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Perfectionism & Stress

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Stress, perfectionism, health

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Abstract

The constructs of stress and perfectionism are detailed through consolidation of literature. Connections between the experience of stress and the personal trait of perfectionism are analyzed primarily through observed health effects, along with mechanical perspectives. Specifically, the potency of major depressive disorder and chronic fatigue syndrome are found to correlate strongly with perfectionism. An attempt to conclude as to how these associations are maintained is made by drawing information from varying sects of research, concluding that the most plausible reason is a loss of adaptability. Loss of adaptability is primarily facilitated through a malfunction in the hypothalamic-pituitary-adrenal axis, which regulates the stress response system. Future research should attempt to explore in greater detail this system and how it is affected by external loads.

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Introduction

Stress and accompanying physiological responses have long been intriguing topics in the sphere of psychology and related disciplines, such as neuroscience. In fact, a number of theories attempting to explain the multifaceted concept of stress have been proposed, many of which show great variation with respect to alternative hypotheses (McEwen, 1998; Staal, 2004; Ursin & Eriksen, 2004). Interestingly, this phenomenon of anomaly continues, despite stress being an extremely important feature of everyday life, whether it be for the purpose of motivation or as a negatively attuned outcome. Stress can often be one of the most crucial experiences for an individual to undergo in order to maintain a balanced lifestyle (Ursin & Eriksen, 2004, p. 572) and thus succeed in producing the appropriate responses for various situations. Several psychological conditions seemingly interfere with the standard stress response system that most individuals experience. One such condition is generally termed as “perfectionism”, or a more specific designation of this construct. Although most literature agrees that perfectionistic qualities have some impact on stress responses, whether negative or positive in nature, the ways in which this is facilitated are not overly clear to the research community as a whole. Examining the literature has revealed several avenues by which perfectionists become victims of the effects of stress. Thus, this review serves to consolidate and analyze existing literature in the hopes to answer the question: how does stress manifest itself in individuals who lead perfectionistic lifestyles and what health effects might this entail?

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What Constitutes Perfectionism

Along with setting forth a framework for characterizing stress, a similar regard should be taken with perfectionism. The literature on perfectionism has developed greatly in the past thirty or so years, however, it is still a very dynamic field and thus should be taken as such when considering future applications of research. Perfectionism is often used as a casual adjective, however, it does require a more stringent interpretation when incorporated into a more rigorous set of studies. Broadly, perfectionism can be summarized as "the compulsive and unremitting striving toward impossible goals (Burns, 1980)" (Ashby & Bruner, 2005, p. 31). Several well-known models have attempted to identify the key traits that would compose this definition. Potentially the most widely utilized and respected such model is the Frost-Marten multidimensional perfectionism scale (FMPS), as developed by Frost and others (Frost, Marten, Lahart & Rosenblate, 1990). This scale measures perfectionistic qualities based upon six criteria: concerns over mistakes (CM), personal standards (PS), parental expectations (PE), parental criticism (PC), doubts about actions (D) and organization (O). Following this model, Hewitt and Flett proposed a similar multidimensional perfectionism scale (HFMPS), which categorizes self-oriented, other-oriented and socially-prescribed components of the condition (Hewitt & Flett, 1991), providing another layer of complexity.

Additionally, perfectionism researchers have found strong connections with various personality traits – the main five of which being neuroticism, conscientiousness, openness, extraversion and agreeableness. Dunkley and Blankstein as well as others have described the correlation of self-oriented perfectionism (HFMPS) with conscientiousness, and socially-

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prescribed components (HFMPS) and self-criticism (FMPS) factors with neuroticism (Dunkley & Blankstein, 2000; Rice, Ashby & Slaney, 2007). Obsessive-compulsivity has also been found to correlate with perfectionistic traits, and there is often overlap between the two conditions (Schrijvers, Bruijn, Destoop, Hulstijn, & Sabbe, 2010; Ashby & Bruner, 2005), thus these terms might be used to describe similar lifestyles. While generally utilized to describe a condition corresponding to negative outcomes, some researchers have found that depending upon the balancing of subcategories, both positive and negative forms of perfectionism can be experienced. Stoeber and Otto (2006), Blatt (1995, pp. 1006-1007), as well as Ashby and Kottman (1996) characterize negative, or neurotic, perfectionism as comprising concerns, whereas positive, or normal, perfectionism consists of strivings. Generally speaking, neurotic perfectionism tends to lead towards unhealthy lifestyle patterns, while normal perfectionism can have beneficial results in terms of self-organization and other features.

