	Patient N	Age - Mean (SD)	Clinical Profile	Therapeutic Orientation	Synchrony Measure	Alliance Measure	Proximal/Distal Alliance	Hypothesis
Aafjes-van Doorn et al. (2020)	7	N/A	N/A	Psychoanalysis	LSM	WAI-O	Distal	Positive
Altmann et al. (2020)	267	34.4 (11.8)	SAD	CBT (manual-guided/naturalistic); PDT	MEA	HAQ	Distal	Positive
Bar Kalifa (2019)	31	25.9 (6.3)	Anxiety	Imagery-work; CBT	EDA	SAI	Proximal	Moderation*
Cohen et al. (2021)	86	32.03 (8.54)	MDD	PDT	MEA	WAI	Proximal	Moderation**
Gernert (2023)	14	38.8 (15.5)	N/A	CBT	MEA, SCR	BPSR	Proximal	Exploratory
Paulick, Deisenhofer, et al. (2018)	143	36.5 (N/A)	Mainly affective disorder	Integrative CBT	MEA	HAQ	Distal	Exploratory
Ramseyer & Tschacher (2011)	70	36.5 (10.2)	Mainly anxiety and affective disorders	CBT	MEA	BPSR	Distal: IIP, BSI, GSE, MAQ; Retrospective: GAS, VEV; Proximal: BPSR	Positive
Ramseyer & Tschacher (2014)	70	36.5 (10.2)	Mainly anxiety and affective disorders	CBT	MEA	BPSR	Proximal	Exploratory

Ramseyer (2020)	12	39.1 (13.1)	Mainly affective disorders	General Psychotherapy	MEA	BPSR	Proximal	Positive
Reich et al. (2014)	52	26.6 (N/A)	N/A	Psychotherapy	Vocal pitch (f0)	WAI	Proximal	Positive
Reinecke et al. (2022)	28	34.79 (12.76)	Mainly social anxiety	PDT	Movement units	HAQ	Distal	Positive
Shapira et al. (2022)	68	39.06 (13.67)	Mainly comorbid anxiety and affective disorders	Short-term PDT	LS	WAI	Proximal	Positive

	Findings	Leading/Following
Aafjes-van Doorn et al. (2020)	When holding time constant, LSM was positively correlated to the WAI-O Goal subscale, albeit non-significant (r = .36, p = .21, p = .21). LSM was unrelated to the WAI-O Task subscale, (r = .01, p = .97). LSM was negatively correlated to the WAI-O Bond subscale, (r = -.54, p = .05). Reciprocal LSM was negatively correlated to the WAI-O Bond subscale, (r = -.61, p = .05), but not related to the other subscales (all ps = .06).	No information about leading/following
Altmann et al. (2020)	Beyond treatment type, higher alliance scores at session 20 were predicted by more frequent movement synchrony at session 3 (β = .29, p < .001) and session 8 (β = .17, p < .05). Synchrony-alliance associations remained significant in naturalistic-CBT (βs = [.28, .32], ps <.01). For manualized-PDT, only synchrony at session 3 predicted alliance scores (β = .57, p <.01). All other synchrony-alliance associations did not reach significance (ps > .1).	Beyond treatment type, lower alliance scores at session 20 were correlated with more leading by patient at S8 (β = -.15, p < .05), but not at S3 (β = -.07, p > .1). Separately for manualized-CBT, lower alliance scores at session 20 were marginally correlated with more leading by the patient at session 3 (β = -.17, p < .1). In manualized-PDT, patient's leading was marginally correlated with alliance scores (β = -.24, p < .1). No other alliance-patient's leading associations reached significance (ps > .1).
Bar Kalifa (2019)	In imagery-work segments: synchrony was not significantly associated with the task/goal subscale of alliance (Est. = 0.987, p = .455). It was significantly associated with the alliance bond subscale (Est. = 1.926, p = .045). In CB segments: Synchrony was not significantly associated with the task/goal subscale of alliance at either the session level (Est. = 0.668, p = .601), or the person level (Est. = 4.576, p = .271). Similarly, synchrony was not significantly associated with the alliance bond subscale at either the session level (Est. = 0.201, p = .835), or the person level (Est. = 5.993, p = .084). In both segment types: only session-level synchrony during imagery-work segments was positively associated with the alliance bond subscale (Est. = 2.329, p = .023).	No information about leading/following
Cohen et al. (2021)	Only state-like changes were found significant: calculated as the centered nonverbal synchrony, it was significantly associated with	No information about leading/following

