunsley, J., Elliott, K., & Therrien, Z. (2014). The efficacy and effectiveness of psychological treatments for mood, anxiety, and related disorders. *Canadian Psychology/Psychologie canadienne, 55*(3), 161–176. https://doi.org/10.1037/a0036933

Jacobson, N. S., Dobson, K. S., Truax, P. A., Addis, M. E., Koerner, K., Gollan, J. K., … Prince, S. E. (1996). A component analysis of cognitive-behavioral treatment for depression. *Journal of Consulting and Clinical Psychology, 64*(2), 295–304. https://doi.org/10.1037/0022-006x.64.2.295

Jacobson, N. S., Dobson, K. S., Truax, P. A., Addis, M. E., Koerner, K., Gollan, J. K., … Prince, S. E. (2000). A component analysis of cognitive-behavioral treatment for depression. *Prevention & Treatment, 3*(1). https://doi.org/10.1037/1522-3736.3.1.323a

Karpiak, C. P., & Benjamin, L. S. (2004). Therapist affirmation and the process and outcome of psychotherapy: Two sequential analytic studies. *Journal of Clinical Psychology, 60*(6), 659–676. https://doi.org/10.1002/jclp.10248

Keijsers, G. P., Schaap, C. P., & Hoogduin, C. A. (2000). The impact of interpersonal patient and therapist behavior on outcome in cognitive-behavior therapy. A review of empirical studies. *Behavior Modification, 24*(2), 264–297. https://doi.org/10.1177/0145445500242006

Kiesler, D. J., & Auerbach, S. M. (2003). Integrating measurement of control and affiliation in studies of physician-patient interaction: The interpersonal circumplex. *Social Science & Medicine, 57*(9), 1707–1722. https://doi.org/10.1016/S0277-9536(02)00558-0

Krause, M. S., & Lutz, W. (2009). Process transforms inputs to determine outcomes: Therapists are responsible for managing process. *Clinical Psychology: Science and Practice, 16*(1), 73–81. https://doi.org/10.1111/j.1468-2850.2009.01146.x

López-Pina, J., Sánchez-Meca, J., & Rosa-Alcázar, A. (2009). The Hamilton Rating Scale for Depression: A meta-analytic reliability generalization study. *International Journal of Clinical and Health Psychology*, 143–159.

Macdonald, J., Cartwright, A., & Brown, G. (2007). A quantitative and qualitative exploration of client-therapist interaction and engagement in treatment in an alcohol service. *Psychology and Psychotherapy: Theory, Research and Practice, 80*(2), 247–268. https://doi.org/10.1348/147608306X156553

McCullough, J. P. (2010). Cognitive behavioral analysis system of psychotherapy. In *The Corsini encyclopedia of psychology* (pp. 1–2). Hoboken, NJ: John Wiley & Sons. https://doi.org/10.1002/9780470479216.corpsy0192

McEvoy, P. M., Burgess, M. M., & Nathan, P. (2013). The relationship between interpersonal problems, negative cognitions, and outcomes from cognitive behavioral group therapy for depression. *Journal of Affective Disorders, 150*(2), 266–275. https://doi.org/10.1016/j.jad.2013.04.005

Norcross, J. C., & Wampold, B. E. (2011). Evidence-based therapy relationships: Research conclusions and clinical practices. *Psychotherapy, 48*(1), 98–102. https://doi.org/10.1037/a0022161

Pagoto, S. L., Spring, B., Coups, E. J., Mulvaney, S., Coutu, M.-F., & Ozakinci, G. (2007). Barriers and facilitators of evidence-based practice perceived by behavioral science health professionals. *Journal of Clinical Psychology, 63*(7), 695–705. https://doi.org/10.1002/jclp.20376

Parikh, S. V., Segal, Z. V., Grigoriadis, S., Ravindran, A. V., Kennedy, S. H., Lam, R. W., & Patten, S. B. (2009). Canadian Network for Mood and Anxiety Treatments (CANMAT) clinical guidelines for the management of major depressive disorder in adults. II. Psychotherapy alone or in combination with antidepressant medication. *Journal of Affective Disorders, 117*, S15–S25. https://doi.org/10.1016/j.jad.2009.06.042

Renner, F., Jarrett, R. B., Vittengl, J. R., Barrett, M. S., Clark, L. A., & Thase, M. E. (2012). Interpersonal problems as predictors of therapeutic alliance and symptom improvement in cognitive therapy for depression. *Journal of Affective Disorders, 138*(3), 458–467. https://doi.org/10.1016/j.jad.2011.12.044

Saatsi, S., Hardy, G. E., & Cahill, J. (2007). Predictors of outcome and completion status in cognitive therapy for depression. *Psychotherapy Research, 17*(2), 185–195. https://doi.org/10.1080/10503300600779420

Safran, J. D., Crocker, P., McMain, S., & Murray, P. (1990). Therapeutic alliance rupture as a therapy event for empirical investigation. *Psychotherapy: Theory, Research, Practice, Training, 27*(2), 154–165. https://doi.org/10.1037/0033-3204.27.2.154

Safran, J. D., & Muran, J. C. (1995). Resolving therapeutic alliance ruptures: Diversity and integration. *In Session-Psychotherapy in Practice, 1*(1), 81–92.