Perfectionism and Depression

An example of one disorder that is commonly reported in coincidence with perfectionistic qualities is major depressive disorder, or commonly referred to as simply “depression”. Depression is a psychological condition primarily characterized by feelings of sadness, emptiness and low interest, suicidal thoughts or tendencies, low energy, and loss of appetite (American Psychiatric Association, 2013). The most notable scales for measuring the severity of depression are the Hamilton Depression Rating Scale (HDRS) (Hamilton, 1960) and Beck Depression Inventory (BDI) (Beck, Ward, Mendelson, Mock & Erbaugh, 1961), which consist of numerous questions which can be analyzed to score an approximate rating. With relation to

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perfectionism, Blatt identified from previous literature several factors associated with this condition which predispose individuals to depression. Firstly, his analysis found that self-critical aspects of perfectionism – i.e. self-oriented in the HFMPS – were tied to robust failure experiences or doubts about their efforts, which in turn lead to feelings of despair and hopelessness (1995) and thus contribute significantly to depressive affect. Chemical indicators of stress following a failure scenario also showed high values in individuals when perfectionist qualities were displayed (Blatt, 1995). These findings indicate that perfectionism reduces the ability to respond accordingly to stress, and thus stresses in the form of failure or fear of failure cause intense psychological torment. Along with this, Blatt found that socially-prescribed, as well as self-oriented perfectionism correlated with high frequency or severity of suicidal ideation (1995) due to the sensitivity to failure experiences, discussed previously – the perception of shortcoming in their own/others' eyes strengthened the potential for suicidal action.

Other researchers have found similar relations between depression and perfectionism. A study conducted by Schrijvers and his colleagues (Schrijvers et al., 2010) ainvolving thirty-nine patients diagnosed with major depressive disorder (MDD) using the DSM-IV system (American Psychiatric Association, 2013) examined the effects of perfectionistic traits on event-related potentials, which measure cortical responses to cognitive stresses. Event-related potentials (ERP) relating to failure scenarios are generally composed of an initial negative response – error-negativity (Ne)– accompanied by a subsequent positive response (Pe) that signifies awareness of the error. A variant of the Frost-Marten Multidimensional Perfectionism Scale (FMPS) was used to note the severity and composition of the patients' perfectionism in terms of subscale (i.e.

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concerns over mistakes, personal standards, and doubts about actions). Questionnaires were also administered to evaluate anxiety or perception of stressful situations. Following this, subjects took an interactive test in which they were required to respond to visual cues with the press of a button, and event-related potentials were measured by electrodes placed on the cranium. Results showed that the Pe responses associated with conscientiousness of error were strongly correlated with higher scores on the concern over mistakes subsection of the MPS and initial Ne responses were related to high scores in the doubts about actions subscale (Schijvers et al., 2010). Although previous studies were discussed as showing varying results, this particular study demonstrated that perfectionist qualities in the presence of depression corresponded to more intense responses in the face of stresses.

Luyten and his colleagues found additional indications of the effects of perfectionism on depression severity as well as potential mechanisms for this in another study (Luyten, Kempke, Van Wambeke, Claes, Blatt, & Van Houdenhove, 2011). Through the use of daily self-report questionnaires and diaries, sixty-five patients with chronic fatigue syndrome (CFS) had their levels of depression measured in regards to perfectionism. Findings included a significant correlation between self-critical subcategories of perfectionism and depression severity (2011, p. 26). In addition, other subscales of the data were used to identify a relationship between self-critical perfectionism and sensitivity to stress, as well as the apparent active generation of new stress caused by perfectionist qualities (2011, p. 27). Therefore, this study not only shows correlation, but also provides a hypothesis of how these factors mediate greater depressive effect; higher experiences of depression are seemingly facilitated through the default creation of new

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stressors and increased sensitivity towards stressors that might be considered trivial to others The latter portion of this hypothesis shows consistency with the ideas set forth by Blatt regarding perfectionism and depression that were previously discussed (1995).

