A Clinical Strategy to Strengthen the Connection Between Cognition, Emotion, and Behavior: From Philosophical Principles to Psychotherapy Practice

James E. Crum II¹

Published online: 12 November 2018
© The Author(s) 2018

Abstract

Helping clients gain insight into the ways in which their thinking influences the expression of emotional distress and maladaptive behavior is an important goal of CBT-based psychotherapies. However, efforts to establish this insight into the connection between dysfunctional beliefs and the consequences of having them (i.e., B–C connection) are often met with resistance. To address this issue in practice, therapists can draw upon certain existential principles underpinning CBT theory. More specifically, practitioners can use the concepts of existential freedom and responsibility, contained in the rational-humanistic view of rational-emotive behavior therapy, to complement current disputation strategies in the object to establish the B–C connection and, importantly, to facilitate cognitive change. Employing in practice what is postulated in theory in such cases is apt to provide individuals with a larger context of human agency in which to consider cognitive mediation.

Keywords Cognitive behavioral therapy (CBT) · B–C connection · Existentialism · Humanism · Rational-emotive behavior therapy (REBT) · Strategies · Cognitive change

What are the conditions of cognitive change in cognitive behavioral therapy (CBT)? From the outset it is clear that there are probably a number of factors involved in treating dysfunctional cognitive processes; there is likely not a single, necessary condition. The relative criticality of these factors, or mechanisms, to the process of psychotherapeutic change largely depends on the form of CBT under consideration. Different schools of CBT postulate different mechanisms of change (Austad 2009; David et al. 2010; Kuehlwein and Rosen 1993) and differ by their object to modify

✉ James E. Crum II
jecrumii@gmail.com

¹ Institute of Cognitive Neuroscience, University College London, 17 Queen Square, London WC1N 3AR, UK

the function or content of these mechanisms (Herbert and Cardaciotto 2005). The question posed above might, therefore, seem relative to the form of CBT under consideration, but there are some ideas regarding cognitive change to which almost all CBT-based treatments accord. Namely, there is a rudimentary emphasis in general CBT theory not only on the idea that certain types of cognition, such as appraisals and schemas, influence the expression of emotional distress and maladaptive behavior, but also on having individuals discern that their beliefs, emotions, and behaviors all relate in basic and complex ways (Beck 1976, 1995; Clark 1995; David et al. 2010; Ellis 1962, 1994). Importantly, it is this latter emphasis that, when realized in practice, facilitates a marked opportunity to achieve cognitive change.

In clinical practice, cultivating this insight in clients has been referred to as establishing the B–C *connection* (Dryden 2006). The idea behind establishing the B–C connection in clients and why it is important to progress in CBT is that dysfunctional cognitive processes are rendered especially susceptible to modification, or cognitive restructuring (see Clark 2014), when individuals are aware of the interrelationships between their thinking, feeling, and behaving: that is, when they have a strong B–C connection and are able to actively identify their beliefs about goal-incongruent events (David et al. 2010). However, establishing the B–C connection in practice can often be problematic. To help individuals acknowledge more responsibility for their states of functioning, therapists are frequently tasked with having to inculcate, and re-inculcate, individuals with the B–C connection (Ellis 2002; Ellis and Dryden 2007). For instance, clients typically agree—after some resistance—with the general idea that people have influence over their response selection in goal-relevant situations, and they can understand this principle in relation to their evaluations about recent life-episodes that have been under consideration with the therapist; however, seldom do they succeed in applying this understanding to future, novel events: A goal-incongruent situation occurs in the future, as they invariably will, and the client misattributes his emotional distress to factors relating to that event, such as to the actions of others.

Frequent recapitulation of the B–C connection suggests that it is sometimes not being sufficiently established, which could ultimately impact the degree to which clients achieve cognitive change. Employing psychotherapeutic strategies that improve the strength and speed at which the B–C connection is instilled might address this issue. The present paper considers the possibility that, strategically, it is key for practitioners to draw upon the humanistic-existential principles underpinning CBT theory. More specifically, appealing to the principles of human freedom and responsibility might help build a more robust, conceptual foundation on which to cultivate the B–C connection in clinical practice. That is, it provides a broader context of human nature in which individuals can discern their role in generating emotional distress. Consequently, this strategy might facilitate cognitive change across a range of CBT-based schools of psychotherapy.