	the patient-reported alliance (β = 0.05, p < .0001) and with the therapist-reported alliance (β = 0.04, p = .005) over the course of treatment.	
Gernert (2023)	Head movement interpersonal synchrony in the first session of the follow-up group, showed a significant negative association with patients' post-session rating scores of therapeutic alliance (r (12) = −0.702, p = 0.005).	No information about leading/following
Paulick, Deisenhofer, et al. (2018)	Nonverbal synchrony at the beginning of treatment did not predict patient's or therapists' rated alliance, neither at the beginning nor at the end of treatment (βs = [-.01, .02], ps = [.46,.94]).	No information about leading/following
Ramseyer & Tschacher (2014)	A significant association between patients' alliance and body-synchrony (r(69) = 0.45; p < 0.0001) and patients' alliance and head-synchrony (r(69) = 0.12; p > .05).	Therapist's leading corresponded with patient's relationship rating [F(1, 104) = 8.34, p = .005)].
Ramseyer (2020)	Best fitting models (AICc) provided no significant associations between synchrony and patient's and therapist's rated alliance. Using quantitative idiographic process analysis (QUIPA) – Therapists' rated alliances were unrelated to synchrony at the next session (T = 0.78; d = 0.63; p= .148).	No information about leading/following
Reich et al. (2014)	Associations are only regarding patient/therapist leading	Lower ratings of the therapeutic alliance were associated with greater therapist-leading synchrony (r = -.60, p < .05), but not with therapist-following synchrony (r = -.09, p > .05). Greater therapist-leading synchrony was associated with lower ratings of therapeutic alliance. r = -.60
Reinecke et al. (2022)	No significant correlations between alliance and hand synchrony (rs = [-.11, .31], ps = [0.10, 0.97]).	No information about leading/following
Shapira et al. (2022)	LS did not show associations with alliance of both patients' and therapists' ratings. patient: (Est. = -72.7, p > 0.05); therapist: (r = -79.80, p > 0.05).	No information about leading/following

Table S1: Studies examining the synchrony-alliance association

Note. SAD = Social Anxiety Disorder; MDD = Major Depressive Disorder; CBT = Cognitive Behavioral Therapy; PDT = Psychodynamic Therapy; MEA = Motion Energy Analysis; EDA = Electrodermal Activity; SCR = Skin Conductance Response; LSM = Linguistic Synchrony Measure; LS = Linguistic Synchrony; WAI = Working Alliance Inventory; WAI-O = Working Alliance Inventory Observer; HAQ = The Helping Alliance Questionnaire; SAI = The Session Alliance Inventory; BPSR = Bern Post-Session Report. *It was hypothesized that synchrony would not be associated with alliance during CB work (Cognitive behavioural), but would be positively associated with alliance during imagery work. **It was hypothesized that associations with synchrony would be different for state-like and trait-like levels. Positive association was expected to be found between synchrony and alliance in the state-like level. We included studies that examined the association between synchrony and alliance, and extracted information only regarding this association (e.g., we excluded analysis reporting on the association between synchrony and attachment). We excluded studies that did only moderation analysis (Bar-Kalifa et al., 2023). We Excluded couple therapies (Avdi et. al 2022; Nyman-slonem et. al 2021; Tourunen et. al 2019). We also excluded Yokotani et. al (2020) because it is an interview, rather than psychotherapy session. Similarly, we excluded Zhang et. al (2018) because they reported on counselling rather than psychotherapy session, and Bryan et. al (2018) because they used interventions that were not defined as psychotherapy. We excluded Ramseyer and Tschacher (2008) because the same data is used in another research that was included, to avoid overlapping data. We excluded Sened et. al (2022) because the research is unpublished at the time of preparing this table, and Altenstein et. al (2013) because they investigated interpersonal microprocesses and not synchrony. We excluded Zimmermann et. al (2021) because they used adolescents as participants. We excluded studies which did not include at least 5 patients (Ramseyer & Tschacher, 2016; Tschacher & Meier, 2020; Andreas et. al, 2021). Given that this is not the intention of this paper, the information provided in the Table is not part of a pre-registered systematic review, and cannot replace any of the systematic analyses of the literature.