Perfectionism and Chronic Fatigue Syndrome/Fibromyalgia

Depression, however, is not the only condition found to correlate with perfectionism throughout literature. Another such condition is chronic fatigue syndrome, commonly referred to as simply CFS, which is a condition characterized primarily by extreme, unrelenting fatigue or recurring pain (Centers for Disease Control and Prevention, 2017). CFS may sometimes be referred to as fibromyalgia, or FM, due to the similarity in symptoms and lack of a clear division between the two diagnoses. A notable author on the intersection between perfectionism and CFS is Boudewijn Van Houdenhove, a psychologist of Dutch origin who has studied this sect for a number of years. Van Houdenhove's work has found that perfectionism, or at the least, lifestyle traits related to perfectionism, plays a role in "predisposing, initiating, and perpetuating" CFS symptoms (2001, p. 575) in afflicted patients. He and his colleagues found that the main avenue through which perfectionism causes chronic fatigue syndrome is through disrupting the body's natural system for adapting to stress (Van Houdenhove, Luyten & Kempke, 2013). Essentially, high sensitivity to stress resulting from perfectionism (Blatt, 1995; Luyten et al., 2011) – discussed previously – leads to extreme shifts in over- and under-activation of the hypothalamic-pituitary-adrenal (HPA) axis, which in turn imbalances the equilibrium of this system and its ability to regulate stress through cortisol secretion (Van Houdenhove & Luyten, 2010; Van Houdenhove et al., 2013). In addition, cytokine responses, which correspond with sickness-like

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feelings and behavior (i.e. entering a period of resting) become easily triggered, resulting in the chronic low energy experienced by CFS patients.

Recently, a study by Kempke and colleagues attempted to test the validity of these theories by measuring cortisol responses in relation to perfectionism in CFS patients (Kempke, Luyten, Mayes, Van Houdenhove & Claes, 2016). Forty-one female participants in the study were initially administered various questionnaires to determine severity of depressive affect, perfectionism subscales, and fatigue experiences. Once an understanding of these factors was developed, the participants were subjected to the Trier Social Stress Test (TSST), which involves a speaking component as well as a mental task portion and is designed to trigger increases in stress response. Saliva samples were collected before and after the test to indicate cortisol levels corresponding with the stress experience. Analysis of the resulting cortisol levels found that high self-critical perfectionism scores corresponded with reduced cortisol concentrations in the face of stress for CFS patients, indicating that these individuals had a severely disrupted stress response system due to constant HPA axis shifts (Kempke et al., 2016, p. 302). However, participants with more intensive self-critical perfectionism had greater reported subjective stress levels. Further supporting the theory that CFS causes wearing of the HPA system, severity of CFS symptoms were also isolated and found to correspond to lesser cortisol responses amongst the sample. Weathering of the HPA axis in relation to CFS is also discussed by Demitrack and Crofford (1998); conducting a study of thirty chronic fatigue syndrome patients and seventy-two other "control group" individuals, they utilized urine and plasma samples to analyze cortisol and cortisol-bonding-globulin (CBG), a compound that is associated with healthy HPA function

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through the regulation of glucocorticoid. They found that CFS patients showed lower levels of CBG compared to the non-CFS participants, indicating a chemical disturbance in the hypothalamic-pituitary-adrenal system (Demitrack & Crofford, 1998). Following this, they used tests administering ACTH and CRH, hormones generally released when biological stress is experienced, to determine if HPA chemical responses were consistent with expectations for such an imbalance in cortisol levels. These tests appeared to indicate results opposite of their prediction – increased pituitary and reduced adrenal responses – however, this was found inconsistent with previous studies and deemed to be abnormal for such conditions (1998, pg. 691), potentially due to experimental error.

