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**THE USE OF THE ELABORATION LIKELIHOOD MODEL AND ATTITUDE
CHANGE IN PERSONALITY DISORDER PATIENTS**

by

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**SUBMITTED TO SCRIPPS COLLEGE IN PARTIAL FULFILLMENT OF THE
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Abstract

Previous research has studied the relationship between the use of the Elaboration Likelihood Model (ELM) and various personality traits when individuals are presented with persuasive information. This study aims to examine attitude change toward treatment in personality disorder (PD) patients using the ELM. It is predicted that patients of BPD, SPD, and OCPD will be more likely to use the central route of processing, while patients of NPD will be more likely to use the peripheral route of processing when evaluating persuasive information due the personality traits characteristic of the respective disorders. Selected patients of the four PDs of interest will be randomly assigned to read a positive persuasive appeal containing information more likely to be persuasive to an individual using the central route of processing or, conversely, the peripheral route of persuasion. Differences in treatment attitudes before and after reading each appeal will be compared in a 2x4 Factorial ANOVA design. Understanding individual differences in information processing and attitude change toward treatment depending on personality disorder could potentially allow for mental health professionals to consider these tendencies when encouraging treatment for individual personality disorder patients.

Receiving treatment for a diagnosed mental illness can be a complicated process for many individuals. Mental health concerns are almost a common phenomenon, with about 17.9% of all U.S adults having reported experiencing a mental illness in 2015 (“Center for Behavioral Health”, 2016). However, certain disorders are more easily diagnosed than others. In particular, personality disorders often present a challenge on the path to diagnosis. Within a given year, 9.1% of the population will have been given a diagnosis of a personality disorder at some point in their lifetime (“Center for Behavioral Health”, 2016). However, given the nature of personality disorders, the true incidence is ambiguous. Many patients delay seeking treatment or health information regarding personality disorders because it is often assumed that any aberrant personality traits one exhibits are inherent to their general personality. This challenging factor not only has the potential to limit mental health professionals’ ability to diagnose these disorders, but it also impacts the number of afflicted persons able to get treatment. While over half of diagnosed patients with disorders such as Schizophrenia, Bipolar, Generalized Anxiety, and Major Depression receive treatment within a given year, only 39.0% of patients with a personality disorder report having received some type of treatment (Park-Lee et al., 2016). This number does not include the percentage of patients who receive some amount of treatment, but eventually dropout or discontinue their treatment regimens.

The treatment dropout potential is another considerable obstacle that mental health professionals face. As people with personality disorders commonly present characteristics that impact their ability to interact with others, collaborating with a therapist, for example, can be a difficult task (Dingfelder, 2004). As Marsha M. Linehan, a researcher from University of Washington has found, nearly 70% of individuals diagnosed with Borderline personality disorder (BPD) dropout of treatment (Dingfelder, 2004). Many interventions have previously been examined in attempts to combat this trend. However, it is currently unclear how direct persuasive efforts may impact patient attitudes toward engaging in treatment.

This study will focus on the model of attitude change as outlined in the Elaboration Likelihood Model (ELM), a theory of persuasion originally conceptualized by researchers Petty and Cacioppo (1986). Essentially, the ELM purports that attitude change can be achieved using both high and low thinking processes. Furthermore, it holds that there are two different cognitive routes a person can use that lead to attitude change: the central route and the peripheral route. When an individual engages in the central route of processing information, they are more apt to consider all relevant information provided, requiring higher elaboration of thought. Conversely, when engaging in the peripheral route to process information, individuals use a lower level of thought elaboration, relying mainly on obvious cues and heuristics to interpret persuasive information (Petty & Cacioppo, 1986). However, there are a plethora of variables that have been found to affect