Study	Patient N	Age - Mean (SD)	Clinical Profile	Therapeutic Orientation	Synchrony Measure	Outcome Measures	Proximal/Distal Outcome	Hypothesis
Aafjes-van Doorn et al. (2020)	7	N/A	N/A	Psychoanalysis	LSM	Functioning (GAF); symptoms (PHI)	Distal	Positive
Altmann et al. (2020)	267	34.4 (11.8)	SAD	CBT (Manual-guided/Naturalistic); PDT	MEA	Symptoms (BDI); interpersonal (IIP)	Distal	Positive
Gernert (2023)	14	38.8 (15.5)	N/A	CBT	SCR, MEA	Symptoms (BDI, BSI, GSI)	Distal: GSI; Proximal: BDI, BSI	Exploratory
Paulick, Deisenhofer, et al. (2018)	143	36.5 (N/A)	Mainly affective disorder	Integrative CBT	MEA	Symptoms (BSI, OQ-30); interpersonal (IIP); dropout	Distal	Positive
Paulick, Rubel, et al. (2018)	93	36.8 (N/A)	Depression and anxiety related disorders	CBT	MEA	Symptoms (BSI)	Distal	Exploratory
Prinz et al. (2021)	175	37.1 (13.5)	Mainly Affective disorder and anxiety disorder as primary diagnosis	Integrative CBT (including emotion-focused and interpersonal elements)	MEA	Symptoms (OQ-30, HSCL)	Distal: OQ-30; Proximal: HSCL	Exploratory
Prinz et al. (2022)	60	25.37 (N/A)	Patients with high TAI scores	IR treatment combined with CBT	SC	Symptoms (TAI); interpersonal (ORS)	Distal: TAI; Proximal: ORS	Positive
Ramseyer & Tschacher (2011)	70	36.5 (10.2)	Mainly anxiety and affective disorders	CBT	MEA	Symptoms (BSI); interpersonal (IIP, MAQ); functioning	Distal: IIP, BSI, GSE, MAQ; Retrospective:	Positive

						(GSE, VEV, GAS, BPSR-self-efficacy subscale)	GAS, VEV; Proximal: BPSR	
Ramseyer & Tschacher (2014)	70	36.5 (10.2)	Mainly anxiety and affective disorders	CBT	MEA	Functioning (VEV, GAS, BPSR)	Distal: GAS, VEV; Proximal: BPSR	Exploratory
Ramseyer (2020)	12	39.1 (13.1)	Mainly affective disorders	General Psychotherapy	MEA	Symptoms (BSI, SCL-K-9); functioning (BPSR self-efficacy factor); interpersonal (IIP)	Distal: IIP, BDI; Proximal: SCL-K-9, BPSR	Exploratory
Reich et al. (2014)	52	26.6 (N/A)	N/A	Psychotherapy	Vocal pitch (f0)	Symptoms (HSC, BDI); interpersonal (OQ-interpersonal items)	Proximal	Positive
Reinecke et al. (2022)	28	34.79 (12.76)	Social anxiety as main diagnosis	PDT	Movement units	Symptoms (LSAS, BDI)	Distal	Positive
Schoenherr, Paulick, Strauss, et al. (2019)	267	34.38 (11.77)	SAD	CBT (Manual-guided/Naturalistic); Manual-guided PDT	MEA	Dropout (binary, categorical, continuous)	Distal	Positive
Schoenherr, Paulick, Worrack, et al. (2019)	84	Range: 18-70	Mainly SAD	Manualized CBT; Manualized PDT	MEA	Interpersonal (IIP)	Distal	Positive
Schoenherr, Strauss, Paulick, et al. (2021)	100	34.25 (8.86)	SAD	CBT; PDT	MEA	Symptoms (LSAS)	Distal	Exploratory
Schoenherr, Strauss, Stangier, et al. (2021)	64	34.4 (11.1)	SAD	CBT; PDT	MEA; Vocal pitch (f0); Range of vocal frequency	Symptoms (LSAS); interpersonal (IIP)	Distal	Positive
Shapira et al. (2022)	68	39.06 (13.67)	Mainly comorbid anxiety and	Short-term PDT	LS	Functioning (ORS)	Proximal	Positive