Safran, J. D., & Muran, J. C. (1996). The resolution of ruptures in the therapeutic alliance. *Journal of Consulting and Clinical Psychology, 64*(3), 447–458. https://doi.org/10.1037/0022-006X.64.3.447

Safran, J. D., Muran, J. C., Demaria, A., Boutwell, C., Eubanks-Carter, C., & Winston, A. (2014). Investigating the impact of alliance-focused training on interpersonal process and therapists' capacity for experiential reflection. *Psychotherapy Research*, 1–17. https://doi.org/10.1080/10503307.2013.874054

Safran, J. D., Muran, J. C., & Eubanks-Carter, C. (2011). Repairing alliance ruptures. *Psychotherapy, 48*(1), 80–87. https://doi.org/10.1037/a0022140

Santor, D. A., & Coyne, J. C. (2001). Examining symptom expression as a function of symptom severity: Item performance on the Hamilton Rating Scale for Depression. *Psychological Assessment, 13*(1), 127–139. https://doi.org/10.1037/1040-3590.13.1.127

Spitzer, R. L., Williams, J. B. W., & Gibbon, M. (1987). *Structured clinical interview for DSM–lll–R: Patient edition*. New York, NY: Biometrics Research Department, New York State Psychiatric Institute.

Stirman, S. W., DeRubeis, R. J., Crits-Christoph, P., & Rothman, A. (2005). Can the randomized controlled trial literature generalize to nonrandomized patients? *Journal of Consulting and Clinical Psychology, 73*(1), 127–135. https://doi.org/10.1037/0022-006x.73.1.127

Streiner, D. L., & Norman, G. R. (2011). Correction for multiple testing: Is there a resolution? *Chest, 140*(1), 16–18. https://doi.org/10.1378/chest.11-0523

Strong, T., Sutherland, O., & Ness, O. (2011). Considerations for a discourse of collaboration in counseling. *Asia Pacific Journal of Counselling and Psychotherapy, 2*(1), 25–40. https://doi.org/10.1080/21507686.2010.546865

Tasca, G. A., Foot, M., Leite, C., Maxwell, H., Balfour, L., & Bissada, H. (2011). Interpersonal processes in psychodynamic-interpersonal and cognitive behavioral group therapy: A systematic case study of two groups. *Psychotherapy, 48*(3), 260–273. https://doi.org/10.1037/a0023928

Tasca, G. A., & McMullen, L. M. (1992). Interpersonal complementarity and antitheses within a stage model of psychotherapy. *Psychotherapy: Theory, Research, Practice, Training, 29*(4), 515–523. https://doi.org/10.1037/0033-3204.29.4.515

von der Lippe, A. L., Monsen, J. T., Rønnestad, M. H., & Eilertsen, D. E. (2008). Treatment failure in psychotherapy: The pull of hostility. *Psychotherapy Research, 18*(4), 420–432. https://doi.org/10.1080/10503300701810793

Watson, J. C., & McMullen, E. J. (2005). An examination of therapist and client behavior in high- and low-alliance sessions in cognitive-behavioral therapy and process experiential therapy. *Psychotherapy: Theory, Research, Practice, Training, 42*(3), 297–310. https://doi.org/10.1037/0033-3204.42.3.297

Watzke, B., Rueddel, H., Koch, U., Rudolph, M., & Schulz, H. (2008). Comparison of therapeutic action, style and content in cognitive-behavioural and psychodynamic group therapy under clinically representative conditions. *Clinical Psychology & Psychotherapy, 15*(6), 404–417. https://doi.org/10.1002/cpp.595

Wong, K., & Pos, A. E. (2014). Interpersonal processes affecting early alliance formation in experiential therapy for depression. *Psychotherapy Research, 24*(1), 1–11. https://doi.org/10.1080/10503307.2012.708794

Yin, P., & Fan, X. (2000). Assessing the reliability of Beck Depression Inventory scores: Reliability generalization across studies. *Educational and Psychological Measurement, 60*(2), 201–223. https://doi.org/10.1177/00131640021970466

Zuroff, D. C., & Blatt, S. J. (2006). The therapeutic relationship in the brief treatment of depression: Contributions to clinical improvement and enhanced adaptive capacities. *Journal of Consulting and Clinical Psychology, 74*(1), 130–140. https://doi.org/10.1037/0022-006x.74.1.130

*About the Authors*

Katherine Thompson is a full-time psychologist with the Montreal West Island Integrated University Health and Social Services Centre. Her research interests include interpersonal behaviour and psychotherapy process research. This study is drawn from her doctoral dissertation.

Debora D'Iuso is a licensed psychologist specializing in the provision of psychological services for adults. She works in public mental health services for adults in London, UK. She continues to supervise students in their research and clinical work and collaborate on research projects. Her clinical and research interests include psychotherapy process research.

Deborah Schwartzman is a psychologist at Medipsy Psychological Services in Montreal, Canada. Her areas of research include systematic and scoping reviews, virtual reality, and psychotherapy process.

Keith S. Dobson is a professor of clinical psychology at the University of Calgary, as well as the current president of the Canadian Association of Cognitive and Behavioural Therapies and a principal investigator for the Opening Mind program of the Mental Health Commission of Canada.

Martin Drapeau is an associate professor of counselling psychology and psychiatry at McGill University. He is the director of the McGill Psychotherapy Research Group and is the co-director of the Science & Practice in Psychology research team. His interests are in psychotherapy process and outcome, as well as in best practices in psychology.

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Address correspondence to Martin Drapeau, Department of Counselling Psychology, McGill University, 3700 McTavish Street, Montreal, Québec, Canada, H3A 1Y2. E-mail: <martin.drapeau@mcgill.ca>