The Rational-Humanistic View

Although there are a number of CBT-based therapies that have long appreciated aspects of existentialism, rational-emotive behavior therapy (REBT) is an exemplar of one which explicitly acknowledges the existential-humanistic underpinnings of its general theory (see Ellis 1994); thus, it is an excellent CBT theory upon whose tenets practitioners can draw to better help clients understand and accept the principle of cognitive mediation (i.e., B–C connection). In brief, REBT is the first, classical form of CBT (Ellis 1958). In addition, REBT has long been shown to be an efficacious form of psychotherapy (e.g., Engels et al. 1993; Lyons and Woods 1991; Smith and Glass 1977; Wampold et al. 1977). At the core of its theory is the postulation of a cognitive-vulnerability model (on which many other forms of CBT are also predicated) according to which certain cognitive processes are etiopathogenic (David et al. 2010). More specifically, dysfunctional cognitive processes interact with stressful environmental, or psychological, events to generate unhealthy emotional, cognitive, and behavioral responses (David and Szentagotai 2006). However, unique to REBT is the idea that the pathogenesis of psychopathological symptoms is largely the product of irrational belief processes, which are a type cognitive appraisal (David et al. 2002; see Scherer et al. 2001). Irrational beliefs are a valuation of the impact of events on one's goals and personal well-being, but are distinct from other types of appraisal processes because their content is inherently illogical, unempirical, and non-pragmatic, which consequently facilitates dysfunction such as emotion dysregulation (see David et al. 2010 for a contemporary account of irrational belief processes).

Importantly, REBT holds that people are ultimately responsible for whether these dysfunctional cognitive processes are maintained or rejected in everyday life. The grounds for this proposition can be traced to the existential roots of REBT theory: to what Ellis (1994) referred to as the rational-humanistic view. The foundations of REBT theory include not only a position on life and the world that emphasizes logical consistency and empirical facts in the pursuit of cultivating rational beliefs but also a position on the liberty and, indeed, prerogative of human beings to choose the precepts by which they guide their behavior and to decide the meaning(s) of their lives; it is an amalgamation of both reason and meaning. Ellis (1994) described a list of ten existential concepts to which REBT theory is markedly sympathetic, and perhaps the most critical of these concepts are of human freedom and responsibility. According to these ideas, human beings exist prior to any concept by which they can define themselves; they have no natural teleology—i.e., purpose (Sartre 1943). A well-known example in the existential literature is that the function of scissors is to cut, but unlike scissors, the essence of human beings is not predetermined. Instead, people are free to transcend their basic existence—the nothingness from which this existence came—and to create or appropriate the meaning(s) of their lives (Sartre 1943, 1957, 1987). The corollary of this basic freedom is that people have the autonomy to adopt or renounce the many meanings and perspectives of the world in which they find themselves living. In short, there are no objective grounds for

determining the value or significance of one's life; rather, life is a creative project undertaken on the part of the individual (Frankl 1946, 1986; Nietzsche 1995, 2011); for a more comprehensive discussion on existentialism, see Guignon and Pereboom (2001).

REBT theory has also long propounded that innate fallibility is an important feature of human nature in addition to existential freedom (Ellis 1962). Human fallibility involves the propensity to sometimes fail at important tasks as well as encompasses the inclination to uncritically adopt tenuous ideas early in life, especially the ones with which people are rigorously indoctrinated. Although individuals are not responsible for this sense of fallibility, their existential liberties render them responsible for whether they critically challenge or continue to credulously accept erroneous ideas once subscribed to them. Not reflecting, in a Cartesian sense, upon the veracity of that which one holds as true is itself a choice, as the mind has available to it the faculties to enact such epistemological reasoning (James 1890/2012). Interestingly, thinking about one's thinking in this way is likely served by metacognitive processes (see Wells and Purdon 1999). What is more is that the ability of clients to discern this sense of responsibility and to incorporate this knowledge into their thinking about emotions and behavior is markedly important to the process of cognitive change in CBT. It would be extremely difficult in everyday life to explicitly challenge a dysfunctional cognition if one did not know to look for one after experiencing the consequences of having it. Therefore, practitioners make a point to assist clients in understanding how their beliefs mediate the relationship between goal-relevant events and emotional, behavioral responses: that is, to make the B–C connection (Dryden 2006).

