

Balancing Optimistic and Pessimistic Perspectives



Introduction

This wiki page will talk about pessimism and optimism as well as the theories behind them, and discuss the importance of balancing these two perspectives in everyday life. Practical suggestions on how to do this will also be provided.

Have you always wondered whether you're an optimist or a pessimist? Find out in this short and easy test [here](http://ajeducation.com/psy/quizes/lot.htm) (http://ajeducation.com/psy/quizes/lot.htm)!

To get you started, we suggest reading the key papers that we have highlighted at the start of each topic. However, if you really have no time, you could read the following [paper](https://dl.dropboxusercontent.com/u/61414855/book%20review_estyle.pdf) (https://dl.dropboxusercontent.com/u/61414855/book%20review_estyle.pdf) to get a brief idea of the topic.

Table of Contents

1. Optimism
 - 1.1 Definitions
 - 1.2 Benefits and drawbacks
 - 1.3 Genetics of optimism
 - 1.4 Cultural differences
2. Pessimism
 - 2.1 Definitions
 - 2.2 Catastrophising
 - 2.3 Theories of pessimism
 - 2.4 Benefits and drawbacks
 - 2.5 Genetics of pessimism
3. Optimal balance
 - 3.1 Theories of optimal balance
 - 3.2 Situational factors
 - 3.3 Mindfulness
 - 3.4 Practical exercises
4. Clinical applications
5. History and cultural connection
6. Critique
7. Conclusion
8. References

Optimism

Key paper:

Charles S., Carver, M. F. Scheier & S. C. Segerstrom (2010). Optimism. *Clinical Psychology Review*, 30, 879-889.



Definitions

The word optimism comes from the Latin word optimum, which means 'best'. Appropriately then, optimism has been frequently linked to better physiological and psychological well-being. The term has many definitions but in its most typical use it refers to a mindset in which one holds overall positive expectations in any given situation and about the future. Put simply, whereas pessimists expect bad things to happen to them, optimists expect good things to happen to them (Carver, Scheier & Segerstrom, 2010). In psychological research, the term is usually operationalised in one of two ways: as expectational optimism or explanatory style.

Expectational optimism

The generalised outcome expectancies model (Scheier & Carver, 1985) describes optimism as a mindset in which individual holds positive expectations about the future. This kind of quintessential 'glass half full' optimism is also called dispositional optimism.

Life Orientation Test is used as a measure of dispositional optimism. Its revised version does not divide people into two distinct categories of optimists and pessimists, but rather provides them a score on a continuum (Scheier, Carver & Bridges, 1994; Scheier & Carver, 2002).

Explanatory styles

According to Buchanan & Seligman's (1995) explanatory style model, optimists are the opposite of pessimists. Optimists tend to adopt an optimistic explanatory style in which they attribute the cause of negative events to external factors (externalise), believe that negative situations can be changed (unstable) and think that these events are limited to specific domains (specific).

Explanatory styles can be seen as a somewhat narrower view on optimism. Some researchers argue that dispositional optimism is simply the lay term and explanatory style the scientific term used to describe the same thing (Peterson, 2000), whereas others argue that explanatory styles only describe one part of optimism (Zullow, 1991).

Benefits and drawbacks of optimism

Benefits

Physiological

Much of the research on optimism has been done in the domain of health psychology. The central argument in this field of research is that optimists may be less reactive to stressful events in their life than pessimists and this lower physiological stress will over the years put less pressure on the body, resulting in potentially better health and even longevity.

Optimism has been linked to for example better cardiovascular health. There is evidence for fewer physical markers of the development of cardiovascular disease, fewer rehospitalisations after a heart surgery, fewer mortalities from heart-disease and fewer mortalities overall in a longitudinal study of 95,000 women (Tindale et al., 2009).

Furthermore, optimism has also been linked to for example heightened immunity responses (Szondy, 2004) and faster healing after biopsy (Ebrech et al., 2004). Optimism has also been found to predict longer life: a study of elderly individuals reported that those individuals who reported high optimism were less likely to die over the next ten years (Giltay et al., 2004).

It is however worth noting, that most studies have reported higher correlations between subjective measures of physical well-being and optimism than between objective biological measures and optimism (Carver, Scheier & Segerstrom, 2010).

Psychological

Optimists anticipate good rather than bad things in contrast to pessimists, and this relatively simple difference seems to be at the core of some behavioural differences which could have a great impact on their lives. Optimists confront problems and cope with adversity differently - and this seems to alter their risk for psychopathology.

Higher levels of optimism have often been linked to better subjective mental well-being during difficult times (Charles et al., 2010). To begin with, optimism is inversely related to hopelessness which is a risk factor for depressive disorders (Alloy et al. 2006). Optimism seems to bring about resilience to psychologically stressful life events which tend to be linked with onset and relapse of psychological ill health.

Furthermore, optimism is positively correlated with a group of other important factors such as social integration and socioeconomic status that have been found to increase resilience to mental and physical health alike (Lorant et al., 2003).

Drawbacks

The evidence for the positive effects of optimism on overall health suggests optimism to have several adaptive properties. However, there are instances in which too much optimism may in fact do an individual a disservice.

For example, gambling is a situation in which too optimistic expectancies may lead into problems. Gibson and Sanbonmatsu (2004) found that optimists without known gambling problems have higher expectancies of the end result of gambling than pessimists, and they were less likely to reduce their bets even after an unsuccessful outcome.

Other research has suggested that overly optimistic expectancies may lead an individual to not know when to quit, but be over-persistent. If it is sometimes adaptive to recognise one will not be able to meet their goal, can optimism prevent this and lead an individual spend their resources on a task that will not yield the hoped for result (Wrosch, Scheier, Carver & Schulz, 2003). However, other research (Aspinwall & Richter, 1999) has suggested that when optimistic people are faced with two tasks, one impossible one and one alternative task, optimism was associated with faster disengagement with the impossible task in favour of the alternative task, suggesting that perhaps they find it easier to move on from a difficult task if another possibility presents itself.

Optimism bias

Optimism bias, also known as unrealistic or comparative optimism, is a bias which makes an individual believe they have a lesser chance of experiencing a negative event in comparison to other people. The classical example of this could be a smoker who has seen all the anti-smoking ads and knows the related health dangers, yet believes that they will not be one of the ones who suffer of them. Alternatively, an individual may know the dangers of for example speeding, but believes they are less likely to get into an accident. It is easy to see how this kind of bias could lead to risky behaviours that could have bad consequences. The following TED talks video by Tali Sharot explains optimism bias in a great way.

Genetics of optimism

Optimism and other traits such as self-esteem and life-satisfaction have been strongly linked to positive physical and psychological well-being. There is consistent evidence that these traits seem to be highly correlated in individuals, and researchers have found a large overlap in the genes that influence these traits (Caprara et

al., 2009).

Several twin studies have produced estimates of heritability that range from approximately 25% up to almost 50% (Mosing et al., 2009; Mosing et al., 2010; Kostka & Jachimowicz, 2010). However, it is hard to disentangle the effects of shared genes and shared environment in studies like this; how much of optimism is actually inherited in the forms of genes and how much of an individual models from the people around them when they grow up?

Cultural differences



Are there consistent cultural differences in the levels of optimism between people from different cultures?

Research has led to mixed results, with some finding varying levels of dispositional optimism across cultures and some reporting no significant differences. Previously meta-analyses (e.g. Nes & Segerstrom, 2005) have found that the relationship between coping and optimism is not consistent across cultures. In addition, a large meta-analysis across 22 different nations found that overall cultural differences in optimism were small (Fischer & Chalmers, 2008). However, the study reported positive associations between greater individualism and greater optimism, as well as greater egalitarianism and greater optimism.

Overall, research seems to suggest that there are no fundamental differences in the optimism levels between different cultures.