which persuasive route an individual is likely to follow and how efficient each route can be in effecting attitude change. There are two broad categories of factors that influence the ELM: motivational and ability factors (Wagner & Petty, 2011). Among the numerous motivational factors that have been established, examples include personal relevance of the presented argument, the framing of the message, and the need for psychological consistency. Examples of ability factors include knowledge regarding the attitude topic, message repetition, and individual attentional resources (Wagner & Petty, 2011). In turn, these factors, among many others, can influence various aspects of the ELM, such as the level of persistence, or stability of the new attitude. For example, it has been found that the central route, rather than the peripheral route, must be followed, if more stable, permanent attitude change is desired (Sengupta & Boninger, 1997). Furthermore, it has been found that when using the peripheral route, the low levels of elaboration foster a lack of motivation to deeply internalize all given attitude cues (Sengupta & Boninger, 1997). Rather, a surface association between the attitude cues and the attitude is formed, while individuals using high elaboration levels are more likely to experience a more stable attitude change (Sengupta & Boninger, 1997). However, it has also been found that when peripheral route cues are more closely related to the attitude object, they are also more likely to produce a more stable attitude change (Sengupta & Boninger, 1997). In addition to the stability of attitude change, the route of

persuasion used may also be influenced, which is what will be investigated in the current study.

Past research also heavily indicates that individual personality traits can have an impact on the use of the ELM persuasive routes. As found by Haugtvedt and Petty (1992), one's level of need for cognition can play a moderating role in the effectiveness of persuasive appeals. They found that when presented with a persuasive appeal, participants with a high need for cognition were more resistant to change than those with a low need for cognition, while those with a low need for cognition were more likely to display more persistent attitude change than those with a high need for cognition (Haugtvedt & Petty, 1992). The Big Five personality traits (openness, conscientiousness, extraversion, agreeableness, and neuroticism) may also impact one's response to persuasive appeals (Gerber et al., 2012). As Gerber et al. (2012) found when examining voter turnout rates, high levels of openness are more likely to lead to a broader persuasive response. The current study will examine several of these Big 5 traits as they relate to personality disorders and attitude change, but will elaborate on other relevant traits, as well. In addition, it has also been shown that persuasive appeals are more effective when the message framing targets an individual's particular personality traits (Hirsh, Kane, & Bodenhausen, 2012).

While past literature has expanded on the various factors that influence an individual's use of the ELM, it has not yet done so with a clinical lens.

Given what is known regarding the influence of individual personality traits

on attitude change, the study will explore attitude change in personality disorder patients. Personality disorders often present with varying traits that may influence attitude formation. This study will focus on four major personality disorders: BPD, Schizoid personality disorder (SPD), Narcissistic personality disorder (NPD), and Obsessive Compulsive personality disorder (OCPD)—each of which are associated with specific, potentially influential personality traits.

One of the most common personality disorders, BPD, is often characterized by instability in self-image, emotional control, impulse control, and interpersonal relationships. Common symptoms in patients may include self-injury, suicidal tendencies, impulsive aggression, inappropriate displays of intense anger, or desperate attempts to avoid abandonment (Lieb et al., 2004). The definitive cause of BPD is currently unknown, however, a combination of genetic factors and major childhood stressors, such as abuse or parental neglect, may contribute to its development. Current treatments often involve a mixture of psychopharmacology and psychotherapeutic interventions (Lieb et al., 2004). However, when encouraging treatment, the emotional nature of BPD needs to be considered, due to the links that have been found between emotion and persuasion. It has been shown that attitudes have the potential to be influenced by the emotions associated with the attitude object, as well as an individual's emotions as a result of unrelated factors. The emotional framing of the persuasive information appeal may also influence attitudes and attitude change. In addition, an individual's

emotional valence may predict the route of persuasion they are more likely to follow. All factors, such as emotion, that may influence the ELM can bear multiple roles in the persuasion process. They can act as simple cues, impact the amount of elaboration used, bias interpretation of the message, or impact the confidence one has in their own self-efficacy (Petty & Cacioppo, 1986). Given the various impacts these factors can have on the process of attitude change, it has been found that experiencing high levels of negative emotional affect, a trait often experienced by BPD patients, will lead to a larger levels of elaboration, and therefore a higher likelihood of following the central route, while a positive disposition may predispose an individual to follow the peripheral route of persuasion (Petty & Briñol, 2014). Similar findings regarding the implications of emotion on attitude change via the ELM have been cited in research conducted by Wagner & Petty (2011).

