An Overview of Beck's Cognitive Theory of Depression in Contemporary Literature

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This review provides a summary of literature pertaining to Beck's Cognitive Theory of Depression, as well as a general overview of the theory. Beck believed that the cognitive symptoms of depression actually precede the affective and mood symptoms of depression, rather than vice versa. According to Beck, what is central to depression are the negative thoughts, instead of hormonal changes or low rates of reinforcement as postulated by other theorists. It shall be seen how his contributions have been used in recent studies concerning depression, whether related to his work on negative automatic thoughts, biases and distortions, or his Cognitive Model of Depression.

This article gives an overview of current research programs based around Beck's Cognitive Theory of Depression. The theory is divided into three main aspects, which concern the event preceding and during depression. As it is a cognitive theory, it strongly deals with the cognitive perceptions of the brain, which was different from the behavioral theories that were popular during Beck's time, thus making his theory a breakthrough in cognitive research. Briefly put, Beck argued that negative automatic thoughts, generated by dysfunctional beliefs, were the cause of depressive symptoms, and not vice versa.

Beck's Cognitive Theory of Depression Features Underlying Dysfunctional Beliefs

Beck's main argument was that depression was instituted by one's view of oneself, instead of one having a negative view of oneself due to depression. This has large social implications of how we as a group perceive each other and relate our dissatisfactions with one another. Abela and D'Alessandro's (2002) study on college admissions is a good example of this phenomenon. In their study they found that the student's negative views about their future strongly controlled the interaction between dysfunctional attitudes and the increase in depressed mood. The research clearly backed up Beck's claim that those at risk for depression due to dysfunctional attitudes who did not get into their college of choice then doubted their futures, and these thoughts lead to symptoms of depression. Therefore, the students' self-perceptions became negative after failing to get into college, and many showed signs of depression due to this thinking. Other aspects of this study did not match up well with Beck. They elaborate: "As for participants' more enduring mood reactions, our findings are incongruent with Beck's...theory.... Therefore, one possible explanation of discrepancies between these studies is that immediately following the occurrence of a negative event, cognitively vulnerable individuals show marked increases in depressed mood. At the same time, the do not yet exhibit increases in other symptoms of depression.... However, in vulnerable individuals...such depressed mood may be to be accompanied by a host of other depressive symptoms.... Their level of depressed mood, however, was simply not more severe than individuals who did not possess dysfunctional attitudes" (Abela & D'Allesandro, 2002, p.122). What occurred is that the requirements, according to Beck, for depressive symptoms were there but they did not occur regardless. Findings like
this show that Beck's theory may not be as complete as we would like, and there is likely
to be factors which are unaccounted for in play in situations like this.

Another study, which was performed on Beck's Theory, was Sato and McCann's (2000)
study on the Beck sociotropy-autonomy scale. The scale had originally meant to identify
self-feelings that would lead to depression, mainly solitude/interpersonal insensitivity,
independence, and individualistic achievement. However, the results of the study
showed that the independence did not correlate with depression, and the sociotropy,
not autonomy was a precursor of depression. As they described, "sociotropy can be
characterized by an individual's emphasis on interpersonal interactions involving
intimacy, sharing, empathy, understanding, approval, affection, protection, guidance,
and help...tend to place importance on seeking approval from others and on trying to
avoid disapproval from others as much as possible." (Sato, & McCann, 2000, p.66) So it
is seen that a strong correlation with sociotropy and depression was found, which is a
trait that is strong when relating to underlying thoughts and emotions. This support for
cognitively caused depression is an interesting use of Beck's Theory.

Moilanen's (1995) study of adolescent depression also attempts to validate Beck's
theory in a new way, as Beck worked mostly with adults. Indeed, she found that the
student's depression was often associated with dysfunctional beliefs and negative
future attitudes. She suggests that the cognitive theory has reasonable validity for
describing the symptoms of depression for nonreferred adolescents, and that the
subject's depression is closely correlated with his or her ability to deal with
dysfunctional attitudes and beliefs, as well as doubt towards the future. Her findings
may not sound truly convincing, because she did find some discrepancies: "However,
the results of this study were not entirely consistent with Beck's theory, particularly the
proposition that a predominantly negative self-schema underlies the information
processing of depressed individuals." (Moilanen, 1995, p.440) We see how perhaps, at
least in adolescents, the idea of the negative self-schema is not a clear as Beck wishes it
to be.