Perfectionism and Coping

While not an officially diagnosed condition, issues coping properly with stressors have also been observed in tandem with perfectionism. Coping is essentially, in this context, the ability to mediate a psychological stressor such that it can be managed. Negative, or maladaptive variants of coping, involve high amounts of emotional or avoidance coping and low amounts of task-oriented coping, and have been found to correlate with higher distress levels (Dunkley & Blankstein, 2000; Robotham & Julian, 2006, p.113; Staal, 2004, p. 22). Dunkley and Blankstein used a series of self-report questionnaires corresponding to various indexes, such as subscales of perfectionism, experience of hassles, autonomy/solitude, depression and coping strategies, to analyze the ways in which perfectionism related to hassles and coping methods in university students (2000). Their results, which agreed with similar presiding research, identified that perfectionism leads to more maladaptive (i.e. negatively skewed) coping strategies, and that this

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feature serves as an important avenue for mediating strong feelings of distress. Maladaptive coping leads to non-proportional stress responses because simple issues that can be solved with elementary methods are instead met with avoidance or other, unhealthy forms which do not actively address problems. Another way in which this manifests itself is through the condition known as “burnout”, commonly experienced by professionals in very stressful fields with a high amount of personal interaction, which can result in the feeling of being constantly overwhelmed, emotional exhaustion and other symptoms (D’Souza, Egan & Rees, 2011). Burnout has been found to be amplified by certain subcategories of perfectionism (D’Souza et al., 2011), and its symptoms might be explained by a lack of ability to cope with stressful occurrences, such that they all seem to feel overwhelming.

Other researchers have analyzed coping strategies in non-perfectionist populations and found similar patterns to those that Dunkley and Blankstein identified. For example, Bland et al. (Bland, Melton, Welle, & Bigham, 2012) examined how coping strategies indicated variable tolerance towards stress. To find these relations, questionnaires about how the individuals handled the stress they experience were taken, as well as questionnaires to determine the frequency and severity of stressors they experienced. Methods indicated on the questionnaires included listening to music, sleeping, eating, praying, cleaning, watching films and many other options, which can be approximately categorized as avoidance or action-oriented coping. The study found that feeling socially supported by peers or mentor figures significantly correlated with high stress tolerance under the methods applied; in contrast, coping methods characterized by avoidance, such as using a substance or calling mom, were found to correlate with much

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lower stress tolerance levels and could thus be labeled as maladaptive in nature. It was also hypothesized that the motivation behind why a certain strategy was applied could be the root for the observed relationship, rather than simply the direct outcomes of that strategy (Bland et al., 2012, p.372). Robotham and Julian (2006) reviewed a multitude of literature regarding stress and coping and came to the conclusion that the main two forms of coping can be distinguished as problem focused and emotion focused, which agree with the types differentiated by previous authors (Baqutayan, 2015, p. 481). They also described the balance of using professional and family-friend intervention to handle stress, touching on the necessity of some individuals to seek trained help as opposed to others. The depiction of coping in the CATS model of stress proposed by Ursin and Holger, as discussed earlier (2002), also discusses the importance of coping to the experience of stress. Despite their focus on the outcome of the strategies as opposed to the pathways themselves, Ursin and Holger described emotional coping as a form of defense mechanism that comes when coping is impossible (2002); this form of coping turned to a distorted state of reality rather than an active effort to accept what is happening. Many individuals with perfectionist tendencies have been found to undergo the same coping strategies described as maladaptive in non-perfectionist populations (Luyten et al., 2011, p.23), and it may stand to merit that this is due to a more direct correlation of the two.