NPD, another personality disorder of focus, is characterized by other influential traits. This disorder is commonly marked by a lack of empathy, a need for admiration, and a pattern of grandiosity, while often simultaneously hiding an underlying sense inferiority, emptiness, or boredom (Caligor, Levy, & Yeomens, 2015). The broad spectrum of severity adds a level of complication to many diagnostic efforts. However, once diagnosed, treatment will ideally be determined. While no treatments for NPD are currently empirically supported, the most recommended treatment involves various psychotherapeutic approaches, as well as symptom-dependent psychopharmacology (Caligor, Levy, & Yeomens, 2015). The lack of empathy

and difficulty with interpersonal attachment characteristic of NPD adds to the struggle to keep patients in treatment. Given this challenge, the self-referential nature of the disorder must be considered when formulating a persuasive appeal to NPD patients. It has been found that engaging in self-referential thought makes following a central route to persuasion more likely. Having attention focused on one's self has been found to predispose individuals to be more open to elaborate consideration of all persuasive information presented (Escalas, 2007). However, several other traits consistently associated with NPD, such as high levels of extraversion and low levels of agreeableness, have been shown to be related to a higher propensity of using the peripheral route to respond to persuasive appeals (Chen & Lee, 2008). Given these conflicting traits as they pertain to attitude change, it is not immediately apparent how patients with NPD will respond to persuasive attempts, per the ELM.

Another disorder of interest is OCPD, which presents its own unique traits that may impact an individual's attitude change process. This disorder commonly manifests with an excessive need for orderliness and cleanliness, a preoccupation with perfectionism, and an impairing need to control one's own environment (Cain et al., 2014). Diagnosis of OCPD can be challenging, as it may manifest with characteristics similar to those of Obsessive Compulsive Disorder (OCD). The controlling behaviors exhibited by OCPD patients often have the potential to be mistaken as compulsive habits characteristic of OCD. For example, hoarding is listed as a symptom of both

OCD and OCPD in the DSM IV (Mansebo et al., 2005). Current treatments for OCPD include psychotherapeutic techniques such psychodynamic therapy and cognitive therapy. However, it has been found that lack of occupational dysfunction may lead to a lack of motivation, discouraging patients from seeking treatment (Mansebo et al., 2005). To address this obstacle, certain traits of the disorder, such as high levels of conscientiousness, must be considered as it relates to persuasive efforts (Samuel & Widiger, 2011). It has been found that individuals high in conscientiousness are more likely to follow a central route of persuasion (Chen & Lee, 2008). Another pervasive trait in patients diagnosed with OCPD is a high level of neuroticism (Samuel & Widiger, 2010). In terms of persuasion and the ELM, neuroticism has been linked to a higher likelihood in engaging in the central route of persuasion, thus displaying another example of the relationship of personality disorders and traits that influence use of the ELM (Petty, Cacioppo, & Schumann, 1983).

The last disorder of interest in this study is SPD. This personality disorder is characterized by a detachment from interpersonal relationships and limited emotional expression, often accompanied by reclusive behavior and odd patterns of communication (Kosson et al., 2008). However, the general lack of research regarding SPD, as well as lack of construct validity in assessment make diagnostics complicated. Once diagnosed, the general treatment for SPD includes various psychotherapeutic approaches. Conversely, the reclusive nature of the disorder may cause challenges in completing treatment regimens through psychotherapy, which must be

