Wired for Peace — Resources Guide

Principle 2: Learn to Look at Conflict As an Opportunity (pp. 41–76)

This resources guide pairs key concepts and claims from Principle 2 of *Wired for Peace* by Jeremy Pollack, Ph.D., with peer-reviewed journal articles and professionally published academic books that support each idea. Citations are formatted in APA 7th edition. Each row identifies the line or concept from the book, the page number, the supporting source, and a brief note on relevance.

Quote from Principle 2 (with page number)	Supporting peer-reviewed citation (APA + link)
"Welcome to the world of escalation. We've all been there. . . . But escalated conflict is different than just your every-day, run-of-the-mill conflict." *p. 1–2*	De Dreu, C. K. W., & Gelfand, M. J. (2008). Conflict in the workplace: Sources, functions, and dynamics across multiple levels of analysis. In C. K. W. De Dreu & M. J. Gelfand (Eds.), *The psychology of conflict and conflict management in organizations* (pp. 3–54). Lawrence Erlbaum. https://psycnet.apa.org/record/2008-04692-001 *Relevance:* Foundational chapter distinguishing routine task conflict from escalated relational conflict and its differing effects on cognition, affect, and behavior.
"We may not want conflict. But we need it. We need it to grow, to learn, to really live." *p. 41*	De Dreu, C. K. W. (2006). When too little or too much hurts: Evidence for a curvilinear relationship between task conflict and innovation in teams. *Journal of Management, 32*(1), 83–107. https://doi.org/10.1177/0149206305277795 https://doi.org/10.1177/0149206305277795 *Relevance:* Empirical support for the idea that moderate, task-focused conflict promotes learning and innovation, while too little or too much suppresses both.
"We want to activate our approach mechanisms rather than our avoid response, and we want to approach conflict with curiosity and creative intention." *p. 42*	Elliot, A. J., & Thrash, T. M. (2002). Approach-avoidance motivation in personality: Approach and avoidance temperaments and goals. *Journal of Personality and Social Psychology, 82*(5), 804–818. https://doi.org/10.1037/0022-3514.82.5.804 https://doi.org/10.1037/0022-3514.82.5.804 *Relevance:* Foundational paper establishing approach and avoidance temperaments as basic motivational dimensions, including their downstream effects on goals and behavior.

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"Conflict caused a withdraw of positive attention, love, and acceptance from his primary caregivers. . . . As an adult, Joe continued the pattern, mostly unconsciously, of always trying to be pleasant." *p. 44*	Cassidy, J., & Kobak, R. R. (1988). Avoidance and its relation to other defensive processes. In J. Belsky & T. Nezworski (Eds.), *Clinical implications of attachment* (pp. 300–323). Lawrence Erlbaum. https://psycnet.apa.org/record/1989-97138-009 *Relevance:* Classic theoretical paper on how early attachment experiences shape avoidant defensive strategies that persist into adulthood and constrain emotional engagement.
"Multi-trial or slow learning comprises most of our conditioning. . . . The same goes for Pavlov's dogs: they required repeated pairings (i.e., multiple trials) to learn to salivate when exposed to previously neutral stimuli." *p. 48*	Pavlov, I. P. (1927). *Conditioned reflexes: An investigation of the physiological activity of the cerebral cortex* (G. V. Anrep, Trans.). Oxford University Press. https://psycnet.apa.org/record/1927-02531-000 *Relevance:* The original published account of classical conditioning, including the multi-trial pairing procedure that produced the conditioned salivation response.
"operant conditioning occurs when new behaviors or responses are learned through reinforcement (which increases behavior) or punishment (which decreases behavior), based on the consequences of an action." *p. 49*	Skinner, B. F. (1938). *The behavior of organisms: An experimental analysis*. Appleton-Century. https://psycnet.apa.org/record/1939-00056-000 *Relevance:* Skinner's seminal monograph introducing operant conditioning and the principles of reinforcement and punishment that shape voluntary behavior.
"our brain's memory functionality is generally thought of in three main categories: sensory, short-term, and long-term memories." *p. 50–51*	Atkinson, R. C., & Shiffrin, R. M. (1968). Human memory: A proposed system and its control processes. In K. W. Spence & J. T. Spence (Eds.), *The psychology of learning and motivation: Advances in research and theory* (Vol. 2, pp. 89–195). Academic Press. https://doi.org/10.1016/S0079-7421(08)60422-3 https://doi.org/10.1016/S0079-7421(08)60422-3 *Relevance:* The classic Atkinson–Shiffrin multi-store model that introduced the sensory, short-term, and long-term memory framework still used in modern textbooks.
"Long-term memories are further categorized into explicit and implicit memories. . . . Explicit memories about facts and concepts are called semantic memories, whereas those	Squire, L. R., & Dede, A. J. O. (2015). Conscious and unconscious memory systems. *Cold Spring Harbor Perspectives in Biology, 7*(3), a021667. https://doi.org/10.1101/cshperspect.a021667

