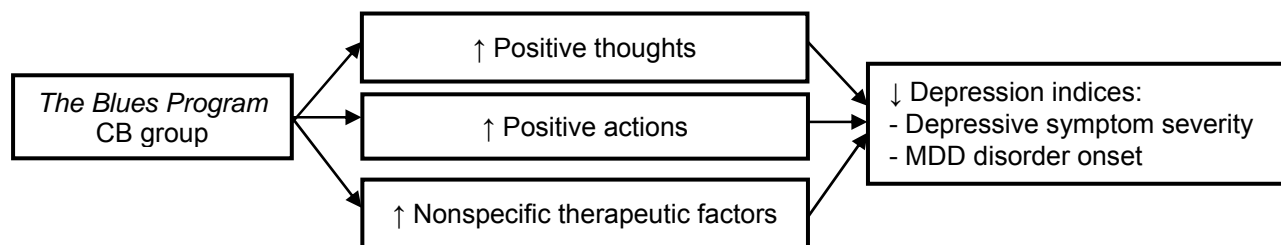


CB Depression Etiology Theories: *The Blues Program* Logic Model

The Blues Program is based on a CB theory of depression, which proposes that depression has its origins in negative thought patterns that result in negative behavior patterns. The cognitive vulnerability model (Beck, 1967) posits that individuals at risk for depression (and those currently depressed) selectively attend to negative rather than positive stimuli and have stronger recall for negative compared to neutral or positive material (Kellough et al., 2008; Wells et al., 2010). More recently, the cognitive theory of depression has been linked to neurobiological research, suggesting that the negative cognitive biases found in depression are facilitated by both increased influence from subcortical emotion processing regions and attenuated top-down cognitive control mechanisms (Disner et al., 2011).

Pure behavioral theories of depression (e.g., Lewinsohn, 1974) emphasize the significant role that maladaptive actions play in the onset and maintenance of depression, positing that depressive symptoms develop (and persist) as the result of decreased environmental reward, reductions in positively reinforced healthy behaviors (possibly due to punishment), and reinforcement of depressive/passive behaviors. Related to behavioral theories of depression etiology and maintenance, growing research supports the power of physical exercise in preventing and treating depression, perhaps due to its positive effect on mood and sleep quality (Mammen & Faulkner, 2013; Vallance et al., 2011). Prospective studies suggest that negative cognitions and low rates of pleasant activities by both self-report (Alloy et al., 2006; Lewinsohn et al., 1994) and objective (Beevers et al., 2011) measures increase risk for future depressive symptoms and MDD onset. Our CB group program is based on the model that increasing positive cognitions/cognitive style and increasing pleasant/valued activities drives its depression prevention effects (Fig. 1).

Fig. 1. Proposed Target Mechanisms for CB Group Depression Prevention



In addition to the specific intervention components predicted by CB theories to result in change, psychosocial interventions contain nonspecific or common factors that may account for a significant proportion of any intervention's effect (estimated to be 30-70%; Imel & Wampold, 2008). This issue has a long history (e.g., Butler & Strupp, 1986; Frank, 1971) and the exact number and nature of these factors varies but almost always includes: (a) development of a confiding relationship with a helping person (often in the context of a group; Cruwys et al., 2014), (b) the opportunity to express arousing emotions, and (c) a rationale to account for change that engenders positive expectations (therapeutic optimism). In addition to representing common curative factors of psychotherapy, the absence of several of these constructs (e.g., isolation, lack of belonging) appears to directly predict depressive symptom risk in adolescents (e.g., Hagerty & Williams, 1999; Williams & Galliher, 2006). Ilardi & Craighead (1994) reviewed the role of nonspecific factors in CBT for depression, based on the paradox that most symptomatic improvement occurs before the patient is formally instructed in cognitive and behavioral techniques, which is consistent with our research in depression prevention (Stice et al., 2010). We hypothesize that *The Blues Program* produces preventive effects through both cognitive and behavioral factors and through common nonspecific factors inherent in the group modality.