An earlier study by Molianen (1993) showed even stronger results when evaluating
college students. This study showed much more clearer results: "In support of Beck's
cognitive theory of depression, the student's current depressive states were
consistently found to be related to their negative processing of personal information"
(Molianen, 1993, p.345). The students' cognitive thoughts were shown to be affecting
them, and as a result they developed symptoms of depression. Molianen, impressed by
the findings, seems to suggest that Beck's theory should be used in further research in
the college student population and how depressed students are treated, as counselors
and therapists would do well to closely look at a student's cognitive thoughts as a way
of assisting the student in recovery. These results are positive, because there is enough
evidence for Molianen to suggest a cognitive treatment for depression via Beck's
Theory. Molianen's work with Beck's Theory is no doubt a welcome look at cognitive
thinking.

**Beck's Negative Cognitive Triad**

Another way to look at these cognitive thoughts is through Beck's Negative Cognitive
Triad, which explains that negative thoughts are about the self, the world, and the
future. For example, in a study done by Brown et al. (1995) they centered their focus on college students receiving poor exam scores. Brown reported, "The results suggested that a specific construct measured by the DAS...interacted with a congruent stressor (poorer than expected performance on a college exam) to predict increases in depressive symptoms." (Brown et al., 1995, p.434) In this study we would say that the students are having negative thoughts about their future, because they may not pass the class. Negative thoughts about the world, meaning they may come to believe they do not enjoy the class. And finally negative thoughts about themselves, as in they do not deserve to be in college.

The Beck Depression Inventory

A study done by Boury et al. (2001) studied Beck's theory by monitoring student's negative thoughts with the Beck Depression Inventory (BDI). They gave an overview of Beck's ideas: "Individuals who are depressed misinterpret facts and experiences in a negative fashion, limiting their focus to the negative aspects of situations, thus feeling hopeless about the future. A direct relationship is postulated between negative thoughts and severity of depressive symptoms." (Boury et al., 2001, p.14). They later found this idea to be true, despite their predictions that as time passes negative feelings would on average improve. "The result--that BDI-II scores significantly correlated with the number of automatic thoughts, number of core beliefs, and different types of core beliefs in both time periods--supports Beck's assumptions that negative thought content characterizes depression." (Boury et al., 2001, p.34) The effects of the negative cognitive thinking again proved to prolong depression and it's symptoms in a group, and we see more examples of Beck's theory in use.

Beck's Theory has formed into what is called Beck's Depression Inventory, which is used to measure depression in many studies. One such study done by Saisto et al (2001), attempted to show how different approaches to becoming a mother could stave off depression common with such a major life event. They hypothesized that if the individual set self-focused goals they would be able to think rationally about their situation. "As expected, the results showed that women who adjusted their personal goals to match the particular stage-specific demands of the transition to motherhood showed a decrease in depressive symptoms, whereas those who disengaged from the goals that focused on dealing with such demands showed an increase in depressive symptoms" (Saisto et al., 2001, p.1154). As they used Beck's Theory as a background for their study, we can extrapolate that the subject's who had a goal were able to avoid negative thinking patterns more often than the subjects whom did not have focused goals, so we see that many modern theories of depression are actually based off of Beck's Cognitive Theory.