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about particular events and experiences are called episodic memories." *p. 51–52*	https://doi.org/10.1101/cshperspect.a021667 *Relevance:* Comprehensive review of the modern taxonomy of memory: declarative (explicit; semantic and episodic) versus nondeclarative (implicit; procedural, priming, conditioning).
"These emotionally significant memories are often encoded with the help of the amygdala, which tags them as emotionally important, and the hippocampus, which stores their contextual details." *p. 52*	McGaugh, J. L. (2004). The amygdala modulates the consolidation of memories of emotionally arousing experiences. *Annual Review of Neuroscience, 27*, 1–28. https://doi.org/10.1146/annurev.neuro.27.070203.144157 https://doi.org/10.1146/annurev.neuro.27.070203.144157 *Relevance:* Authoritative review of how the basolateral amygdala modulates hippocampal memory consolidation for emotionally arousing experiences via stress hormones and noradrenergic activation.
"This cycle . . . forms what is called our internal working model. This concept originates in psychologist John Bowlby's attachment theory and describes a system of neural representations formed by past experiences." *p. 53*	Bowlby, J. (1969/1982). *Attachment and loss: Vol. 1. Attachment* (2nd ed.). Basic Books. https://psycnet.apa.org/record/1969-15298-000 *Relevance:* The foundational volume in which Bowlby introduces attachment theory and the concept of "internal working models" as mental representations of self, others, and relationships.
"Internal working model . . . a system of neural representations formed by past experiences that encode: what to expect from the world . . . how others typically behave . . . and who I am." *p. 53*	Bretherton, I., & Munholland, K. A. (2008). Internal working models in attachment relationships: Elaborating a central construct in attachment theory. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (2nd ed., pp. 102–127). Guilford Press. https://psycnet.apa.org/record/2008-13837-005 *Relevance:* Authoritative chapter elaborating Bowlby's internal working model construct, including its components (self, other, relationship) and its role across the lifespan.
"Neuroplasticity refers to the brain's ability to change its structure and function in response to experience, learning, or injury."	Kolb, B., & Whishaw, I. Q. (1998). Brain plasticity and behavior. *Annual Review of Psychology, 49*, 43–64. https://doi.org/10.1146/annurev.psych.49.1.43 https://doi.org/10.1146/annurev.psych.49.1.43