Specifically, practitioners aim to establish the B–C connection early in the process of disputing irrational beliefs (DIBS; Beal et al. 1996; Ellis and Dryden 2007); in CBT more generally, this is early in the process of cognitive reconstruction (see Clark 2014). More particularly, REBT practitioners help to identify beliefs about stressful environmental events, to distinguish the irrational from rational aspects of these beliefs, and to empirically, logically, and pragmatically challenge the irrational ones. In consequence to DIBS, individuals renounce their irrational beliefs and form rational ones, facilitating emotional and behavioral responding that is more functional (David et al. 2005). Unfortunately, this process is impeded from the outset if clients fail to concede to the principle of cognitive mediation. In these situations, it becomes requisite to challenge clients' beliefs about how emotions and behaviors are engendered in human beings, and there are a number of strategies by which to carry out this type of disputation: empirically, logically, and pragmatically. For example, Dryden (2006) explicated that it is frequently useful to appeal to the idea that there would be a complete lack of variance in emotional responding across people if their evaluations about the world, self, and others held no influence over such functioning. This logic is typically helpful in disputing the idea that thinking has no role in eliciting emotions, with clients eventually understanding cognitive mediation—at least at an intellectual level—and being able to make the B–C connection in the context of the irrational belief(s) under consideration in the current therapy session. However, there are often failures in the future to employ the B–C connection to other contexts or novel situations, whereby clients misattribute their mental

states entirely to activating events (Sarracino et al. 2017). This suggests that the B–C connection could be more strongly established. The process of cognitive change is almost certainly expedited if clients can succeed at making the B–C connection when goal-incongruent events occur in their everyday lives.

A construct as important as the B–C connection probably requires for its establishment not only the aforementioned disputation tactics but also existential-humanistic approaches that dispute resistance through psychoeducation. Researchers have recently outlined a number of parallels between CBT and existential-phenomenological psychotherapy, suggesting that features of the latter might improve the effectiveness of current CBT-based treatment strategies (e.g., Bornstein 2004; Corrie and Milton 2000; Hickes and Mirea 2012; Hutchinson and Chapman 2005). While this remains to be demonstrated, it might be enough to consider not what existential-phenomenological therapies might add to CBT, but what the existential principles already rooted in CBT theory might add to its clinical practice. Frankly, existential principles are seldom the subject of extensive discussion in the practice of CBT; they are covered when pertinent, but sometimes are perhaps not due to a lack of erudition on the part of the clinician. It is worth noting that this is an example—albeit minor—of a theory-procedure gap (see Reese et al. 2013). Nonetheless, in so far as the B–C connection is not to remain transient, at least some basic psychoeducation of the human-existential condition will need to be elucidated. More specifically, the rational-humanistic view can inform clinical practice in that learning of a larger context of human agency and responsibility in which to view the B–C connection might better cultivate it and, consequently, promote the process of cognitive change.

For instance, take a situation in which a client attributes recent emotional distress to an activating event, denying any relation between her thoughts about the event and the resultant distress. In this case, instilling in the client that there is such a relation is important before proceeding to dispute the validity of her irrational thoughts, as discussed above. Here, the practitioner can draw on the rational-humanistic view to dispute the idea that no cognitive mediation occurred. Particularly, it can be carefully explicated that, for example, the responsibility one bears for engaging in maladaptive behaviors and feeling unhealthy emotions is only a portion of the aggregate responsibility held as a human being, on the whole. The idea behind appealing to existential aspects of the human condition is that it provides a more encompassing framework in which to contemplate cognitive mediation. It becomes easier to acknowledge one's role in generating emotional distress if one already accepts a larger responsibility for adopting, retaining, and rejecting any type of idea (e.g., descriptive propositions that are not affective valuations of goal-relevant events) and, particularly, for creating the meaning(s) of one's life.