			affective disorders					
Zilcha-Mano et al. (2021)	37	31.54 (9.63)	MDD	PDT (supportive-expressive therapy)	OT	Symptoms (HRSD); functioning (OQ-social functioning subscale)	Distal	Positive

	Findings	Leading/Following
Aafjes-van Doorn et al. (2020)	No significant correlation between talk-turn level synchrony and change in either measure of functioning, PHI ($r = .21$, $p > .05$); GAF ($r = -.02$, $p > .05$).	No information about leading/following
Altmann et al. (2020)	Higher synchrony predicted lower IIP scores, at session 3 ($\beta s = -.16$, $p < .01$) and at session 8 ($\beta s = -.20$, $p < .01$), but not depression (BDI), both at session 3 ($\beta s = -.10$, $p > .05$) and session 8 ($\beta s = .02$, $p > .05$). All other associations with synchrony and leading did not reach the critical level of significance.	Beyond treatment type, lower interpersonal scores at the end of therapy were predicted by less leading by patient at session 3 ($\beta = .12$, $p < .05$), and session 8 ($\beta = .11$, $p < .05$). In manualized-CBT, lower interpersonal problems at the end of therapy were significantly predicted by less leading by the patient at S3 ($\beta = .24$, $p < .01$) and S8 ($\beta = .23$, $p < .01$), but not in naturalistic CBT and manualized-PDT ($ps > .1$). Beyond treatment type, higher BDI scores at the end of therapy were significantly predicted by more leading by the patient at S3 ($\beta = .14$, $p < .01$) and S8 ($\beta = .12$, $p < .05$). In manualized-CBT, higher BDI scores at the end of therapy were significantly predicted by more leading by the patient at S3 ($\beta = .34$, $p < .001$) and S8 ($\beta = .17$, $p < .05$), but not in naturalistic CBT and manualized-PDT ($ps > .1$).
Gernert (2023)	Head movement IPS did not show any significant association with patients' change in symptom intensity over time (BDI, BSI, GSI). Skin conductance response synchrony significantly predicted ΔGSI ($R2 = 0.429$, $F(1,12) = 9.009$, $p = 0.011$)	No information about leading/following
Paulick, Deisenhofer, et al. (2018)	Synchrony was not a significant predictor of outcomes: OQ-30 ($\beta = -.02$, $P = .50$); BSI ($\beta = -.02$, $P = .53$); IIP ($\beta = .01$, $P = .64$). Synchrony predicted dropout with marginal significance, ($\beta = -.02$, $P = .07$).	No information about leading/following
Paulick, Rubel, et al. (2018)	Synchrony positively predicted symptom reduction (BSI) in patients with depression, ($B = .13$, $p < .05$), but not in patients with anxiety, ($B = -.06$, $p > .05$).	No information about leading/following
Prinz et al. (2021)	No association between synchrony and outcome, $F(2, 130) = 21.34$, $p = .54$).	No information about leading/following