Despite the seemingly negative impact of perfectionism on coping methods, however, other reviews of existing literature have found that healthy perfectionism can be connected to more beneficial coping habits. In attempting to differentiate the positive aspects of perfectionism, Stoeber and Otto observed that active coping strategies for dealing stress were often associated

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with the positively oriented perfectionism traits (personal standards and organization) while negative aspects generally had more maladaptive strategies (2006). These connections were reiterated in a questionnaire-based study by Rice and Lapsley, who found that action-oriented coping methods were much more prevalent in healthy perfectionists while emotional coping methods were observed in maladaptive perfectionism (2001); additionally, it was eluded that this may be because of the high organization but lower concern experienced by healthy perfectionists – adaptive coping involving planned efforts towards solving stressful situations are potentially derived from these traits. Therefore, it is important to note that not all forms of perfectionism lead to seemingly negative coping methods, and in fact, it can often be associated with positive outcomes in this regard.

Discussion and Conclusion

Analyzing the literature behind stress in coincidence with perfectionist tendencies has revealed that the latter may amplify responses to the former, both in positive and negative ways. Stress, as a construct, has historically been regarded as a negatively attuned device, however positive conceptions focusing on the motivational aspects of stress may also be quite valid (Ursin & Eriksen, 2004; Lundberg & Frankenhaeuser, 1980). Additionally, contemporary models of stress consistently indicate that the goal of the experience is to initiate regulatory steps for the individual undergoing the stress (McEwen, 1998), such that any disruptions to physiological equilibrium can be corrected. Similarly, both maladaptive and adaptive forms of perfectionism seem to exist, with the former being primarily characterized by high levels of concerns about their actions, whereas the latter consists primarily of strong organizational skills and apt goal-

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setting (Stoeber & Otto, 2006). Subcategories of perfectionism can also be distinguished, comprising of different elements depending on the type of scales (Frost et al., 1990; Hewitt & Flett, 1991) used to classify them.

Stress was found to manifest itself in perfectionists through depressive affect, chronic fatigue syndrome and an inability to cope with stress. All of these effects seem to most plausibly stem from a loss of adaptability, which may be facilitated by an imbalance of the hypothalamic-pituitary-adrenal axis (Demitrack & Crofford, 1998; Kempke et al., 2016; Van Houdenhove & Luyten, 2010; Van Houdenhove et al., 2013) caused by extensive and extreme exposure to stress. A lack of balance in the HPA system can cause problems with appraising the response appropriate for a given stimulus, leading to depression because less threatening stimuli may trigger intense failure experiences (Blatt, 1995). As discussed by Van Houdenhove and his colleagues, the turbulence undergone by the HPA system can lead to irregular cytokine responses (2013) that in turn cause periods during which the body believes itself to be afflicted with a sickness, and thus assumes a resting state; this phenomenon is hypothesized to be the cause of the extreme fatigue experienced by patients with chronic fatigue syndrome. Poor coping habits in perfectionists demonstrate and perpetuate loss of adaptability as well, in that they hinder the potential to formulate a suitable plan to deal with issues that arise in one's life, instead turning to avoidance strategies that push off responsibility.

As such, loss of adaptability can be identified as the feature bridging the main corollaries of perfectionism, suggesting a potential focus in this sector for future research. Existing literature has solidly established that connections between perfectionism and stress-derived conditions can

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be drawn, however, the mechanics of how this is established remains somewhat unclear. An ineptitude to adapt to external stressors has been consistently observed amongst perfectionists through several different health outcomes, nevertheless, some research disagrees with this observation (Demitrack & Crofford, 1998). Suggestions for research to come might include a greater focus on how the hypothalamic-pituitary-adrenal axis is affected by perfectionistic subcategories, such that a quantitatively supported consensus can be reached on this topic. Creating a better understanding of this connection may help in clinical applications because if a direct causation factor could be isolated it would allow for more targeted diagnosis and treatment of illnesses derived from unbalanced HPA axis; this may assist in treating depression, which has been an increasing health concern in recent years. Given the frequency of encounters involving stress related incidents – such as an anxiety attack or mental breakdown – it seems natural that scholarly efforts to better comprehend the effects of stress will continue to grow with awareness of these issues.

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