addressed. However, like NPD, OCPD, and BPD, certain traits of the disorder, such as a construct of ambivalence, meaning simultaneous and conflicting beliefs or attitudes, may be implicated in attempts at attitude change (Thylstrup & Hesse, 2009). It has been found that high levels of ambivalence actually increase an individual's likelihood of careful consideration of information presented to them (Cavazza & Butera, 2008). Another distinctive trait of SPD is low levels of extraversion. Higher levels of extraversion have been shown to predict the use of the peripheral route to persuasion, encouraging instead the use of cues and heuristics to guide information processing (Chen & Lee, 2008). As such, each unique trait associated with the four personality disorders of focus has the potential to influence a patient's pattern of persuasion through acting as simple cues, impacting the amount of elaboration used, biasing interpretation of the message, or impacting the confidence one has in their own self-efficacy (Petty & Cacioppo, 1986).

As discussed, there has been extensive research on the ELM and different factors that impact an individual's route of persuasion at a given moment in time. With influential elements such as conscientiousness, need for cognition, ambivalence, emotions, and self-referential tendencies, among many other traits, it is clear that predicting attitude change is complicated. Even for individuals without a personality disorder diagnosis, these traits are potentially influential factors on attitude change, however less severe than in an individual with a personality disorder. While the ELM has been widely researched, along with the various factors that have the potential to impact

an individual's path to persuasion, it is still empirically unknown how psychologically abnormal patterns of thinking interact with persuasion. It is unknown if patients with conditions such as NPD, SPD, OCPD, and BPD will display a pattern of using the central or peripheral route of persuasion due to the exaggerated traits characteristic of the respective disorders. The aim of this current study is to address this ambiguity using the topic of attitudes toward treatment. Given the various difficulties in treating personality disorders, the possibility for the four personality disorders to engage in the ELM paths of information processing as it pertains to attitudes toward treatment will be investigated.

Patients diagnosed with BPD, NPD, OCPD, and SPD will be recruited to participate via "consent to contact" options and information spread through the mental health community. This study will be a quasi-experiment. Participants' initial treatment attitudes will be measured, after which, they will then be randomly assigned a condition of the dependent variable: persuasive appeal type, placing them in either the peripheral or central condition. Participants will receive a persuasive appeal featuring information characteristic of the peripheral route or the central route processing, depending on the experimental condition they are placed in. Following exposure to the appeals, participant attitudes toward treatment will be measured once more to assess any attitude change toward treatment.

Given what is already known about the interactions of certain characteristics and personality traits with the path to persuasion, there are

several key predications for patterns of attitude change in patients with different personality disorders. It is hypothesized that the route of persuasion used (central versus peripheral) will impact attitudes toward engaging in treatment. More specifically, due to the trait qualities of OCPD, SPD, and BPD being associated with a higher propensity of using the central route of processing, it is hypothesized that using the central route to persuasion will lead to a larger change in attitudes toward treatment. Conversely, given the trait qualities of NPD mostly being associated with a higher propensity of using the peripheral route of processing, it is hypothesized that the use of the peripheral route will result in a larger change in attitudes toward treatment. Given what is known regarding the central route's ability to produce longer-lasting attitude change, these hypotheses may appear somewhat obvious. However, these results can be interpreted under the assumption that the average participant is of a stable mental state. It is unknown how the cognitive processes and mechanisms behind mental illness may impact elaboration of thought and reactions to persuasive appeals. With that said, to reiterate, there are several important hypotheses being investigated:

Hypothesis 1: There will be an overall higher rate of positive attitude change toward treatment in participants exposed to the persuasive appeal targeting the central route.

Hypothesis 2: Participants diagnosed with BPD, OCPD, and SPD will display higher rates of positive attitude change toward treatment when exposed to the persuasive appeal targeting the central route of processing.

Hypothesis 3: Participants diagnosed with NPD will display higher rates of positive attitude change toward treatment when exposed to the persuasive appeal targeting the peripheral route of processing.