References

- Alloy, L.B., Abramson, L.Y., Whitehouse, W.G., Hogan, M.E., Panzarella, C., & Rose, D.T. (2006). Prospective incidence of first onsets and recurrences of depression in individuals at high and low cognitive risk for depression. *Journal of Abnormal Psychology, 115*, 145-156.
- Beck, A.T. (1967). *Depression: Clinical, experimental, and theoretical aspects*. New York: Harper & Row.
- Beevers, C.G., Lee, H.-J., Wells, T.T., Ellis, A.J., & Telch, M.J. (2011). Association of predeployment gaze bias for emotion stimuli with later symptoms of PTSD and depression in soldiers deployed in Iraq. *American Journal of Psychiatry, 168*, 735-741.
- Butler, S.R., & Strupp, H.H. (1986). Specific and nonspecific factors in psychotherapy: A problematic paradigm for psychotherapy research. *Psychotherapy, 23*, 30-40.
- Cruwys, T., Haslam, A., Dingle, G.A., Jetten, J., Hornsey, M.J., Chong, E.M.D., & Oei, T.P.S. (2014). Feeling connected again: Interventions that increase social identification reduce depression symptoms in community and clinical settings. *Journal of Affective Disorders, 159*, 139-146.
- Disner, S.G., Beevers, C.G., Haigh, E.A.P., & Beck, A.T. (2011). Neural mechanisms of the cognitive model of depression. *Nature Reviews Neuroscience, 12*, 467-477.
- Frank, J.D. (1971). Therapeutic factors in psychotherapy. *The American Journal of Psychotherapy, 25*, 350-361.
- Hagerty, B.M., & Williams, A.R. (1999). The effects of sense of belonging, social support, conflict, and loneliness on depression. *Nursing Research, 48*, 215-219.
- Ilardi, S.S., & Craighead, W.E. (1994) The role of nonspecific factors in cognitive-behavior therapy for depression. *Clinical Psychology: Science and Practice, 1*, 138-155.
- Imel, Z., & Wampold, B. (2008). The Importance of Treatment and the Science of Common Factors in Psychotherapy. *Handbook of counseling Psychology* (4th ed., pp. 249-262). New York: John Wiley & Sons.
- Kellough, J.L., Beevers, C.G., Ellis, A.J., & Wells, T.T. (2008). Time course of selective attention in clinically depressed young adults: an eye tracking study. *Behaviour Research and Therapy, 46*, 1238–1243.
- Lewinsohn, P.M. (1974). A behavioral approach to depression. In R.J. Friedman, M.M. Katz (Eds.), *The psychology of depression: Contemporary theory and research* (pp. 157-178). New York: John Wiley & Sons.
- Lewinsohn, P.M., Roberts, R.E., Seeley, J.R., Rohde, P., Gotlib, I.H., & Hops, H. (1994). Adolescent psychopathology: II. Psychosocial risk factors for depression. *Journal of Abnormal Psychology, 103*, 302-315.
- Mammen, G. & Faulkner, G. (2013). Physical activity and the prevention of depression: A systematic Review of prospective studies. *American Journal of Preventative Medicine, 45*, 649-657.
- Stice, E., Rohde, P., Seeley, J.R., & Gau, J.M. (2010). Testing mediators of intervention effects in randomized controlled trials: An evaluation of three depression prevention programs. *Journal of Consulting and Clinical Psychology, 78*, 273-280.
- Vallance, J.K., Winkler, E.A.H., Gardiner, P.A., Healy, G.N., Lynch, B.M. & Owen, N. (2011). Associations of objectively-assessed physical activity and sedentary time with depression: NHANES (2005-2006). *Preventive Medicine, 53*, 284-288.
- Wells, T.T., Beevers, C.G., Robison, A.E., & Ellis, A.J. (2010). Gaze behavior predicts memory bias for angry facial expressions in stable dysphoria. *Emotion, 10*, 894–902.
- Williams, K.L., & Galliher, R.V. (2006). Predicting Depression and Self-Esteem from Social Connectedness, Support, and Competence. *Journal of Social and Clinical Psychology, 25*, 855-874.