Helping clients to grasp this scope of understanding can also be useful outside the context of a psychotherapy session. Namely, their newly cultivated rational-humanistic views behind the B–C connection could improve their ability to phenomenologically identify dysfunctional cognitions (e.g., irrational beliefs) in everyday life: for example, to know to introspect about their thinking when experiencing emotional distress and, then, to determine if their thinking involved irrational belief processes such as demandingness, catastrophizing, frustration intolerance, or global evaluation (see DiGiuseppe 1996). That is, cultivating the rational-humanistic view in practice might facilitate in

the real-world the metacognitive processes that are potentially involved in activating the B–C connection prior to employing self-imposed disputation procedures. Future research could explore this possibility.

Interestingly, that people can independently make the B–C connection outside psychotherapeutic settings suggests that, like dysfunctional and functional cognitions, the B–C connection is a quantifiable cognitive process. While the present paper encourages the psychoeducation of the rational-humanistic view as a means by which to better establish the B–C connection, it suggests also that it might be of interest to researchers to assess the plausibility of the B–C connection as construct. There is a great deal of evidence supporting the interrelationships between dysfunctional cognitive processes and the emotional and behavioral consequences of having them (see David et al. 2010), but no studies to date have been conducted to investigate an empirical grounding for the cognitive operation by which individuals reach a metacognitive understanding of these relationships. This is surprising considering the relevance of the B–C connection to cognitive change in CBT. Operationally defining and empirically corroborating the B–C connection could potentially be clinically relevant. For example, clinicians could periodically monitor changes in the strength of clients' B–C connections as well as examine the influence of this insight on cognitive change outcomes. Future research might begin with developing a psychometric-based, self-report measure using factor analysis, or the B–C connection could be modeled in a parallel distributed processing, connectionist neural network model (see Tryon 2014).

However, there are a few implications worth considering. First, there is a possibility that clients will initially reject the type of psychoeducation under consideration if their worldviews are in marked contrast to humanism. In this case, practitioners can employ typical strategies of disputation to target clients' erroneous views about the human condition; perhaps the above mentioned example of scissors might be useful. Second, there is a risk of a theory-procedure gap if practitioners fail to brush up on—as it were—the philosophical underpinnings of CBT theory (Reese et al. 2013). In this case, the process of cognitive change might become delayed if practitioners neglect the option to further psycho-educate clients when there is a strong resistance to establishing the B–C connection. Lastly, the present paper has called for further inquiry into the B–C connection itself. Reflection upon the relations between one's thoughts and emotional responses is carried out nowhere else than in the minds of clients, suggesting that this potentially metacognitive process can be studied as other clinically-relevant phenomena are. Improving our understanding of how the mind discerns its own mediation in the generation of emotional distress and maladaptive behavior might be valuable to achieving a more comprehensive account of the mechanisms underpinning the process of cognitive change, and it might also enhance the degree to which forms of CBT are evidence-based.

Psychoeducation as a Disputation Strategy

There are conceptual differences between the various forms of CBT, but most accord to the idea that helping clients develop insight into the ways in which their thinking influences their emotions and behaviors is crucial to the process of deconstructing

dysfunctional cognitions and cultivating functional ones (i.e., cognitive reconstruction). One reason is that dysfunctional cognitive processes are more susceptible to change when individuals acknowledge that their brains mediate the relationship between goal-incongruent events and emotional and behavioral responding (David et al. 2010). In other words, achieving cognitive change in therapy is a difficult process—for example, disputing dysfunctional appraisals likely places great demands on explicit, controlled thought (Braunstein et al. 2017)—and this becomes exceedingly difficult when individuals do not, from the outset, have a strong B–C connection: when they do not accept that appraisal processes are corrigible and, consequently, neglect to identify the processes associated with goal-incongruent events and emotional distress. Moreover, in clinical practice, there often is resistance to establishing the B–C connection despite the best efforts of CBT practitioners (e.g., Ellis 2002; Ellis and Dryden 2007). There is a considerable risk of this type of resistance impacting the larger project of cognitive restructuring in therapy. That is, dysfunctional cognitive processes will not be as susceptible to change if only a weak B–C connection has been established; a weak connection is evidenced by future misattributions of emotional distress to novel, or contextually different, activating events. Therefore, there is reason to augment current disputation strategies, or verbal intervention techniques, to improve clients' thinking concerning the interrelationships between goal-incongruent events, affective evaluations, and emotional and behavioral responding.