Prinz et al. (2022)	Average EDA synchrony during IR segments was positively associated with clients' next session ORS levels (β = .22, 95% CI [.02, .41], p = .04), but not during CB segments (β = .08, 95% CI [−.16, .33], p = .492). Higher synchrony during IR segments predicted lower post-treatment TAI, (β = -.25, CI [-.50, -.01], p = .038), but not in CB segments, (β = -.09, CI [-.34, .16], p = .656).	No information about leading/following
Ramseyer & Tschacher (2011)	Positive correlations between synchrony in the initial third of treatment and some outcome changes (by Cohen's d): IIP (r = .35, p < .05); BSI (r = .35, p < .05); GSE (r = .27, p < .10); MAQ (r = .25, p < .10); overall (r = .45, p < .01). Positive correlations between synchrony in the final third and some outcome changes, IIP (r = .24, p < .10); BSI (r = -.03, p > .10); GSE (r = .27, p < .05); MAQ (r = .16, p > .10); overall (r = .24, p < .10). Positive correlations between synchrony in the initial third of treatment and overall retrospective outcome, VEV + GAS (r = .32, p < .05). No significant correlations in the final third, (r = .20, p > .05). Higher synchrony was associated with higher client-rated self-efficacy (BPSR) in the initial sessions, (r = .35, p < .05), and these two were marginally associated in the final third, (r = .26, p < .10).	Therapist's pacing was predominantly associated with patient's self-efficacy (F(1, 97.5) = 4.35, p = .04).
Ramseyer & Tschacher (2014)	Head synchrony was positively associated with patients' goal attainment, GAS (r = .30, p < .05), and marginally with changes in experiencing and behavior, VEV (r = .22, p < .10). No significant correlations between outcomes and body synchrony (rs = [.01, .04], p > .05). Body synchrony positively associated with client-rated self-efficacy (BPSR) in the same session, (r = .304, p < .05), after controlling for head synchrony. Body-and-head combined synchrony positively associated with clients' self-efficacy in the same session, (r = .388, p < .001). No association between head synchrony and clients' self-efficacy with body synchrony controlled, (r = .164, p > .05).	No information about leading/following

Ramseyer (2020)	Pre-to-post improvement in interpersonal problems marginally and negatively associated with synchrony, IIP ($t(54.9) = -1.78$, $p = .081$). No significant association between pre-post symptom change and synchrony, BSI ($p > .05$). Higher synchrony marginally predicted higher symptoms in the next session, SCL-K-9 ($T = .51$, $d = .59$, $p = .067$). Less therapist-rated progress associated with higher synchrony in the same session, BPSR ($t(145.7) = -2.11$, $p = .037$). Higher symptoms associated with lower synchrony in the same session, SCL-K-9 ($t(99.5) = -1.70$, $p = .009$).	No information about leading/following
Reich et al. (2014)	Apart from the mentioned patient/therapist leading effects, no significant correlations between synchrony and other outcomes, ($rs = [.03, .41]$, $p > .05$).	Greater therapist-following synchrony was related to greater post-session reports of depression ($r = .69$, $p < .05$), but not with OQ ($r = .30$, $p > .05$) and HSC ($r = .36$, $p > .05$) ratings. Additionally, therapist leading was not associated with any treatment outcome measures ($rs = [.03, .41]$, $ps > .05$). Moderate and positive correlation between patient-led synchrony and depression, ($r = .69$, $p < .05$).
Reinecke et al. (2022)	Simultaneous movement change revealed significant negative correlations with LSAS at week 8: ($rp(28) = -0.519$, $p = .005$), at week 15: ($rp(28) = -0.518$, $p = .005$), and with BDI-II post-measurement ($rp(28) = -0.469$, $p = .003$).	No information about leading/following
Schoenherr, Paulick, Strauss, et al. (2019)	Marginally significant correlation between synchrony and dropout, ($r = -.18$, $p < .10$). Higher synchrony predicted lower risk of dropout, Cox regression ($B = -.05$, $p < .05$, $OR = .95$); logistic regression ($B = -.06$, $p < .05$, $OR = .94$); multinomial regression ($B = -.22$, $p < .001$, $OR = .80$).	A lower dropout risk was predicted by higher patient-led synchrony, multinomial regression (early dropout: $OR = .63$, $p < .001$; late dropout: $OR = 1.07$, $p = .36$); Cox regression ($OR = .90$, $p = .02$); logistic regression ($OR = .88$, $p = .01$). Higher therapist-led synchrony predicted lower dropout risk using multinomial regression (early dropout: $OR = .70$, $p = .001$; late dropout: $OR = 1.08$, $p = .28$), but not Cox regression ($OR = .93$, $p = .13$), and logistic regression ($OR = .92$, $p = .10$).
Schoenherr, Paulick, Worrack, et al. (2019)	Only 3 out of 7 metrics significantly correlated with IIP: windowed cross-correlation by average ($r = -.27$, $p < .05$); windowed cross-lagged correlation (peak) by ratio ($r = -.26$, $p <$	No information about leading/following