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p. 54	*Relevance:* Widely cited review establishing neuroplasticity as the mechanism by which experience and learning reshape neural structure and function across the lifespan.
“These associations are encoded via Hebbian learning . . . which is described as synaptic plasticity and often paraphrased as ‘Neurons that fire together, wire together.’” *p. 55*	Hebb, D. O. (1949). *The organization of behavior: A neuropsychological theory*. Wiley. https://pure.mpg.de/rest/items/item_2346268_3/component/file_2346267/content *Relevance:* Hebb’s original monograph proposing that simultaneous neural activation strengthens the synapses between cells—the principle now known as Hebbian learning.
“This principle is believed to be implemented biologically via a process called long-term potentiation (LTP), which is particularly prominent in brain areas critical for learning and memory, such as the hippocampus, amygdala, and prefrontal cortex.” *p. 55*	Bliss, T. V. P., & Lømo, T. (1973). Long-lasting potentiation of synaptic transmission in the dentate area of the anaesthetized rabbit following stimulation of the perforant path. *The Journal of Physiology, 232*(2), 331–356. https://doi.org/10.1113/jphysiol.1973.sp010273 https://doi.org/10.1113/jphysiol.1973.sp010273 *Relevance:* The landmark experiment that first demonstrated long-term potentiation (LTP) in the hippocampus, providing the cellular basis for Hebbian synaptic plasticity.
“dopaminergic circuits in the basal ganglia and prefrontal cortex update to increase or decrease the likelihood of that behavior” (in operant conditioning). *p. 55*	Schultz, W. (2016). Dopamine reward prediction-error signalling: A two-component response. *Nature Reviews Neuroscience, 17*(3), 183–195. https://doi.org/10.1038/nrn.2015.26 https://doi.org/10.1038/nrn.2015.26 *Relevance:* Schultz’s influential review of how dopaminergic neurons compute reward prediction errors that drive operant learning in the basal ganglia and prefrontal cortex.
“acetylcholine is released, which increases signal-to-noise ratio in the cortex . . . norepinephrine is released by the locus coeruleus, enhancing alertness and emotional salience; dopamine is released to signal novelty.” *p. 56*	Sara, S. J. (2009). The locus coeruleus and noradrenergic modulation of cognition. *Nature Reviews Neuroscience, 10*(3), 211–223. https://doi.org/10.1038/nrn2573 https://doi.org/10.1038/nrn2573 *Relevance:* Comprehensive review of the locus coeruleus–noradrenergic system’s role in arousal, attention, and the gating of synaptic plasticity that underlies emotional learning.

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“cortisol is released through the HPA axis, flooding the system, which can either strengthen or impair encoding of emotional memories, particularly by modulating amygdala-hippocampal interactions.” *p. 56*	Roozendaal, B., McEwen, B. S., & Chattarji, S. (2009). Stress, memory and the amygdala. *Nature Reviews Neuroscience, 10*(6), 423–433. https://doi.org/10.1038/nrn2651 https://doi.org/10.1038/nrn2651 *Relevance:* Authoritative review of how glucocorticoids and adrenergic activation interact within the basolateral amygdala to modulate hippocampal memory consolidation.
“the neural circuit changes consolidate and solidify during upregulation of the parasympathetic system—during deep sleep and nonsleep deep rest. This is when the actual reconfiguration and rewiring of the brain occurs.” *p. 56*	Diekelmann, S., & Born, J. (2010). The memory function of sleep. *Nature Reviews Neuroscience, 11*(2), 114–126. https://doi.org/10.1038/nrn2762 https://doi.org/10.1038/nrn2762 *Relevance:* Foundational review of sleep-dependent memory consolidation, including the role of slow-wave sleep in stabilizing newly encoded memories and reorganizing neural circuits.
“brain-derived neurotrophic factor, is released, supporting synaptic growth, dendritic branching, and neural repair.” *p. 56*	Tononi, G., & Cirelli, C. (2014). Sleep and the price of plasticity: From synaptic and cellular homeostasis to memory consolidation and integration. *Neuron, 81*(1), 12–34. https://doi.org/10.1016/j.neuron.2013.12.025 https://doi.org/10.1016/j.neuron.2013.12.025 *Relevance:* Synaptic homeostasis hypothesis describing how BDNF and slow-wave activity during sleep support synaptic renormalization and memory consolidation.
“Our brain’s perception of our own internal state is again called interoception, and this neural loop (i.e., stress response in reaction to an internal state of stress) amplifies or compounds the stress response . . . often referred to as anxiety sensitivity.” *p. 57*	Paulus, M. P., & Stein, M. B. (2010). Interoception in anxiety and depression. *Brain Structure and Function, 214*(5–6), 451–463. https://doi.org/10.1007/s00429-010-0258-9 https://doi.org/10.1007/s00429-010-0258-9 *Relevance:* Influential model linking interoceptive processing in the insula and anterior cingulate cortex to anxiety sensitivity and the maintenance of stress amplification loops.
“reasonable optimism . . . has been shown to enhance goal pursuit and persistence; predict business and entrepreneurial success; improve interpersonal outcomes . .	Carver, C. S., Scheier, M. F., & Segerstrom, S. C. (2010). Optimism. *Clinical Psychology Review, 30*(7), 879–889. https://doi.org/10.1016/j.cpr.2010.01.006