Pessimism

Key paper:

Henriques, G. Published in the Journal of Science and Health Policy Depression: *Disease or Behavioral Shutdown Mechanism?*

Available online:

(<http://psychweb.cisat.jmu.edu/ToKSystem/My%20ToK%20Papers/BSM%20Final.pdf>)
(<http://psychweb.cisat.jmu.edu/ToKSystem/My%20ToK%20Papers/BSM%20Final.pdf>)



Definitions

Pessimism is derived from the Latin word *pessimus*, meaning 'the worst'. It refers to an individual mindset in which bad outcomes are expected and negative evaluations are favoured. Pessimism has been linked to mental disorders such as anxiety and depression. However, researchers have also shown that pessimism can be beneficial in creating a more realistic approach to life and in difficult circumstances where passivity can be more advantageous than risk taking (Lang et al, 2013).

Explanatory style

Buchanan & Seligman (1995) proposed that optimists and pessimists differ in their explanatory style, which refers to the manner in which people interpret life events. Our explanatory styles are shaped by our experiences since childhood, and can be changed by taking appropriate measures. There are three main dimensions of explanatory styles:

1. Personal

Individuals may choose to attribute the cause of an event to themselves (ie. internalising the cause of the event), or attribute the cause of an event to an external factor (ie. externalising the event).

Example of internalisation: "I was fired because I was incompetent."

Example of externalisation: "I was fired because the company had to cut costs."

2. Permanence

Individuals may view events as stable (ie. remain unchanged over time) or unstable (ie. can be changed over time).

Example of stable event: "I will always do badly."

Example of unstable event: "I might be performing poorly now, but I will do better if I work hard."

3. Pervasiveness

Individuals may think that events have global effects (ie. affect all aspects of life) or specific/local effects (ie. affect a specific area of life).

Example of global effect: "I failed my exams; I can't get anything right."

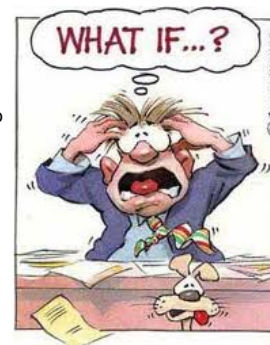
Example of specific effect: "I might have failed my exams, but I am still a key player for my football team."

Pessimists tend to adopt a pessimistic explanatory style in which they blame themselves for negative events (internalise), believe that negative situations will persist (stable) and think that these events affect all aspects of life (global).

Catastrophising

Catastrophising can be thought of as an unhelpful thinking style, that leads an individual in believing something is far worse than it actually is. These negative thoughts can concern the future in general ('I'm sure I'll fail all my exams because I missed that one important lecture'), or a specific event ('I can't believe I forgot to call my boyfriend even though I promised to, he will surely break up with me now'). Catastrophising is thought to narrow cognitions and lead to rumination, hopelessness and magnification of problems (Ong, Zautra & Reid, 2010).

Seligman's ABCDE model ([hyperlink](#)) has been designed as a tool to battle catastrophising. Furthermore, if you have a tendency to catastrophise, the 'practical exercises' section of this wiki also contains additional resources on how to cope with catastrophising.



Theories of pessimism

Behavioural Shutdown Model

Proposed by Gregg Henriques

Unlike the typical view that Depression is biological disorder whereby functioning in the brain is impaired because of differing brain activity, Henriques proposes a novel approach. He suggests that the reason why a depressed brain may be different from other individuals is because he sees depression as an evolved strategy. The Behavioral Shutdown Model (BSM) therefore proposes an alternative view to how depression is seen by our society: as a genetic illness. It claims that negative emotions signal potential problems in the environment and therefore allow us to avoid them in order to avoid emotional pain - this can manifest in foreexample fear of being laughed at or sadness from losing a friend. The reason this has to do with depression is because individuals whose 'cost to benefit' ratio is skewed - that is, he or she gives more than he or she receives in return - will eventually end up giving less in order not to be disappointed by receiving less - i.e. behaviorally shutting down to avoid stress and disappointment from a failure to achieve what was set out to do.

It should be said that the BSM does not just explain depressive symptoms rather well but it also gives rise to understanding how negative perspectives rely on how we perceive our environment. In this light, depression may be seen as a result of the environment as well as negative life experiences and how each individual internally copes with these.

Behavioral Activation Therapy

Theory originally proposed by B. Ferstner, discussion from C. Martell's webpage

Behavioral Activation Therapy (BAT) ties nicely into the previously mentioned BSM theory in that it focuses on the environmental factors, which are seen to affect the development of depression, rather than on internal biological factors. It gave rise to an alternative to the psychoanalytic approach on depression which was dominant at the time in the 70s.

The therapy works under an assumption that individuals develop depression because they have a lack of positive reinforcement in their every-day life. This can be due to, for example, a loss of a beloved. This does not mean that the theory ignores any genetic predisposition individuals with depression may possess - however, it does not consider the biological makeup of a person as the main explanation. As mentioned in the BSM theory, individuals who no longer find pleasure in their activities tend to withdraw and 'shut down', and this may in turn worsen the feeling of hopelessness and alleviate depression. This is why BAT aims to increase a person's activeness on an every-day basis, thus combating the individuals' tendency to become socially withdrawn.

The reason why this therapy is useful for balancing a person's perspective is because it helps battle the idea that depression is in the person's biology only, and reaffirms that it can be changed when the environment and the way we respond to it changes. As such, it gives rise to a possibility for individuals who feel 'stuck' in their current negative position to actively re-engage with pleasurable activities, and thus change their perspective on life.

Analytical rumination hypothesis

Andrews and Thomson, 2009

This theory suggests that the reason why depressed individuals act the way they do is because their body and mind have created a strategy via which to cope with outside stressors. More specifically, individuals who feel under some form of strain need to solve their current problem in order to move on. In order to do this, however, a person needs to analyse and focus on the solving of the problem. This may prove rather time consuming and the process may potentially be disrupted by external circumstances, and so analytical rumination is carried out whilst decreasing all chances of possible disruption by the environment. This then explains why depressed individuals choose to withdraw from their social life and spend time alone brewing over their thoughts.

It would seem that this hypothesis suggests that individuals should be able to solve their own problems if they spend enough time analysing them in detail. Although this may be true for a typical person, it may prove difficult when having a serious depression issue. In fact, too much rumination may simply exacerbate a person's feelings of hopelessness and be more harmful than helpful. It could therefore be suggested that the BSM gives a better explanation for depression as an adaptation. Furthermore, BAT may be more useful in combatting depressive symptoms as it actively helps change individual's perception of the world by re-engaging, rather than by promoting problem-solving rumination which may be maladaptive.

Dispositional factors

Pessimism has been found to be linked to dispositional factors such as individual differences and brain activity. Pessimists report greater levels of neuroticism and negative affect (Marshall et al, 1992). Pessimists were also found to have greater right hemisphere brain activity (Hecht, 2013). The right hemisphere is associated with an attentional focus on negative stimuli, a gloomy approach towards the future and low self-esteem. This generates a sense of insecurity and caution that sustains pessimistic thought processes.

Childhood experiences and socio-economic environment have also been found to predict pessimism (Robb, Simon & Wardle, 2009; Peters et al, 2011). Children growing up in low socio-economic environments might have faced more stressful situations with fewer coping resources, thus leading to a pessimistic outlook. This pessimism can be seen as a stable trait as it extends into adulthood (Peters et al, 2011). However, improvements in socio-economic situations in adulthood can lead to a more optimistic perspective, thus showing that pessimism can be changed where resources are available (Heinonen et al, 2006).

Benefits and drawbacks of pessimism



Benefits

Evolutionary value

Pessimism might have improved the survival chances of our ancestors. Primitive humans lived in hostile environments where pessimism had adaptive value as a survival strategy (Leahy, 2002). Living in a hostile environment meant that there was a low margin of error as a slight misstep or a moment of complacency might have resulted in death. Adopting a pessimistic outlook through the assumption that every situation is potentially dangerous can lead to heightened vigilance and caution, thus allowing our ancestors to constantly avoid and be prepared for threats such as predators or enemies. However, such an outlook would be less adaptive in the modern environment which tends to be less deadly. Despite this, pessimism can be beneficial under certain circumstances that mimic those of our ancestors, such as situations of chronic high stress. Pessimism can also be beneficial for certain individuals who are known as defensive pessimists.