	.05); windowed cross-lagged regression by ratio (r = -.28, p < .05). Others were insignificant, (rs = [-.20, .08], p > .05).	
Schoenherr, Strauss, Paulick, et al. (2021)	No synchronies were associated with social anxiety or social avoidance (rs = [-.10, .12], p > .05).	Therapist-led synchrony were positively correlated with LSAS anxiety at the beginning of therapy (r = .25, p < .05). Therapist-led synchrony was not significantly correlated with LSAS avoidance pre, and all LSAS post measures (rs = [-.10, .05], ps > .05). Patient-led synchrony was not associated with any of outcome measures (rs = [-.16, .19], ps > .05).
Schoenherr, Strauss, Stangier, et al. (2021)	Associations are only regarding patient/therapist leading	Higher therapist-led vocal synchrony predicted lower change in interpersonal problems (β = .37, p < .05), but was not associated with social anxiety and avoidance (βs = [.12, .26], ps > .05). Higher therapist-led vocal range synchrony was not associated with social anxiety and avoidance (βs = [-.31, -.13], ps > .05). Higher patient-led vocal synchrony predicted greater social anxiety and avoidance, βs = [.24, .34], ps < .05) but was not associated with other outcomes (βs = [.16, .23], ps > .05). Higher patient-led vocal range synchrony predicted lower social avoidance (β = –.29, p < .05). Patient- and therapist-led body movement synchrony were not associated with outcome measures (βs = [–.29, .27], ps > .05).
Shapira et al. (2022)	Higher LS in a treatment associate with a lower level of treatment outcome as reported by the patient at the beginning of the next session (Est. = 47.74, p < .05 95% CI [5.89, 89.58])	No information about leading/following
Zilcha-Mano et al. (2021)	Adjusting for the baseline SR, higher OT synchrony was associated with better psychotherapy outcome (B = -4.41, 95% CI [-7.46, -1.35], t[3] = 2.93, p = .006, R2 = 0.21).	No information about leading/following