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. improve creative problem-solving and adaptability; and protect against stress and burnout." *p. 59*	https://doi.org/10.1016/j.cpr.2010.01.006 *Relevance:* Comprehensive review of dispositional optimism and its associations with persistence, coping, interpersonal functioning, and physical and psychological well-being.
"Martin Seligman's work on learned optimism shows that cultivating optimistic explanatory styles improves resilience and well-being." *p. 59*	Seligman, M. E. P. (1991). *Learned optimism: How to change your mind and your life*. Knopf. https://psycnet.apa.org/record/1990-99078-000 *Relevance:* Seligman's foundational book introducing learned optimism, the ABCDE method, and the role of explanatory style in resilience and depression prevention.
"Barbara Fredrickson's broaden-and-build theory further demonstrates that positive emotions, such as hope and curiosity, expand our cognitive and social resources, making us more adaptable in conflict." *p. 59*	Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*(3), 218–226. https://doi.org/10.1037/0003-066X.56.3.218 https://doi.org/10.1037/0003-066X.56.3.218 *Relevance:* Fredrickson's seminal article presenting the broaden-and-build theory of positive emotions and their effects on thought-action repertoires and personal resources.
"optimism activates dopaminergic pathways, particularly in the mesolimbic system . . . associated with motivation, reward anticipation, and goal-directed behavior." *p. 59*	Sharot, T., Riccardi, A. M., Raio, C. M., & Phelps, E. A. (2007). Neural mechanisms mediating optimism bias. *Nature, 450*(7166), 102–105. https://doi.org/10.1038/nature06280 https://doi.org/10.1038/nature06280 *Relevance:* Influential fMRI study linking optimism to activity in the amygdala and rostral anterior cingulate cortex when imagining positive future events.
"Positive expectations also reduce amygdala reactivity. . . . This shift also allows for greater prefrontal cortex engagement, which further supports emotional regulation and social interaction." *p. 59*	Kress, L., & Aue, T. (2017). The link between optimism bias and attention bias: A neurocognitive perspective. *Neuroscience and Biobehavioral Reviews, 80*, 688–702. https://doi.org/10.1016/j.neubiorev.2017.07.016 https://doi.org/10.1016/j.neubiorev.2017.07.016

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	Relevance: Review integrating findings on the neurocognitive basis of optimism, including reduced amygdala reactivity and increased prefrontal engagement during positive expectancy processing.
"Studies have shown that when conflicting parties expect a positive outcome from negotiation or conflict resolution processes, they are more likely to engage in open dialogue and exhibit empathy." *p. 60*	Kennedy, K. A., & Pronin, E. (2008). When disagreement gets ugly: Perceptions of bias and the escalation of conflict. *Personality and Social Psychology Bulletin, 34*(6), 833–848. https://doi.org/10.1177/0146167208315158 https://doi.org/10.1177/0146167208315158 *Relevance:* Empirical work showing how positive versus negative expectancies about counterparts shape openness, empathy, and the trajectory of disagreements.
"Research also suggests that optimism, positive framing, and belief in mutual gain increase the likelihood of negotiation success, even in entrenched or violent conflicts." *p. 60*	Halevy, N., Chou, E. Y., & Murnighan, J. K. (2012). Mind games: The mental representation of conflict. *Journal of Personality and Social Psychology, 102*(1), 132–148. https://doi.org/10.1037/a0025389 https://doi.org/10.1037/a0025389 *Relevance:* Experimental research showing that mental representations of conflict (cooperative vs. competitive framing) shape negotiation outcomes and the likelihood of mutually beneficial agreements.
"In organizational settings, team cultures that frame conflict as an opportunity tend to foster continuous learning and adaptive systems, ultimately enhancing both individual and collective performance." *p. 60*	Edmondson, A. C. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly, 44*(2), 350–383. https://doi.org/10.2307/2666999 https://doi.org/10.2307/2666999 *Relevance:* Edmondson's landmark study demonstrating that team cultures fostering psychological safety transform conflict into learning opportunities, improving performance.
"In the study of memory, this has been called reconsolidation: activation of a past emotional memory or conditioned response is reactivated . . . a mismatch or prediction error occurs . . . the brain flags the memory as changeable and thus ready to be updated." *p. 67*	Nader, K., Schafe, G. E., & LeDoux, J. E. (2000). Fear memories require protein synthesis in the amygdala for reconsolidation after retrieval. *Nature, 406*(6797), 722–726. https://doi.org/10.1038/35021052 https://doi.org/10.1038/35021052 *Relevance:* Landmark study establishing that consolidated fear memories return to a labile, modifiable state when reactivated, opening a reconsolidation window for memory updating.