The rational-humanistic view (Ellis 1962) of REBT theory can inform the clinical practice of CBT-based psychotherapies to potentially address this issue. More specifically, to better cultivate the B–C connection, practitioners might recognize the importance of informing the corrigibility of clients' dysfunctional evaluations about the world, self, and others with not only logic, empiricism, and pragmatics but also the larger context of the human-existential condition. That is, clinicians can draw on the existential underpinnings of CBT to more thoroughly re-inculcate the B–C connection when typical strategies fail to so instill the principle of cognitive mediation that clients are able to consistently identify their evaluations during or after goal-relevant situations. More specifically, this involves psycho-educating clients to help them discern the always present freedom to renounce or adopt a multitude of perspectives and values in the world, as well as the responsibility they bear for retaining or rejecting the ideas to which they already subscribe, and understand that these existential aspects of being a human being means that every person has liberty to create or appropriate the meaning(s) of one's life. This larger context of human agency might render it easier for clients in everyday life to understand how their thinking influences their emotions and behavior. In particular, they will have in place an inferential schema that because all people are free to determine or create what brings meaning to their lives, all people are, therefore, responsible for the meanings they ascribe to instances of goal obstruction.

A Hypothetical Case

The context of this hypothetical case is that the B–C connection has previously been established in prior sessions, albeit weakly, because in the session under consideration the client clearly misattributes his depressed feelings. Namely, the client

recently received a visit from a childhood friend who lives in a different state. This friend moved there a few years ago to pursue a better job. In short, the client found the visit highly enjoyable, but afterward felt quite down. He keenly recognized that the visit reminded him of a similar opportunity he once had to move out of the town in which he grew up and to work in an area of industry in which he was more interested; however, he makes the mistake of thinking that his depreciated feelings are due to him not taking that opportunity. Clearly, disputation of his negative, global evaluations about himself is requisite, including the demand that he *should* of chose otherwise in the past. But the effects of disputing these irrational belief processes will not likely be as large in so far as the client does not have a stronger B–C connection. Here, there is an opportunity to psycho-educate the client to instrumentally dispute the idea that his emotional distress is the direct resultant of not pursuing this vocational goal.

Therefore, the practitioner focuses on building a rational-humanistic context of cognitive mediation before disputing any irrational belief processes. Specifically, the practitioner discusses the existential principle of freedom by explaining that all people are born into particular historical epochs over which they have entirely no control. One begins existing at an arbitrary period in time as simply a being-in-the-world, and in that world there already exist a multitude of social and cultural values and perspectives and, moreover, one is constantly free to transcend their basic existence—as it were—by adopting the ideas that bring meaning to one’s life. It is made clear to the client that, conversely, people are free to renounce these ideas and, consequently, they are responsible for whether or not they continue to hold or decide to reject the beliefs they might have incredulously acquired. It is worth noting that, here, unconditional acceptance becomes relevant to strengthening the B–C connection, because it is important that clients accept their fallibility in having uncritically subscribed to perhaps a great many tenuous ideas in the world. The client accepts these concepts and embraces the idea that people are free and responsible for creating the meaning(s) of their lives. From here it is a small step to tie in the corollary that, therefore, people are free and responsible for the meanings they ascribe to the events that occur in their lives—that people actively value the significance of goal-relevant events in everyday life. The client now discerns that there is a mediating factor in existing in the world: himself, and, more specifically, that he has mediated the relationship between his recent emotional distress and his not pursuing a desired job. From here the therapist continues as normal in assisting the client to identify, and subsequently reject, the dysfunctional appraisal processes he has been maintaining about this goal-incongruent event.