Expectations: defensive pessimism

Everyone knows someone who has predicted that they are going to do badly for an upcoming exam, only to outscore everyone whom they have complained to. These people are likely to be defensive pessimists.

Defensive pessimists have negative expectations for upcoming events and high levels of anxiety prior to these events (Showers & Ruben, 1990). However, defensive pessimists do not perform more poorly because of their pessimism. Their good performance is dependent upon their pessimism – when told to adopt an optimistic outlook, their performance deteriorates (Norem & Cantor, 1986; Showers, 1986). Their pessimism allows them to accept the possibility of failure and encourages them to create contingency plans. The act of planning for contingency helps defensive pessimists to cope with anxiety, thus stabilising their anxiety at a consistent level prior to the event (Showers & Ruben, 1990).

The key difference between defensive pessimists and other pessimistic individuals lies in their coping strategies. Instead of adopting avoidant coping strategies, defensive pessimists engage in extensive preparation when faced with an event for which they have made a negative forecast as they strive to avoid failure (Showers & Ruben, 1990). This behavioural pattern mirrors that of optimists. Moreover, by anticipating the possibility of poor performance, defensive pessimists experience

less disappointment when faced with setbacks, thus allowing them to recover quickly (Gaspar et al, 2009).

It appears that defensive pessimists have adapted to their pessimism by taking action to avoid the worst case scenario envisioned in their negative rumination. This combination of pessimistic thinking and optimistic coping strategy results in success for them, thus showing that pessimism is not necessarily a bad thing on its own; it is how you cope with pessimism that determines the outcome.

Drawbacks

Physiological

Seligman (1989) predicted that individuals with a pessimistic explanatory style are at significantly greater risk of adverse medical conditions, mental health issues and reduced achievement. There have been mixed results for the health impact of pessimism. Several studies have reported that pessimism adversely affects health outcomes such as mortality rates, social adjustment and emotional distress. A 30-year study revealed that pessimistic patients were 19% more likely to die before their expected lifespan as compared to optimistic patients (Maruta et al, 2000). Optimistic lung cancer patients also survived approximately 6 months longer than pessimistic patients, possibly because pessimistic lung cancer patients are less likely to seek surgical treatment (Novotny, 2010). Breast cancer patients who were more pessimistic also reported greater levels of emotional distress and fatigue in the post-surgery period, which in turn led to greater levels of social withdrawal (Carver, Lehman & Antoni, 2003). As compared to optimists, pessimists also report increased absence from work due to sickness after experiencing a death or onset of severe illness in the family (Kivimäki et al, 2005).

However, pessimism appears to have benefits for older people. Schulz et al (1996) observed that a pessimistic perspective was associated with higher levels of mortality among young and middle-aged cancer patients, but not among old patients. Lang et al (2013) also found that pessimism about life was associated with lower disability and mortality rates among older adults. As people age, their experiences allow them to make more realistic predictions about their future and their present condition, thus facilitating the implementation of additional precautions, hence resulting in a positive effect on health outcomes and life expectancy (Lang et al, 2013). This suggests that adopting a pessimistic outlook might be beneficial under certain circumstances such as when we are at greater risk of adverse medical conditions.

Psychological

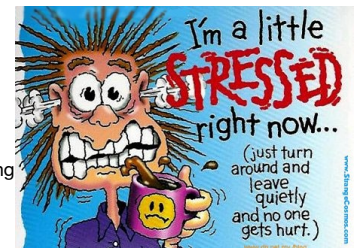
A study by Cadinu et al. (2005) showed that women who were subjected to a stereotype threat - that is, a gender stereotype - were more likely to have negative thoughts about their potential performance not just in the mathematics task they were presented with, but also about their mathematics performance in general, and in turn, this affected their real performance on the task. In other words, an increase in negative views about self-performance resulted in an actual poorer performance on the task. This suggests that negative perspectives about our own abilities seriously hinder not just our will to perform but also decreases our ability to do so.

Pessimism has also been shown to predict depression among different demographics. Bromberger & Matthews (1996) found that pessimistic middle-aged women reported more depressive symptoms if they were experiencing ongoing stressors. This is consistent with cognitive theories of depression, which posit that cognitive factors such as a pessimistic explanatory style, increase the likelihood of assessing a stressor negatively, thus bringing about or exacerbating a depressed mood (Bromberger & Matthews, 1996). On the other hand, when compared with those with an optimistic explanatory style, pregnant teenagers with a pessimistic explanatory style were less depressed during pregnancy, but were more depressed after childbirth (Wagner et al, 1998). This suggests that pregnancy serves as a protective buffer against depression for pessimistic teenagers, possibly because pessimistic teenagers are more likely to feel important, special and proud during pregnancy (Wagner et al, 1998). Childbirth would remove these positive effects, and introduce stressors such as financial difficulties, childcare and continuation of education. Coupled with their pessimistic outlook, these stressors would lead to the development or exacerbation of depressive mood (Wagner et al, 1998).

Individuals with a pessimistic explanatory style, and who have experienced or are exposed to a traumatic event, are more likely to develop Post-Traumatic Stress Disorder (PTSD) symptoms (Gray, Pumphrey & Lombardo, 2003). This is consistent with the Shattered Assumptions model of PTSD, which explains that PTSD results when traumatic events shatter individuals' assumptions of a safe and benevolent world, and a competent self (Janoff-Bulman, 2010). Pessimistic individuals, who have negative views of themselves and the world prior to the traumatic incident, will have their beliefs validated by the traumatic experience (Janoff-Bulman, 2010). This will lead them to attribute these events to uncontrollable and stable causes, hence adopting emotion-focused coping more frequently and showing higher levels of PTSD symptoms such as hypervigilance and emotional numbness (Mikulincer & Solomon, 1989).

Stress

There have been mixed findings on how successfully pessimists cope with stress. Scheier & Carver (1985) found that optimistic undergraduates tend to report fewer physical symptoms than pessimistic students during a particularly stressful period in their lives. It appears that optimists and pessimists adopt different coping strategies when faced with stress. Optimists are more likely to use problem-focused coping, seek social support and emphasize the positive aspects of stress situations whereas pessimists tend to engage in denial, distance themselves from the goal with which the stressor is affecting and focus on stressful feelings (Scheier, Weintraub & Carver, 1986). Thus optimists appear to be better at managing stress because they adopt more adaptive coping strategies.



However, pessimism can have benefits under certain conditions. Tennen & Affleck's (1987) vulnerability hypothesis posits that optimism is not always beneficial, and can be particularly costly when things turn out more poorly than expected. Subsequent research has supported this hypothesis. When exposed to acute stressors, women with pessimistic explanatory styles showed poorer immune system responses as compared to women with optimistic explanatory styles (Cohen et al, 1999). However, when exposed to high levels of chronic stress, women with optimistic explanatory styles had poorer immune system responses as compared to women with pessimistic explanatory styles (Cohen et al, 1999). Similarly, Chang & Sanna (2003) found that chronic negative life stress was associated with poor psychological and physical outcomes for optimists, but not pessimists.

Optimists might cope more poorly with persistent stress because such situations are inconsistent with their belief that they can overcome obstacles and avoid extended difficulties (Chesterman et al, 1990; Snyder, 1989). In contrast, pessimists are more willing to distance themselves from the stressor and hence obtain a relieve in situations of persistently high stress (Chang & Sanna, 2003). Scheier & Carver's (1985) study focused on students who were exposed to an acute stressor, which possibly accounts for why optimistic students coped better than pessimistic students. Thus it is important to take into account the type of stress when

considering the benefits and drawbacks of a pessimistic coping style.

Genetics of pessimism

The question remains: is there a genetic predisposition to a certain 'mental health' or certain perspectives an individual is likely to have, such as pessimism?

Todd and colleagues think so. In 2013 they published a paper where they argued that an ADRA2b deletion variant of a gene, which has to do with memory, predisposes a person to remember negative words in a more frequent fashion. More specifically, they found that 50% of individuals with the ADRA2b deletion caught on to negative words more frequently when writing down words which appeared quickly on a computer screen.