The Beck Cognitive Triad Inventory

An interesting study is McIntosh and Fischer's scrutinized look at Beck's Cognitive Triad. They decided to put the triad up to the test to see if there were actually three distinct visible negative thoughts using the Cognitive Triad Inventory (CTI). They found that there was no clear separation of negative thoughts, and that there was actually a singular one-dimensional negative view of the self. They explain in detail their findings: "The present data for the CTI suggest that the components of the triad are not discrete
factors but are rather commonly saturated by a single dominant factor, which we have named 'Self-Relevant Negative Attitude.' Therefore, it would appear that retaining all three areas of the triad as separate dimensions is not necessary for representing the latent structure of depressive cognition within Beck’s framework” (McIntosh & Fischer, 2000, p.156). Not only is Beck’s theory being built on, but also studies are ongoing to flesh out Beck’s basic assumptions about cognitive thinking. It is important to note that this does not take anything away from Beck’s work, but actually strengthens it through empirical research which clarifies Beck’s ideas, which can then be used with even more confidence in later studies. So as we have seen, Beck’s Theory conjectures that underlying dysfunctional beliefs can serve as a diathesis for the occurrence of depression. These thoughts Beck believed centered on a negative cognitive triad, which is made up of thoughts about the self, one's surroundings, and about one’s future.

**Beck’s Cognitive Theory of Depression Features Cognitive Biases and Distortions**

A key part of Beck’s Theory is not only that the subject will feel negative underlying beliefs, but also that these beliefs fall into a certain field which separates them from other disorders such as panic and anxiety disorders. For example, these include polar reasoning, selective abstraction, and overgeneralization. Such feelings promote failure in the first and last and loss in the second. Polar(dichotomous or all-or-none) reasoning is extreme, so even a slight waiver from perfection is considered failure. Abstraction means that successes are ignored, and lost to the subject, who is left only with sadness. Overgeneralization implies one will do poor at one thing, and assume failure in all related things. Thus, the main feelings of depression according to Beck are failure and loss. In a study done by Beck himself with Clark and Brown (1989) he looks to confirm this by studying psychiatric outpatients. He found that "the cognitive content-specificity hypothesis was strongly supported by the present study. Thoughts of loss and failure were uniquely predictive of depression, whereas cognitions of harm and danger were specifically associated with anxiety." (Clark, Beck, & Brown, 1989, p.963) Here we see the even Beck himself was working on fleshing out aspects of his theory. Beck is careful to caution us however that his findings are not only from the subjects cognitive thoughts, but that the ‘temporal orientation’ of the cognitive thoughts must be examined as well in order to confidently specify a cognitive-affective relationship. While anxiety patients may feel failure, it is not related to depression but due to those feelings' prominence during and after an anxiety attack.

In another study, Hewitt et al (2003) attempts to improve on Beck’s inclusion of dichotomous reasoning as a fuel for the negative cognitive triad. They explain that in "Beck’s...model the self-related and socially based features of perfectionism are combined and regarded as similarly influencing the development and maintenance of depression...In Hewitt and Flett’s model, perfectionistic self-expectations and perfectionistic interpersonal dynamics are conceptualized as three distinct personality traits." (Hewitt et al., 2003, p.373) Their results were interesting, and showed to clarify the current understanding of how perfectionism relates to depression in terms of Beck's Theory. "Contrary to the widespread understanding of perfectionistic attitudes as a clear-cut representation of the self-related features of perfectionism, socially prescribed perfectionism--not self-oriented perfectionism--was most strongly related to perfectionistic attitudes." (Hewitt et al., 2003, p.383) In this case Beck’s theory has been expanded with another theory in the field of cognitive psychology. Beck’s Theory also
Beck’s Cognitive Theory of Depression Features a Cognitive Model of Depression Showing the Formation of Dysfunctional Beliefs