Conclusions

In sum, reinforcing the rational-humanistic view in practice is a potentially efficacious strategy by which to cultivate the B–C connection and reduce resistance to cognitive change, and it brings clinical practice closer to its theoretical underpinnings. Thus, this is not an existential-phenomenological technique whose object is to facilitate the B–C connection in CBT; rather, employing the rational-humanistic

view in practice is a form of psychoeducation by which clients' views about cognitive mediation are disputed. Instead of using logic or counterfactuals, for example, to help clients re-discern cognitive mediation, clinicians can offer a larger, contextual foundation on which to establish the B–C connection: the existential-human condition. Showing clients that just as they are always free to create and refine the meaning of their lives, they are free to appraise and reappraise the meaning of goal-incongruent events. Therefore, the rational-humanistic view might be important to facilitating the process of cognitive change. This approach to cultivating the B–C connection stands to promote in clients the ability to identify the role of their thinking in emotional distress in the future and, in the long run, help them deal with everyday situations in which the universe does not conform to the normativity they have imposed on it.

Compliance with Ethical Standards

Conflict of interest The author declares no conflicts of interest and the paper received no external funding.

Open Access This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.

References

- Austad, C. S. (2009). *Counseling and psychotherapy today: Theory, practice, and research*. New York: McGraw-Hill.
- Beal, D., Kopec, A. M., & DiGiuseppe, R. (1996). Disputing clients' irrational beliefs. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 14, 215–229.
- Beck, A. T. (1976). *Cognitive therapy and the emotional disorders*. Oxford: International Universities Press.
- Beck, J. S. (1995). *Cognitive therapy: Basics and beyond*. New York, NY: Guildford.
- Bornstein, R. F. (2004). Integrating cognitive and existential treatment strategies in psychotherapy with dependent patients. *Journal of Contemporary Psychotherapy*, 1, 1–2. <https://doi.org/10.1007/s10879-004-2525-7>.
- Braunstein, L. M., Gross, J. J., & Ochsner, K. N. (2017). Explicit and implicit emotion regulation: A multi-level framework. *Social Cognitive and Affective Neuroscience*, 12(10), 1545–1557. <https://doi.org/10.1093/scan/nsx096>.
- Clark, D. A. (1995). Perceived limitation of standard cognitive therapy: A reconsideration of efforts to revise Beck's theory and therapy. *Journal of Cognitive Psychotherapy*, 9, 153–172.
- Clark, D. A. (2014). Cognitive restructuring. In *The wiley handbook of cognitive behavioral therapy* (Vols. 1–3, pp. 23–44) Wiley-Blackwell. <http://search.proquest.com/docview/1515988253?accountid=26172>.
- Corrie, S., & Milton, M. (2000). The relationship between existential-phenomenological and cognitive-behaviour therapies. *European Journal of Psychotherapy & Counselling*, 3(1), 7–24. <https://doi.org/10.1080/13642530050078538>.
- David, D., Lynn, S., & Ellis, A. (2010). *Rational and irrational beliefs: Research, theory, and clinical practice*. London: Oxford University Press.
- David, D., Schnur, J., & Belloiu, A. (2002). Another search for the “hot” cognitions: Appraisal, irrational beliefs, attributions, and their relation to emotion. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 20, 93–132.