This would suggest that there is something intrinsic in our ability of how we see the world around us. However, a predisposition hardly means that the likely outcome will necessarily always happen. As mentioned above in the Todd study, only about 50% of people had a negative bias. So what makes the other 50% different? Is it optimism? Is it something more intrinsic? This is something that should be further looked into as the answer may hold valuable information about how to combat a negative cognitive bias.

Peterson (2000), for example, argued that even though there may be a genetic link to pessimism, it will vary from individual to individual. This he said, was because individuals undergo different experiences in their lives - for example, they are brought up differently by their parents and this will have an effect. Hasan and Power (2002) showed that pessimistic mothers had pessimistic children, although a mother's optimism did not make a child more likely to be optimistic. Perhaps there is something other than genes that plays a role in how perspectives on life are formed - after all, if we have a pessimistic mother who does not encourage us, we will probably end up seeing the world as we have observed it being done by those closest to us (parents).

On the other hand, the above points also raise the question of whether bad is really stronger than good as Baumeister (2001) argued, and to what extent do genes and environment (nature vs. nurture) interplay when it comes to acquiring certain perspectives.



Optimal balance

It can be seen that both pessimistic and optimistic outlooks on life can result in more elaborate consequences than one might initially think. It is incorrect to simply assume that an optimistic outlook results in happiness whereas a pessimistic outlook results in reduced well-being. *There exists a complex relationship between pessimism and optimism; both outlooks can result in benefits, and both have shortcomings.* It is therefore logical to acknowledge the importance of achieving an optimal balance between the positive and the negative, rather than completely eliminating one outlook and embracing the other. A balanced perspective of any given situation – relishing in the good while accepting and logically working through the bad – is key to achieving optimal satisfaction and well-being. This section looks at theories of optimal balance of the two perspectives and also gives practical exercises which can help you to balance the two in your daily life.



<http://www.landmarc.com.au/wp-content/uploads/2011/01/balance4.jpg> (<http://www.landmarc.com.au/wp-content/uploads/2011/01/balance4.jpg>)

Theories of optimal balance

Broaden-and-build

In psychology, the study of positive emotions and wellbeing has often been overlooked and has not gotten the attention it probably deserves. In order to capture the unique effects of positive emotions, Fredrickson (2004) developed an alternative model to explain their importance and effect.

The broaden-and-build theory is based on the premise that positive emotions broaden an individual's momentary thought-action repertoire and in that way build the individual's resources. Fredrickson argues that negative feelings narrow our thought-action repertoire, urging us to act in a very specific way. They promote the kind of actions that have had evolutionary significance - for example the flight or fight response in a threatening situation. On the contrary, positive emotions rarely present themselves in a threatening situation. Hence there is no need for narrowing our cognitive and behavioural focus, and the theory posits that positive emotions act to widen the array of thoughts and behaviours an individual considers in the moment.

More concretely, joy is seen to create an urge to play and create; interest creates an urge to explore and contentment encourages one to savour the moment. What's common to all these behaviours created by positive emotions is that rather than serving an immediate adaptive purpose, they convey indirect and long-term benefits because they end up building up the individual's resources. This building of resources - whether social, intellectual, psychological or physiological - serves a very important purpose as while the positive emotional states themselves can be fleeting, the behaviours executed during them create a lasting benefit.

In our ancestors, greater personal resources have likely translated to greater odds of survival and reproduction, suggesting that positive emotions have an adaptive significance.

In today's world, it is still easy to see how positive emotions can serve an adaptive advantage. For example, joy can lead us to bond closer with people important to us and these relationships can be important when facing an adversity, whether it is losing a job or feeling depressed.

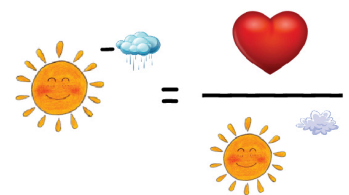
Positivity ratio

Just like the previously mentioned BSM model states, each person needs to have a relatively balanced ratio of good and bad events. If the ratio ends up skewing towards the negative side, individuals may feel hopeless and shut down because they put in more energy than they get back.

Fredrickson and Losada (2005) hypothesized that if people have a positive to negative affect ratio of 2.9 or more, this means individuals are likely to flourish in terms of mental health. Their results based on surveys over a 28-day period ended up supporting this hypothesis, and so the authors argued that a set of mathematical principles could provide a guideline to mental health flourishing. This is potentially useful because a specific score ratio such as this may provide predictions in terms of how mentally healthy a person is or is not, and how far they're from achieving the threshold if their score ratio is under 2.9. The authors suggest a ratio of 2.9 as based on a model by Losada (1999) and call it the 'Losadian Line'. The authors argue that further evidence for this ratio comes from a study by Schwartz et al. (2002).

However, it remains a question whether maintaining this ratio is enough in order to not just have an optimal level of mental health, but to have a 'good' enough level of mental health. Fredrickson and Losada also state that Schwartz et al. (2002) argue that normal mental health is around a ratio of 2.5, whereas an 'optimal' one would be as high as 4.3. The question is then whether Fredrickson and Losada consider anything above the 'normal mental health' ratio as meaning 'flourishment'. Since this is not discussed, it can be said that the definitions of what 'flourishment' and 'optimal' really mean is subject to interpretation. After all, a ratio of 4-1 is larger than a ratio of 3-1. Future studies should make an attempt to clarify this and whether individuals who have a so-called 'normal' ratio are anyhow less effective in their positive perspectives than are those who fit the 'optimal' ratio range.

Formula for Simplifying Negativity to Positivity



©2012 Steph Lough

Learned optimism (Seligman's ABCDE)

Seligman's theory of 'learned helplessness' was developed as an extension of his work on depression. It was noted that dogs who received random electric shocks would eventually stop trying to flee, and would passively accept being shocked. This unwillingness to flee despite having the power to do so was interpreted by Seligman as the animals' belief that they were powerless to change the outcome. He likened this to depression and other mental illnesses; these problems resulted due to the patient's perceived powerlessness to alter their situation.

It is obvious from various animal studies and Seligman's human patients that learned helplessness can result in serious mental (and sometimes physical) trauma to the individual. Later, Seligman began to focus on the positive aspects of mental health rather than the various psychological problems focussed on by research. He built upon his theory of learned helplessness to include learned optimism. Learned optimism functions in the same way as learned helplessness; even when one does not achieve their maximum goal, learning to see the positives and focussing on them consistently (rather than consistently accepting the feeling of helplessness) should aid in improving well-being and mental health.

Seligman developed the ABCDE technique to help individuals to achieve this. The technique encourages the acknowledgement of negative thoughts, and that we should dispute them. When we encounter Adversity, our Beliefs for the future become generalised and negative in response. The Consequences of this include feelings of helplessness and the temptation to give up. However, if you acknowledge the negative thoughts and Dispute them – look for evidence that contradicts them – you will achieve Energization; the result of successful dispelling the negative thoughts.

Seligman's theories demonstrate that achieving positive well-being is not simply about banishing or ignoring the negative side of your situation. Rather, he proposes that accepting and actively working through negative thoughts in a rational way will help us achieve happiness.

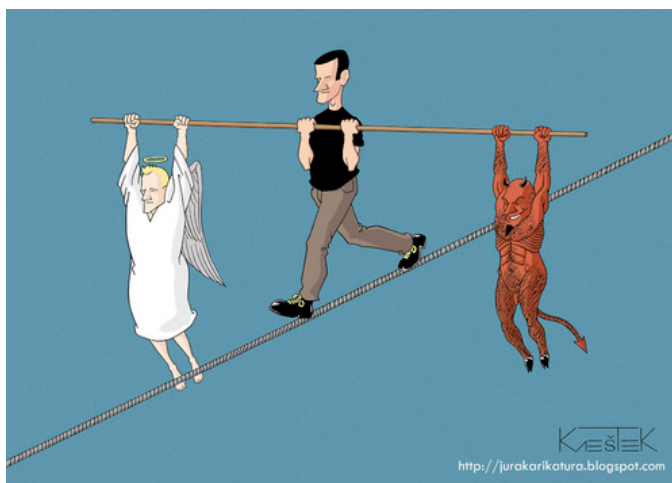
Reflection and Evaluation Model (REM)

When reflecting on the outcome of any given situation, it is common to consider the possible alternative outcomes which may have occurred. Engaging in this 'what if...?' thinking process - known as counterfactual simulation – highlights the importance of adequately balancing an optimistic versus pessimistic view. Counterfactual simulations can be both detrimental and beneficial to our well-being and overall mental health, depending on how we use them.