Table S2: Studies examining the synchrony-outcome association

Note. SAD = Social Anxiety Disorder; MDD = Major Depressive Disorder; CBT = Cognitive Behavioral Therapy; IR = Imagery rescripting PDT = Psychodynamic Therapy; MEA = Motion Energy Analysis; EDA = Electrodermal Activity; SC = Skin Conductance; SCR = Skin Conductance Response; LSM = Linguistic Synchrony Measure; LS = Linguistic Synchrony; OT = Oxytocin; GAF = Global Assessment of Functioning; PHI = Personality Health Index; BSI = Brief Symptom Inventory; OQ = Outcome Questionnaire; HSCL = Hopkins Symptom Checklist Short Form; TAI = Test Anxiety Inventory; ORS = Outcome Rating Scale; IIP = Inventory of Interpersonal Problems; MAQ = Measure of Attachment Qualities; GSE = The General Self-Efficacy Scale; VEV = The Questionnaire to Assess Changes in Experiencing and Behavior; GAS = Goal Attainment Scaling; BPSR = Bern Post-Session Report; SCL-K-9 = Symptom Checklist; HSC = Hopkins Symptom Checklist; BDI = Beck Depression Inventory; LSAS = Liebowitz Social Anxiety Scale; HRSD = Hamilton Rating Scale for Depression. Regarding the data that were included in Atzil Slonim, the information, when reported, was taken from there. For the rest (e.g., updated search) the information was extracted directly from the articles. We included studies that examined the association between synchrony and the therapy outcome, and extracted information regarding only those associations (e.g., we excluded analysis reporting on the association between synchrony and attachment). We excluded studies that did only moderation analysis. We Excluded couple therapies (Avdi et. al 2022; Nyman-slonem et. al 2021; Tourunen et. al 2019). We excluded Zhang et. al (2018) because they reported on counselling rather than psychotherapy sessions. We excluded Sened et. al (2022) because the research is unpublished at the time of preparing this table, and Altenstein et. al (2013) because they investigated interpersonal microprocesses rather than synchrony. We excluded Zimmermann et. al (2021) because they used adolescents as participants. We excluded studies which did not include at least 5 patients (Ramseyer & Tschacher, 2016; Tschacher & Meier, 2020; Andreas et. al, 2021). Given that this is not the intention of this paper, the information provided in the Table is not part of a pre-registered systematic review, and cannot replace any of the systematic analyses of the literature.

References

Aafjes-van Doorn, K., & Porcerelli, J. H. (2020). Language style matching in psychotherapy: An implicit aspect of alliance. *Journal of Counseling Psychology*, *67*, 509–522. https://doi.org/10.1037/cou0000433

Altmann, U., Schoenherr, D., Paulick, J., Deisenhofer, A.-K., Schwartz, B., Rubel, J. A., Stangier, U., Lutz, W., & Strauss, B. (2020). Associations between movement synchrony and outcome in patients with social anxiety disorder: Evidence for treatment specific effects. *Psychotherapy Research, 30(5)*, 574–590. https://doi.org/10.1080/10503307.2019 .1630779

Bar-Kalifa, E., Prinz, J., Atzil-Slonim, D., Rubel, J., Lutz, W., & Rafaeli, E. (2019). Physiological synchrony and therapeutic alliance in an imagery-based treatment. *Journal of Counseling Psychology, 66(4)*, 508– 517. https://doi.org/10.1037/cou0000358

Cohen, K., Ramseyer, F. T., Tal, S., & Zilcha-Mano, S. (2021). Nonverbal synchrony and the alliance in psychotherapy for major depression: Disentangling state-like and trait-like effects. *Clinical Psychological Science, 9(4)*, 634-648. https://doi.org/10.1177/2167702620985294

Gernert, C. C., Nelson, A., Falkai, P., & Falter-Wagner, C. M. (2023). Synchrony in psychotherapy: High physiological positive concordance predicts symptom reduction and negative concordance predicts symptom aggravation. *International Journal of Methods in Psychiatric Research, e1978.*
https://onlinelibrary.wiley.com/doi/full/10.1002/mpr.1978

Paulick, J., Deisenhofer, A.-K., Ramseyer, F. T., Tschacher, W., Boyle, K., Rubel, J., & Lutz, W. (2018). Nonverbal synchrony: A new approach to better understand psychotherapeutic Psychotherapy Research 19 processes and drop-out. *Journal of Psychotherapy Integration, 28 (3)*, 367–384. https://doi.org/10.1037/int0000099

Paulick, J., Rubel, J. A., Deisenhofer, A.-K., Schwartz, B., Thielemann, D., Altmann, U., Boyle, K., Strauß, B., & Lutz, W. (2018). Diagnostic features of nonverbal synchrony in psychotherapy: Comparing depression and anxiety. *Cognitive Therapy and Research, 42(5)*, 539–551. https://doi.org/10. 1007/s10608-018-9914-9

Prinz, J., Boyle, K., Ramseyer, F. T., Kabus, W., Bar-Kalifa, E., & Lutz, W. (2021). Within and between associations of nonverbal synchrony in relation to Grawe's general mechanisms of change. *Clinical Psychology & Psychotherapy*, 28(1), 159–168. https://doi.org/10.1002/cpp.2498