Beck’s Cognitive Model of Depression shows how early experiences can lead to the formation of dysfunctional beliefs, which in turn lead to negative self views, which in turn lead to depression. One interesting study on this aspect is Reed’s (1994) study on reducing depression in adolescents. Many studies have ascertained that depression is more common in women in western society. Reed’s study amazingly shows a large number of female whose cognitive thinking prevented them from recovering from depression, while the males adjusted much better. He comments that this is from the difference between common early experiences between males and females. Males, he believes "run a fairly structured and consistent developmental course... Depressed males often appear either physically awkward or lacking in social/interpersonal skills. Responses to this awkwardness by adults and peers usually consist of strong sanctions, punishment, and negative reinforcement. Moderate improvement in male functioning will usually receive positive responses from both peers and adults. Additionally, male social networks tend to be flexible, and based primarily on current functioning. Therefore, male adolescents can improve their social status as their interpersonal functioning improves." (Reed, 1994) His conclusion is that because males are developing healthy beliefs, they are able to cope with depressing feelings. They do not generally develop depression due to lack of negative thoughts about the self, because the social structure correctly rewards them for having positive thoughts, which prevents depression. On the other hand, the female adolescent social structure is much different, and they are more prone to develop irrational and dysfunctional beliefs. Reed explains, "Female adolescents run a less structured and more inconsistent developmental course. Responses from peers and adults to the female's incompetence is variable...Improved behavior of female adolescents also receives inconsistent feedback....Adolescent females in general are expected to be competent interpersonally. Therefore, a female adolescent who had been depressed, upon achieving appropriate functioning, would receive only minimal attention for her accomplishment...Consequently, improved functioning will often not facilitate immediate social acceptance by females" (Reed, 1994). He explains how females are more likely to form dysfunctional beliefs due to mixed signals from society. This coincides strongly with Beck's Model of Depression and the large problem of female depression in western society.

Comparison to the Hopelessness Theory of Depression

Another interesting study compared Beck’s Cognitive Theory against the hopelessness theory of depression in predicting depression in adolescents, done by Lewinsohn et al (2001). He reported "A main finding of this study was support for dysfunctional attitudes as a risk factor, under conditions of stress, for adolescent major depressive disorder. This finding provided evidence for the Beckian version of the diathesis-stress hypothesis...." (Lewinsohn et al., 2001, p.210) An interesting thing to note is that their positive findings for risk factor support Beck’s idea that early experience leads to the formation of dysfunctional beliefs, which other studies have not been able to show. He
explains more on why his study is profound, because there has simply not been enough research on Beck's theory, so these findings have great heuristic value as well. Because he was not able to find similar correlations with the hopelessness model, he concludes that it is not supported in an adolescent population (Lewinsohn et al., 2001). This adds weight to Beck's Theory, especially in regards to his beliefs on the creation of negative thoughts and vulnerability to depression.

Clinic-Referred Children

A study done by Epkins (2000) looked at clinic-referred children. Two main groups were children whose personality tended to be internalized, and those who were externalized. Epkins' was looking for evidence of Beckian thinking in young children. She explains, "Based on the theory, it was predicted that specificity would emerge on all cognitive measures, with internalizing children reporting more negative cognitions than externalizing children." (Epkins, 2000, p.201) This makes sense, because focusing on yourself would logically lead to a greater increase of negative automatic thoughts on average. Her findings were positive in this matter: "Consistent with Beck's Theory, the findings suggest that the negative cognitive triad, cognitive processing distortions, and depressive and anxious thought content, may be specifically related to internalizing versus externalizing problems" (Epkins, 2000, p.205-206). Therefore, we see how dysfunctional beliefs tie in at an early age with internalized cognitive thinking, which gives us better insight into how our childhood has a strong correlation to whether or not we will be vulnerable to depression.

Conclusion

Since Beck formed his theory, it has catalyzed a lot of work involving cognitive theory and depression, which during the time was rare. Like all great theories, the initial version was no doubt the most accurate, but his theory does lend itself to research, and a large portion of depression related research in one way or another relies on the theory. Beck's Cognitive model will no doubt continue to be scrutinized as we look closer at how negative automatic thoughts are formed and who is vulnerable for future depression. Finally, we have looked at Beck's Cognitive Model of Depression, which conjectures that dysfunctional beliefs are created by early experience. Beck believes that critical events would activate these beliefs, which would then create negative automatic thoughts about oneself. These cognitive thoughts then lead to symptoms of depression, which then reinforce more negative automatic thoughts. The studies shown here are but a small part of the ongoing research on and using Beck's Cognitive Theory of Depression, but it certainly has had a large impact on the way we look at depression in terms of clinical psychology. This paper does side strongly with Beck's Theory, and this is due to most of the literature surrounding the theory being positive.
References