The Reflection and Evaluation Model (REM) was created by Markus & McMullen (2003) to explain the differing consequences of counterfactual thinking depending on the nature and direction of the mental simulation. For example, one may feel saddened after imagining how easily they could have been affected by a recent natural disaster near their home town. The simulation direction would be classified as a downward, since it is negative. The simulation mode would be classified as reflective, as the individual is considering what might have happened to them. This results in a negative feeling. However, by adding a comparative element ("I could have been affected by that disaster, but I was lucky enough not to be"), the thought process is altered; the simulation direction is still downward, but the mode is now comparative evaluation rather than simple reflection. Such a simple change in how the counterfactual thought is viewed can completely alter its effect on emotional state. Interestingly, the opposite is true when the original counterfactual thought is positive; an upward direction counterfactual thought viewed in a reflective manner now creates a positive effect by simply reflecting on what could have happened ("I almost got an A grade", for example). However, when the mode shifts to evaluation, the positive thought generates a negative feeling – "I almost got an A grade, but I failed to."

This was demonstrated by Markman, McMullen & Elizaga (2007); participants generated 'what if... ' counterfactual thoughts about their performance in a simple anagram task, before completing the task again. Upward counterfactuals viewed in an evaluative mode caused an increase in persistence and performance than when they were considered in a reflective mode. Vice versa, downward counterfactuals caused an increase in persistence and performance when considered in a reflective mode.

This phenomenon serves as a good example of the importance of balancing positive and negative aspects of a situation to achieve optimal benefits; simple eliminating negativity does not always yield positive results.



Situational factors

Optimism and pessimism can be advantageous or disadvantageous in different situations. However, achieving an optimal balance in order to maximise the benefits and minimise the drawbacks of optimism and pessimism is not as simple as adopting a particular outlook (ie. optimistic or pessimistic) in response to a specific situation. The common theme that underlies the differing impact of optimism and pessimism in different situations is making accurate situational analyses. This is also the basis of Tennen & Affleck's (1987) vulnerability hypothesis. When experiencing acute stress, an optimistic outlook (ie. the bad times will pass soon) more accurately reflects the reality of the situation, thus increasing the effectiveness of coping strategies associated with this perspective. However, when faced with chronic stress, an optimistic outlook does not accurately reflect the reality of the situation, thus the coping strategies associated with optimism (ie. problem solving and seeking social support) are no longer suited to the situation, hence reducing their effectiveness.

Similarly, the positive health outcomes associated with pessimistic old patients have been attributed to their willingness to accept the reality of their poor health, and take the necessary precautions or measures to address this situation (Lang et al, 2013). However, this does not mean that all older patients or patients at greater risk of having adverse medical conditions should adopt a pessimistic perspective. In fact, such an approach can be counterproductive – old lung cancer patients who adopt a pessimistic perspective tend to have shorter life expectancies than optimistic patients (Novotny, 2010). An excessively pessimistic patient would refuse treatment as he or she believes that treatment is futile and death is inevitable. An excessively optimistic patient would also not seek treatment because he or she believes that his or her medical condition is not so severe. Instead of adopting pessimistic or optimistic perspectives in response to specific situations, it would be more prudent for us to obtain as much information as we can about a situation in order to make a realistic and accurate assessment. This would allow us to adopt an appropriate response that would lead to more positive outcomes.

Mindfulness



Mindfulness is a concept derived from the teachings of Buddhism. It is commonly defined as “bringing one’s complete attention to the present experience on a moment-to-moment basis” (Baer, 2003). Bishop et al (2004) described a 2-component model, involving regulation of attention and orientation to experience. This describes firstly how one must remain consciously aware of their own thoughts and feelings, while also viewing their experiences through an open mind.

It has been documented that mindfulness techniques – including meditation - can be an effective treatment for stress, anxiety and depression.

Brown & Ryan (2003) devised a method of measuring whether or not someone was engaging in mindfulness, known as the Mindfulness Attention Awareness Scale (MAAS). Their study using this scale indicated that mindfulness was positively related to feelings of pleasantness and positive affect, and negatively related to

measures of depression and anxiety.

However, the relationship between mindfulness and positive well-being was dramatically reduced when the effect of neuroticism was controlled for, indicating that a healthy balance between the positive and negative is key for positive gain.

Mindfulness, despite its usefulness in the Brown & Ryan study, has not been subject to as much empirical study as other positive psychology concepts. As a result of this, problems exist when trusting it as a method of improving well-being. For example, Brown & Ryan list their own ‘personal experience’ as a source for their knowledge, which could indicate bias. Similarly, due to the understudied nature of mindfulness, it is entirely possible that those in the positive psychology field may only present evidence which affirms their existing beliefs about mindfulness. Whether done intentionally or not, this creates bias.

It is also difficult to define ‘mindfulness’; Some studies associate it with emotional components such as gratitude and empathy, whereas others describe it in terms of focus and attention to the present without the association with emotions. Without a clear definition of what mindfulness is, it could be argued that empirical study cannot be accurately carried out, and this type of research is what is ultimately needed to demonstrate the usefulness of mindfulness.

Simple mindfulness exercises

One minute breathing

You can do this absolutely anywhere at any time. Focus on your breathing for a minute: breath in slowly, counting to six as you do it and breath out slowly. Focus on the rise and fall of your breath, and let go of any thoughts that try to tempt you.

Mindful listening

Pick a piece of music you have never heard before - the genre or artist don't matter. Simply listen and do nothing else, hear the music without preconceptions. Alternatively, you can just listen to the sounds in your environment, such as in a busy cafe. Let the music or sounds absorb you and take you on a short journey.

The game of five

In this exercise, your task is to notice five things in your day that usually go unnoticed by you. They can relate to any sensation: hearing, smelling, feeling or seeing. Maybe notice the cafeteria worker's nice earrings, smell the ink of fresh newspaper or feel how lovely your warm cup of tea is in your hands. Truly noticing and appreciating the environment we are in can have a huge impact on your life!

Practical exercises for achieving optimal balance

Learned optimism: Seligman's ABCDE model

Seligman argues, that anyone can learn optimism and improve their responses to adverse situations. Especially for people in the more pessimistic end of the spectrum, learned optimism may be helpful in preventing depression and helping the person achieve their goals better, as well as stay healthier. The ABCDE stands for the following terms:

A dversity -something bad happens

B elief - A negative belief/feeling

C onsequence -You feel or behave in a negative manner

D isputation - Provide counter-evidence to the negative belief

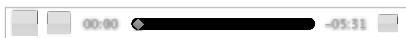
E nergisation - Successful disputation leads to feeling better.

When facing an adversity, there are certain ways in people tend to respond. This is demonstrated by the ABC element. The next time, try to incorporate elements D and E as well! For example, if your friend is late for a meeting with you, you may believe that's because she has once again forgotten about you and doesn't care about you, and you end up yelling at her over the phone. In that case, try to consider alternative explanations and feel better when you realise that there are plenty of other legitimate reasons as to why she may be late, and they may have nothing to do with you.

Mindfulness meditation

You can try the following mindfulness meditation exercises (in ascending order of difficulty!):

1. A short 5 minute mindfulness breathing exercise.



2. A 10 minute mindfulness of breath exercise.

[Download Link \(https://db.tt/mz4dbelJ\)](https://db.tt/mz4dbelJ)

3. This video guides you through a 15 minute mindfulness meditation.

4. A 45 minute body scan meditation exercise. This exercise illustrates how mindfulness can be used to relax body muscles, and is good for easing you to sleep!