Prinz, J., Rafaeli, E., Reuter, J. K., Bar-Kalifa, E., & Lutz, W. (2022). Physiological activation and co-activation in an imagery-based treatment for test anxiety. *Psychotherapy Research: Journal of the Society for Psychotherapy Research*, 32 (2), 238–248. https://doi.org/10.1080/10503307.2021. 1918353

Ramseyer, F. T. (2020). Exploring the evolution of nonverbal synchrony in psychotherapy: The idiographic perspective provides a different picture. *Psychotherapy Research: Journal of the Society for Psychotherapy Research, 30(5)*, 622–634. https://doi. org/10.1080/10503307.2019.1676932

Ramseyer, F. T., & Tschacher, W. (2011). Nonverbal synchrony in psychotherapy: Coordinated body movement reflects relationship quality and outcome. *Journal of Consulting and Clinical Psychology, 79(3)*, 284–295. https://doi.org/10.1037/ a0023419

Ramseyer, F. T., & Tschacher, W. (2014). Nonverbal synchrony of head- and body-movement in psychotherapy: Different signals have different associations with outcome. *Frontiers in Psychology, 5*. https://doi.org/10.3389/fpsyg.2014. 00979

Reich, C. M., Berman, J. S., Dale, R., & Levitt, H. M. (2014). Vocal synchrony in psychotherapy. *Journal of Social and Clinical Psychology, 33(5)*, 481–494. https://doi.org/10.1521/ jscp.2014.33.5.481

Reinecke, K. C. H., Joraschky, P., & Lausberg, H. (2022). Hand movements that change during psychotherapy and their relation to therapeutic outcome: An analysis of individual and simultaneous movements. *Psychotherapy Research*, 32(1), 104– 114. https://doi.org/10.1080/10503307.2021.1925989

Shapira, N., Atzil-Slonim, D., Tuval-Mashiach, R., & Shapira, O. (2022). Measuring linguistic synchrony in psychotherapy. *In Proceedings of the Eighth Workshop on Computational Linguistics and Clinical Psychology* (pp. 158-176). https://aclanthology.org/2022.clpsych-1.14/

Schoenherr, D., Paulick, J., Strauss, B. M., Deisenhofer, A.-K., Schwartz, B., Rubel, J. A., Lutz, W., Stangier, U., & Altmann, U. (2019). Nonverbal synchrony predicts premature termination of psychotherapy for social anxiety disorder. *Psychotherapy*, 56(4), 503–513. https://doi.org/10.1037/pst0000216

Schoenherr, D., Paulick, J., Worrack, S., Strauss, B. M., Rubel, J. A., Schwartz, B., Deisenhofer, A.-K., Lutz, W., Stangier, U., & Altmann, U. (2019). Quantification of nonverbal synchrony using linear time series analysis methods: Lack of convergent validity and evidence for facets of synchrony. *Behavior Research Methods*, 51(1), 361–383. https://doi.org/10.3758/ s13428-018-1139-z

Schoenherr, D., Strauss, B., Paulick, J., Deisenhofer, A.-K., Schwartz, B., Rubel, J. A., Boyle, K., Lutz, W., Stangier, U., & Altmann, U. (2021). Movement synchrony and attachment related anxiety and avoidance in social anxiety disorder. *Journal of Psychotherapy Integration*, 31(2), 163–179. https:// doi.org/10.1037/int0000187

Schoenherr, D., Strauss, B., Stangier, U., & Altmann, U. (2021). The influence of vocal synchrony on outcome and attachment anxiety/avoidance in treatments of social anxiety disorder. *Psychotherapy, 58(4)*, 510–522. https://doi.org/10.1037/ pst0000393

Zilcha-Mano, S., Goldstein, P., Dolev-Amit, T., and Shamay-Tsoory, S. (2021). Oxytocin synchrony between patients and therapists as a mechanism underlying effective psychotherapy for depression. *J. Consult. Clin. Psychol*. 89, 49–57. doi: 10.1037/ccp0000619