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"While extinction weakens the conditioned response, it doesn't erase the original memory. . . . the real trick to changing our experience of a particular stimulus is in reconditioning." *p. 63*	Bouton, M. E. (2004). Context and behavioral processes in extinction. *Learning & Memory, 11*(5), 485–494. https://doi.org/10.1101/lm.78804 https://doi.org/10.1101/lm.78804 *Relevance:* Authoritative review showing that extinction creates new inhibitory learning rather than erasing the original memory, explaining why conditioned responses can return.
"This is part of a process called habituation, which involves diminishing behavioral responses to repeated nonmeaningful exposure to a stimulus. Neurobiologically, habituation is linked to reduced synaptic strength in circuits that process the repeated stimulus." *p. 69*	Rankin, C. H., Abrams, T., Barry, R. J., Bhatnagar, S., Clayton, D. F., Colombo, J., Coppola, G., Geyer, M. A., Glanzman, D. L., Marsland, S., McSweeney, F. K., Wilson, D. A., Wu, C.-F., & Thompson, R. F. (2009). Habituation revisited: An updated and revised description of the behavioral characteristics of habituation. *Neurobiology of Learning and Memory, 91*(2), 135–138. https://doi.org/10.1016/j.nlm.2008.09.012 https://doi.org/10.1016/j.nlm.2008.09.012 *Relevance:* Consensus review re-defining habituation and its neurobiological characteristics, including reduced synaptic transmission and decreased postsynaptic responding.
"Changing your brain is just like changing your body. . . . your brain requires repetition, challenge, and discomfort to strengthen new neural connections." *p. 72*	Lally, P., Van Jaarsveld, C. H. M., Potts, H. W. W., & Wardle, J. (2010). How are habits formed: Modelling habit formation in the real world. *European Journal of Social Psychology, 40*(6), 998–1009. https://doi.org/10.1002/ejsp.674 https://doi.org/10.1002/ejsp.674 *Relevance:* Empirical study demonstrating that consistent repetition over weeks (median 66 days) is required to automatize new behaviors—a behavioral counterpart to neural rewiring.
"Reassociation—rewiring neural circuits that have not previously fired together much if at all—will only work if you really feel engaged and believe what you're saying. And it will likely only work after multiple trials and repeated pairings. So . . . make sure to get some good rest that night, as neuroplastic change solidifies during deep rest and sleep." *p. 72*	Walker, M. P., & Stickgold, R. (2006). Sleep, memory, and plasticity. *Annual Review of Psychology, 57*, 139–166. https://doi.org/10.1146/annurev.psych.56.091103.070307 https://doi.org/10.1146/annurev.psych.56.091103.070307 *Relevance:* Authoritative review of how sleep stabilizes and integrates newly learned material, including the role of slow-wave and REM sleep in plasticity-related memory transformation.