[Download Link \(https://dl.dropboxusercontent.com/u/61414855/mindf/Body%20Scan%20Meditation.mp3\)](https://dl.dropboxusercontent.com/u/61414855/mindf/Body%20Scan%20Meditation.mp3)

The UCLA Mindfulness Awareness Research Centre also provides a variety of mindfulness meditation exercises that you can download for free. Check them out [here \(http://marc.ucla.edu/body.cfm?id=22\)](http://marc.ucla.edu/body.cfm?id=22)!

Clinical applications

Seligman and others founded positive psychology with the belief that clinical research should not focus solely on the negative aspects of mental health and how to cure them, but also on how to promote positive mental health. Clinical psychology, while focussing on psychological disorders, also has an overall aim of improving mental health. In 2010, Wood & Tarrrier proposed the new combined field of 'positive clinical psychology' to bridge the gap between the two, highlighting their similarities while moving clinical psychology towards a more balanced approach of treating the bad and promoting the good.

Positive psychology is a relatively new field with less empirical research than other areas, but evidence exists which supports positive psychology techniques as effective in promoting well-being and preventing psychological problems from developing.

In his book *Learned Optimism: How To Change Your Mind and Your Life* Seligman outlines the details of workshops that were hosted for pessimistic children over several years in controlled conditions. By teaching these children positive psychology techniques, Seligman and his colleagues reduced the percentage of children who developed an anxiety or depressive disorder as compared to the control group who did not attend the workshops.

Wood & Joseph (2010) conducted a long-term cohort study to investigate the links between positive well-being and the later development of depression. They found that people with low positive well-being were more than seven times more likely to be depressed ten years later, even after controlling for other variables. Similarly, Sin & Lyubomirsky (2009) conducted a meta-analysis of positive psychology interventions and found that such interventions do cause significant increase in positive well-being and significant decrease in depressive symptoms. They conclude that those in clinical psychology should aim to include positive psychology methods into their treatment of patients, specifically those with depression.

Self-help

Seligman is just one of many names associated with self-help books and their techniques. While self-help is not regarded in the same way as empirical study, undertaking certain tasks and focussing on how to improve one's own situation have been shown to produce positive effects for the individual.

Emmons & McCullough (2003) divided undergraduate students into three groups and instructed them to write down five events that happened to them. Participants in the gratitude condition, who reflected on good things which had recently happened to them, felt more positive about their lives and had higher optimistic expectations for the future than those who recalled negative or neutral life events. These subjects also experienced better quality sleep, and in some cases the positive effects on well-being were reported by their partner.

Similarly, Burton & King (2004) demonstrated that writing about positive life experiences was linked to increased positive mood and fewer visits to health centres. Evidence like this suggests that self-help techniques do produce greater positive affect, and for this reason could be promoted to patients as part of clinical interventions and therapy, specifically for depression.

However, acknowledging good experiences should not be the sole area of focus with self-help. It has been shown that writing about negative life experience is linked with increased immune system functioning and the same decrease in health-centre visits as writing about positive experiences. This indicates the importance of 'balancing' good and bad perspectives; rather than blocking out bad experiences, it is beneficial to examine them, overcome them and try to find any 'silver linings' within them.

Another example of self-help tasks include mindfulness exercises, which can be carried out individually without the need for specialised guidance. These simple exercises can be used to cope with depressive symptoms. For instance, the Three Minute Breathing Space is a mini-meditation that can restore a sense of control over your life when everything seems to be spiraling out of control. The short duration also allows it to be used in emergency situations (eg. moments of immense pressure or impending sense of losing control), thus improving its utility as a self-help tool. Another mindfulness exercise that one can try is the 10 Minute Mindfulness of Sounds and Thoughts, which aims to improve your awareness and acceptance of what is going on around and within you. By doing so, it helps to break the cycle of negative cognitions that is prevalent in depression.

You can download the sound files for the mindfulness exercises here:

Three Minute Breathing Space

[Download Link \(https://db.tt/r7NPtf80\)](https://db.tt/r7NPtf80)

10 Minute Mindfulness of Sounds and Thoughts

[Download Link \(https://db.tt/ChPnqhll\)](https://db.tt/ChPnqhll)

History & cultural connection

Optimism and pessimism are not modern concepts. The ancient Roman physician Galen identified nine temperament types, which included melancholic and sanguine (Sudhoff, 1926). Melancholic individuals were described as thoughtful and introverted, with a focus on negative events in the world. Sanguine individuals were said to be sociable, lively and possess a positive view of the world. Moreover, Galen believed that melancholic and sanguine individuals possessed imbalanced humours, which negatively impacted their health. The ideal personality was said to have a balance of sanguine and melancholic qualities, among others.

Ancient Greek and Chinese philosophers also recognised the need to balance optimism and pessimism. Stoicism, which is a school of philosophical thought that originated in Athens in the early 3rd Century BC, recommended the "premeditation of evils", or imagining and confronting the worst possible outcome (Burkeman, 2012). By doing so, individuals' confidence to cope would increase and hence reduce their anxiety. Moreover, the possibility of future loss would prompt us to treasure our present situation, thus increasing our sense of gratitude. The Taoist philosophy of Yin and Yang also advocates a balance for all dualities in nature, including positive and negative attitudes. Just as light cannot exist without the dark, positivity cannot exist with negativity. As such, the ideal approach would be to balance the two extremes, rather than focus on one at the expense of the other.

Positive psychology can also trace its roots to humanistic psychology, which adopts the view that people are inherently good and strive towards self-actualisation. This field of psychology was championed by Carl Rogers and Abraham Maslow, who sought to challenge the negative view of humanity adopted by Freudian psychoanalysis. Rogers and Maslow also used the theory of flow in developing humanistic psychology (Nakamura & Csikszentmihalyi, 2009). Today, the theory of flow is widely studied in the area of positive psychology, and serves as a historical link between these two areas of psychology.

References to pessimism can also be seen in popular culture. The (in)famous Murphy's Law states that "anything that can go wrong, will go wrong", and is widely cited in diverse areas ranging from business management to TV shows (Spark, 2006). This adage about pessimism continues to be used today to introduce hilarity into situations when things inexplicably (but predictably) go wrong. Optimism can also be seen in the cultures of certain countries such as USA. The American Dream is an optimistic ideal that attracted (and continues to attract) immigrants to the USA in the hopes that hard work would bring about greater opportunities for success regardless of one's social standing (Adams, 2012).



Critique

Theoretical

In most studies optimism and pessimism are considered as extremes of one trait. What if we took an alternative viewpoint and considered them as two completely different traits? For example Mroczek et al (1993) found a correlation of -0.28 between pessimism and optimism in a study of older men. Furthermore, they found that optimism and pessimism each had unique variance contributions to three different measures: hassles, psychological symptoms and illness severity. In addition, for example Plomin et al (1992) reported that in their study optimism and pessimism were completely uncorrelated ($r=0.02$).

Considering the evidence for optimism and pessimism as two possibly separate constructs, it may be useful to have separate measures for modifying optimistic and pessimistic tendencies, to make reaching the optimal balance easier.

Furthermore, Sackett et al. (2011) claimed that individuals tend to shift from optimism to pessimism, and vice versa, depending on the situation which they find themselves in. In this regard, it seems that the notion of being a 'pessimist' or an 'optimist' may not be intrinsically present in each person, but will depend on the event the person is dealing with at that particular moment. The study therefore suggests that both can be useful and that both optimism and pessimism serve its purpose: self-regulation. As mentioned above, this may help people reach optimal balance faster.

Studies should be taking this into account when making judgements about optimists or pessimists, as having either of the two separate perspectives may have its reasons. However, no studies have really done this as of yet. Therefore, future studies should take care when putting people into either of the two separate categories, as someone who is pessimistic in one scenario, may not necessarily be pessimistic next time around. In conclusion, Sackett et al (2011) create an interesting idea in terms of challenging set notions of pessimism and optimism, and is definitely worth looking into further.

Methodological

Many of the health measures used in studies regarding optimism and pessimism are based on self-reported health. While this can be a great indicator of subjective well-being, it would be useful to have more studies that consider objective health measures.

There is also a possible directionality issue in the interpretation of many of these studies: do individuals have better well-being because they are more optimistic, or are they more optimistic because their well-being is better?