- David, D., & Szentagotai, A. (2006). Cognition in cognitive-behavioral psychotherapies: Toward an integrative model. *Clinical Psychology Review*, 26, 284–298.
- David, D., Szentagotai, A., Eva, K., & Macavei, B. (2005). A synopsis of rational emotive behavior therapy (REBT): fundamental and applied research. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 23, 175–221.
- DiGiuseppe, R. (1996). The nature of irrational and rational beliefs: Progress in rational- emotive behavior theory. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 14, 5–28.
- Dryden, W. (2006). *First steps in REBT: A guide to practicing REBT in peer counseling*. New York: Albert Ellis Institute.
- Ellis, A. (1958). Rational psychotherapy. *Journal of General Psychology*, 59, 35–49.
- Ellis, A. (1962). *Reason and emotion in psychotherapy*. New York: Stuart.
- Ellis, A. (1994). *Reason and emotion in psychotherapy* (Rev ed.). Secaucus, NJ: Birscej Lane.
- Ellis, A. (2002). *Overcoming resistance*. New York: Springer.
- Ellis, A., & Dryden, W. (2007). *The practice of rational emotive behavior therapy* (2nd ed.). New York, NY: Springer.
- Engels, G. I., Garnefski, N., & Diekstra, R. F. W. (1993). Efficacy of rational-emotive therapy: A quantitative analysis. *Journal of Consulting and Clinical Psychology*, 61, 1083–1091.
- Frankl, V. E. (1946). *Man's search for meaning*. Boston: Beacon Press.
- Frankl, V. E. (1986). *General existential analysis. The doctor of the soul* (4th ed.). New York: Vintage Books.
- Guignon, C. B., & Pereboom, D. (2001). *Existentialism: Basic writings*. Indianapolis: Hackett Publishing. (Revised).
- Herbert, J. D., & Cardaciotto, L. (2005). An acceptance and mindfulness-based perspective on social anxiety disorder. In S. M. Orsillo & L. Roemer (Eds.), *Acceptance and mindfulness-based approaches to anxiety: Conceptualization and treatment*. New York: Springer.
- Hickes, M., & Mirea, D. (2012). Cognitive behavioural therapy and existential-phenomenological psychotherapy. *Existential Analysis: Journal of the Society for Existential Analysis*, 23(1), 15–31.
- Hutchinson, G. T., & Chapman, B. P. (2005). Logotherapy-enhanced REBT: An integration of discovery and reason. *Journal of Contemporary Psychotherapy*, 35, 145–155. <https://doi.org/10.1007/s10879-005-2696-x>.
- James, W. (2012). *The principles of psychology*. New York, NY: Dover Publications.
- Kuehlwein, K. T., & Rosen, H. (Eds.). (1993). *Cognitive therapies in action: Evolving innovative practice*. San Francisco: Jossey-Bass.
- Lyons, L. C., & Woods, P. J. (1991). The efficacy of rational-emotive therapy: A quantitative review of the outcome research. *Clinical Psychology Review*, 11, 357–369.
- Nietzsche, F. (1995). *Thus spoke zarathustra*. New York, NY: The Modern Library.
- Nietzsche, F. (2011). *Human, all too human*. Rockville: Wildside Press.
- Reese, H. E., Rosenfield, E., & Wilhelm, S. (2013). Reflections on the theory-practice GAP in cognitive behavior therapy. *Behavior Therapy*. <https://doi.org/10.1016/j.beth.2013.06.001>.
- Sarracino, D., Dimaggio, G., Ibrahim, R., Popolo, R., Sassaroli, S., & Ruggiero, G. M. (2017). When REBT Goes Difficult: Applying ABC-DEF to Personality Disorders. *Journal of Rational—Emotive and Cognitive—Behavior Therapy*, 35(3), 278–295. <https://doi.org/10.1007/s10942-016-0258-7>.
- Sartre, P. J. (1943). *Being and nothingness*. New York: Philosophical Library Inc.
- Sartre, P. J. (1957). *Existentialism as a humanism*. Yale: University Press.
- Sartre, P. J. (1987). *Existentialism and human emotions*. New York, NY: Citadel Press.
- Scherer, K. R., Schorr, A., & Johnstone, T. (2001). *Appraisal processes in emotion*. New York: Oxford University Press.
- Smith, M. L., & Glass, G. V. (1977). Meta-analysis of psychotherapy outcome studies. *American Psychologist*, 32, 752–760.
- Tryon, W. (2014). *Cognitive neuroscience and psychotherapy: Network principles for a unified theory*. New York, NY: Academic Press.
- Wampold, B. E., Mondin, G. W., Moody, M., Stich, F., Benson, K., & Ahn, H. (1977). A meta-analysis of outcome studies comparing bona fide psychotherapies: Empirically, “All must have prizes”. *Psychological Bulletin*, 3, 203–215.
- Wells, A., & Purdon, C. (1999). *Metacognition and cognitive behaviour therapy*. Chichester: Wiley.