Conclusion

Overall, there appears to be various forms of evidence to support the view that a balanced outlook is most beneficial to well-being. Appropriate optimism can maintain well-being, but pessimism also has select benefits. Empirical research and more subjective self-reports have both demonstrated that well-being and mental health can be promoted and protected by achieving balance. Various models and theories discussed in this wiki were proposed to examine and explain factors which affect well-being; from theories of genetics and evolution to models of how we can consciously control our thought processes. This research has helped us understand the most beneficial ways to improve our own mental health. Whether it be our interpretation of the environment or our general outlook on life, a healthy balance appears to be the most appropriate way to maintain well-being.

References

Optimism

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(1), 145.

Aspinwall, L. G., & Brunhart, S. M. (1996). Distinguishing optimism from denial: Optimistic beliefs predict attention to health threats. *Personality and Social Psychology Bulletin*, 22(10), 993-1003.

Buchanan, G. and Seligman, M.E.P. (Eds.). (1995). *Explanatory Style*. Hillsdale, N.J.: Erlbaum.

Caprara, G. V., Fagnani, C., Alessandri, G., Steca, P., Gigantesco, A., Sforza, L. L. C., & Stazi, M. A. (2009). Human optimal functioning: The genetics of positive orientation towards self, life, and the future. *Behavior genetics*, 39(3), 277-284.

Charles S., Carver, M. F. Scheier & S. C. Segerstrom (2010). Optimism. *Clinical Psychology Review*, 30, 879-889.

Ebrecht, M., Hextall, J., Kirtley, L. G., Taylor, A., Dyson, M., & Weinman, J. (2004). Perceived stress and cortisol levels predict speed of wound healing in healthy male adults. *Psychoneuroendocrinology*, 29(6), 798-809.

Fischer, R., & Chalmers, A. (2008). Is optimism universal? A meta-analytical investigation of optimism levels across 22 nations. *Personality and Individual Differences*, 45(5), 378-382.

Gibson, B., & Sanbonmatsu, D. M. (2004). Optimism, pessimism, and gambling: The downside of optimism. *Personality and Social Psychology Bulletin*, 30(2), 149-160.

Giltay, E. J., Geleijnse, J. M., Zitman, F. G., Hoekstra, T., & Schouten, E. G. (2004). Dispositional Optimism and All-Cause and Cardiovascular Mortality in a Prospective Cohort of Elderly Dutch Men and Women. *Archives of General Psychiatry*, 61(11), 1126-1135.

Kostka, T., & Jachimowicz, V. (2010). Relationship of quality of life to dispositional optimism, health locus of control and self-efficacy in older subjects living in different

environments. *Quality of life research*, 19(3), 351-361.

Lorant, V., Deliège, D., Eaton, W., Robert, A., Philippot, P., & Anseau, M. (2003). Socioeconomic inequalities in depression: a meta-analysis. *American journal of epidemiology*, 157(2), 98-112.

Mosing, M. A., Zietsch, B. P., Shekar, S. N., Wright, M. J., & Martin, N. G. (2009). Genetic and environmental influences on optimism and its relationship to mental and self-rated health: A study of aging twins. *Behavior genetics*, 39(6), 597-604.

Mosing, M. A., Pedersen, N. L., Martin, N. G., & Wright, M. J. (2010). Sex differences in the genetic architecture of optimism and health and their interrelation: a study of Australian and Swedish twins. *Twin Research and Human Genetics*, 13(04), 322-329.

Nes, L. S., & Segerstrom, S. C. (2006). Dispositional optimism and coping: A meta-analytic review. *Personality and social psychology review*, 10(3), 235-251.

Rasmussen, N. H., Scheier, M. F., & Greenhouse, J. B. (2009). Optimism and physical health: A Meta-analytic review. *Annals of Behavioral Medicine*, 37, 239-256.

Scheier, M. F., & Carver, C. S. (1985). Optimism, coping, and health: assessment and implications of generalized outcome expectancies. *Health psychology*, 4(3), 219.

Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): a reevaluation of the Life Orientation Test. *Journal of personality and social psychology*, 67(6), 1063.

Szondy, M. (2004). Optimism and immune functions. *Mentalhigiene es Pszichoszomatika*, 5(4), 301-20.

Tindle, H. A., Chang, Y. F., Kuller, L. H., Manson, J. E., Robinson, J. G., Rosal, M. C., ... & Matthews, K. A. (2009). Optimism, cynical hostility, and incident coronary heart disease and mortality in the Women's Health Initiative. *Circulation*, 120(8), 656-662.

Wrosch, C., Scheier, M. F., Carver, C. S., & Schulz, R. (2003). The importance of goal disengagement in adaptive self-regulation: When giving up is beneficial. *Self and Identity*, 2(1), 1-20.

Pessimism

Andrews, P. W., & Thomson Jr, J. A. (2009). The bright side of being blue: depression as an adaptation for analyzing complex problems. *Psychological review*, 116(3), 620.

Baer, R. A. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical psychology: Science and practice*, 10(2), 125-143.

Baumeister, R. F., et al. (2001) Bad is stronger than good. *Review of General Psychology*, Vol 5(4), Dec 2001, 323-370

Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., ... & Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical psychology: Science and practice*, 11(3), 230-241.

Bromberger, J. T., & Matthews, K. A. (1996). A longitudinal study of the effects of pessimism, trait anxiety, and life stress on depressive symptoms in middle-aged women. *Psychology and aging*, 11(2), 207.

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: mindfulness and its role in psychological well-being. *Journal of personality and social psychology*, 84(4), 822.

Buchanan, G. and Seligman, M.E.P. (Eds.). (1995). *Explanatory Style*. Hillsdale, N.J.: Erlbaum.

Burkeman, O. (2012). *The Antidote: Happiness for people who can't stand positive thinking*. Edinburgh: Canongate Books.

Burton, C. M., & King, L. A. (2004). The health benefits of writing about intensely positive experiences. *Journal of research in personality*, 38(2), 150-163.

Carver, C. S., Lehman, J. M., & Antoni, M. H. (2003). Dispositional pessimism predicts illness-related disruption of social and recreational activities among breast cancer patients. *Journal of Personality and Social Psychology*, 84(4), 813.

Cadinu, M., Maass, A., Rosabianca, A., & Kiesner, J. (2005). Why do women underperform under stereotype threat? Evidence for the role of negative thinking. *Psychological Science*, 16(7), 572-578.

Chang, E. C., & Sanna, L. J. (2003). Optimism, accumulated life stress, and psychological and physical adjustment: Is it always adaptive to expect the best. *Journal of Social and Clinical Psychology*, 22(1), 97-115.

Chesterman, E., Cohen, F., & Adler, N. E. (1990). Trait optimism as a predictor of pregnancy outcomes.

Poster presented at the first annual meeting of the International Society of Behavioral Medicine,

Uppsala, Sweden, June, 1990.

Cohen, F., Kearney, K. A., Zegans, L. S., Kemeny, M. E., Neuhaus, J. M., & Stites, D. P. (1999). Differential immune system changes with acute and persistent stress for optimists vs pessimists. *Brain, behavior, and immunity*, 13(2), 155-174.

Emmons, R. A., & McCullough, M. E. (2003). Counting blessings versus burdens: an experimental investigation of gratitude and subjective well-being in daily life. *Journal of personality and social psychology*, 84(2), 377.

Gasper, K., Lozinski, R. H., & LeBeau, L. S. (2009). If you plan, then you can: How reflection helps defensive pessimists pursue their goals. *Motivation and Emotion*, 33(2), 203-216.

Gortner, E. T., Gollan, J. K., Dobson, K. S., & Jacobson, N. S. (1998). Cognitive-behavioral treatment for depression: Relapse prevention. *Journal of Consulting and Clinical Psychology*, 66, 377-384.

Gray, M. J., Pumphrey, J. E., & Lombardo, T. W. (2003). The relationship between dispositional pessimistic attributional style versus trauma-specific attributions and PTSD symptoms. *Journal of Anxiety Disorders*, 17(3), 289-303.

Hassan and Bower (2002) in Holly Petaja Benson (2011) *Children's Dispositional Optimism and Pessimism: Social and Emotional Outcomes*, Proquest, Umi Dissertation Publishing

Hecht, D. (2013). The Neural Basis of Optimism and Pessimism. *Experimental neurobiology*, 22(3), 173-199.

Heinonen, K., Räikkönen, K., Matthews, K. A., Scheier, M. F., Raitakari, O. T., Pulkki, L., & Keltikangas-Järvinen, L. (2006). Socioeconomic Status in Childhood and Adulthood: Associations With Dispositional Optimism and Pessimism Over a 21-Year Follow-Up. *Journal of personality*, 74(4), 1111-1126.

Kivimäki, M., Vahtera, J., Elovainio, M., Helenius, H., Singh-Manoux, A., & Pentti, J. (2005). Optimism and pessimism as predictors of change in health after death or onset of severe illness in family. *Health Psychology*, 24(4), 413.

Henriques, G. Published in the *Journal of Science and Health Policy Depression: Disease or Behavioral Shutdown Mechanism?*. available online:
(<http://psychweb.cisat.jmu.edu/ToKSystem/My%20ToK%20Papers/BSM%20Final.pdf>)
(<http://psychweb.cisat.jmu.edu/ToKSystem/My%20ToK%20Papers/BSM%20Final.pdf>)

Janoff-Bulman, R. (2010). *Shattered assumptions*. SimonandSchuster. com.

Lang, F. R., Weiss, D., Gerstorf, D., & Wagner, G. G. (2013). Forecasting life satisfaction across adulthood: Benefits of seeing a dark future?. *Psychology and aging*, 28(1), 249.

Leahy, R. L. (2002). Pessimism and the evolution of negativity. *Journal of Cognitive Psychotherapy*, 16(3), 295-316.

Markman, K. D., McMullen, M. N., & Elizaga, R. A. (2008). Counterfactual thinking, persistence, and performance: A test of the reflection and evaluation model. *Journal of Experimental Social Psychology*, 44(2), 421-428.

Markman, K. D., & McMullen, M. N. (2003). A reflection and evaluation model of comparative thinking. *Personality and Social Psychology Review*, 7(3), 244-267.

Marshall, G. N., Wortman, C. B., Kusulas, J. W., Hervig, L. K., & Vickers Jr, R. R. (1992). Distinguishing optimism from pessimism: Relations to fundamental dimensions of mood and personality. *Journal of personality and social psychology*, 62(6), 1067.

Martell, C.R.'s web page: (<http://www.christophermartell.com/ba.php>)<http://www.christophermartell.com/ba.php> (<http://www.christophermartell.com/ba.php>)

Maruta, T., Colligan, R. C., Malinchoc, M., & Offord, K. P. (2000, February). Optimists vs pessimists: survival rate among medical patients over a 30-year period. In *Mayo Clinic Proceedings* (Vol. 75, No. 2, pp. 140-143). Elsevier.

Mikulincer, M., & Solomon, Z. (1989). Causal attribution, coping strategies, and combat-related

post-traumatic stress disorder. *European Journal of Personality*, 3, 269-284.

Norem, J. K., & Cantor, N. (1986). Anticipatory and post hoc cushioning strategies: Optimism and defensive pessimism in "risky" situations. *Cognitive Therapy and Research*, 10(3), 347-362.

Novotny, P., Colligan, R. C., Szydlo, D. W., Clark, M. M., Rausch, S., Wampfler, J., Sloan, J. A. & Yang, P. (2010). A pessimistic explanatory style is prognostic for poor lung cancer survival. *Journal of thoracic oncology: official publication of the International Association for the Study of Lung Cancer*, 5(3), 326.

Ong, A. D., Zautra, A. J., & Reid, M. C. (2010). Psychological resilience predicts decreases in pain catastrophizing through positive emotions. *Psychology and aging*, 25(3), 516.

Peters, J. L., Kubzansky, L. D., Ikeda, A., Spiro, A., Wright, R. O., Weiskopf, M. G., ... & Schwartz, J. (2011). Childhood and Adult Socioeconomic Position, Cumulative Lead Levels, and Pessimism in Later Life The VA Normative Aging Study. *American journal of epidemiology*, 174(12), 1345-1353.

Peterson (2000) in Holly Petaja Benson (2011) *Children's Dispositional Optimism and Pessimism: Social and Emotional Outcomes*, Proquest, Umi Dissertation Publishing

Robb, K. A., Simon, A. E., & Wardle, J. (2009). Socioeconomic disparities in optimism and pessimism. *International journal of behavioral medicine*, 16(4), 331-338.

Scheier, M. F., & Carver, C. S. (1985). Optimism, coping, and health: assessment and implications of generalized outcome expectancies. *Health psychology*, 4(3), 219.

Scheier, M. F., Weintraub, J. K., & Carver, C. S. (1986). Coping with stress: divergent strategies of optimists and pessimists. *Journal of personality and social psychology*, 51(6), 1257.

Schulz, R., Bookwala, J., Knapp, J. E., Scheier, M., & Williamson, G. M. (1996). Pessimism, age, and cancer mortality. *Psychology and aging*, 11(2), 304.

Seligman, M. E. (2011). *Learned optimism: How to change your mind and your life*. Random House Digital, Inc.

Seligman, M. E., & Seligman, M. E. P. (1989). Explanatory style: Predicting depression, achievement, and health. *Brief therapy approaches to treating anxiety and depression*, 5-32.

Showers, C. (1986). Anticipatory cognitive strategies: The positive side of negative thinking. Doctoral dissertation, University of Michigan.

Showers, C., & Ruben, C. (1990). Distinguishing defensive pessimism from depression: Negative expectations and positive coping mechanisms. *Cognitive Therapy and Research*, 14(4), 385-399.

Sin, N. L., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice-friendly meta-analysis. *Journal of clinical psychology*, 65(5), 467-487.

Snyder, C. R. (1989). Reality negotiation: From excuses to hope and beyond. *Journal of Social and Clinical Psychology*, 8(2), 130-157.

Tennen, H., & Affleck, G. (1987). The costs and benefits of optimistic explanations and dispositional optimism. *Journal of Personality*, 55(2), 377-392.

Todd, R., et al. (2013). Genes for Emotion-Enhanced Remembering Are Linked to Enhanced Perceiving, *Psychol Sci*, 24(11), p. 2244-53

Wagner, K. D., Berenson, A., Harding, O., & Joiner, T. (1998). Attributional Style and Depression in pregnant teenagers. *American Journal of Psychiatry*, 155(9), 1227-1233.

Wood, A. M., & Joseph, S. (2010). The absence of positive psychological (eudemonic) well-being as a risk factor for depression: A ten year cohort study. *Journal of affective disorders*, 122(3), 213-217.

Wood, A. M., & Tarrier, N. (2010). Positive clinical psychology: A new vision and strategy for integrated research and practice. *Clinical Psychology Review*, 30(7), 819-829.

Optimal Balance

Fredrickson, B.L., and Losada, F.M., (2005) Positive Affect and the Complex Dynamics of Human Flourishing. *Am Psychol*, 60(7), p. 678-686

Losada, M. (1999) The complex dynamics of high performance teams. *Mathematical and Computer Modelling*, 30(9-10):179-192.

Schwartz, R.M., et al. (2002) Optimal and normal affect balance in psychotherapy of major depression: Evaluation of the balanced states of mind model. *Behavioural and Cognitive Psychotherapy*, 30:439-450.

Historical & Cultural connection

Adams, J. T. (2012). *The epic of America*. Transaction Publishers.

Nakamura, J., & Csikszentmihalyi, M. (2009). Flow theory and research. *Handbook of positive psychology*, 195-206.

Spark, N. T. (2006). *A history of Murphy's law*. Lulu. com.

Sudhoff, K. (1926). *Essays in the history of medicine*. Medical Life Press.

Critique

Hazlett, A., Molden, D. C., & Sackett, A. M. (2011). Hoping for the best or preparing for the worst? Regulatory focus and preferences for optimism and pessimism in predicting personal outcomes. *Social Cognition*, 29(1), p. 74-96.