Proposed Method

Participants

This study aims to investigate the population of adults (18-65 years) diagnosed with any of the personality disorders NPD, BPD, SPD, or OCPD. To recruit participants, various hospitals, private practices, and support groups will be asked to provide a “consent to contact” option for patients. Further contact will be made, should they provide consent. Mental health professionals will also be able to provide clients with information regarding the study, should they be deemed an appropriate fit for the research. The sample of participants selected will be within the ages of 18-65 years. Each participant will have been diagnosed within the last five years with at least one of the personality disorders of focus: NPD, BPD, SPD, or OCPD. . As this study focuses primarily on attitudes towards treatment, it would be ideal to have participants who have not potentially spent extensive time in treatment, having already developed strong opinions on the subject. While a diagnosis within the last year would be preferred, there are concerns

regarding recruiting an adequate number of participants, as personality disorders face the aforementioned difficulties in the diagnostic process. A diagnosis in the past five years will ideally allow an appropriate number to participants to be recruited, while simultaneously recruiting participants without extensive prior experience with treatment. The sample will consist of roughly equal numbers of male and female identifying participants.

Roughly 60% of participants will identify as Caucasian/White, 15% Hispanic, 15% Asian/Pacific Islander, and 10% African-American/Black. The sample will ideally include at least 200 participants, with at least 50 participants diagnosed with each different personality disorder of interest.

Materials

Each participant will be given a sheet of paper with one of two randomly assigned persuasive appeals. Both will include information regarding the benefits of treatment and therapy for individuals with a personality disorder. However, one version will model information in a manner likely to be impactful when using central route of information processing, and the other likely to be influential when engaging in the peripheral route to persuasion. These appeals have been designed by the experimenter uniquely for this study (see appendix A). In creating the appeal for the central route, pertinent information regarding the various benefits of treatment was stated in simple, factual statements. However, in creating the peripheral route appeal, many of the same benefits are listed, yet written in a manner that could be

understood by individuals relying on context cues and heuristics to process information. The questionnaire given to participants before and after receiving their respective appeals was also designed by the experimenter of this study (see appendix B). It will measure three different domains of treatment: general feelings toward engaging of treatment, the importance of engaging treatment, and the participant's likelihood of engaging in participants. Scores across these three domains will be combined to create an overall measure of an individual's treatment attitudes. It will use a 7-point Likert Scale for measure participant responses. In addition, to ensure all participants will have equal access to the study an optional shuttle will be provided to and from the lab, free of charge to participants.

Procedure

This study will be conducted entirely in the laboratory over the course of a single day. Participants will first be presented with all information necessary to provide informed consent. Once informed consent has been obtained, all participants will complete the questionnaire to assess initial attitudes toward treatment (see appendix B). Regardless of diagnosed PD, participants will then be randomly assigned to receive one of the two persuasive appeal documents (see Appendix A). After participants have had a chance to read their individual documents, they will each complete the questionnaire once more to assess any resulting attitude change. All

participants will then be thanked for their time and debriefed the end of the study, or at the time of withdrawal from the study.

Ethics

It is imperative that all participants fully comprehend any risks and benefits of partaking in the study before consenting to participate. In this particular study, there are few perceived risks to participants. Participants will be harmed by the study. To ensure this, all participants will be required to complete an informed consent document detailing any possible risks and benefits of participating. In addition, no deception will be used at any point in this experiment. Participants will be able to exit the study at any point during its duration, and will be debriefed on the experiment upon exiting or completing the study.

On the contrary, this study proposes several potential benefits. All participants will receive information detailing the potential benefits and importance of engaging in treatment for their personality disorders. The information collected in this study also has the potential to provide vital data on the impact of mental illness on the use of the ELM, as well as crucial information for mental health professionals on methods of improving treatment plan retention rates. The possible benefits of this study outweigh the potential risks.

However, this study aims to investigate a population comprised of patients diagnosed with any of four different personality disorders. Mental

illnesses such as these qualify participants as a protected population. In addition to the informed consent and debrief provided to all participants, they will also have access to an on-call, licensed mental health professional. Should participants require immediate psychotherapeutic aid given the potentially triggering subject of the study, help will be available.

Participation will be entirely voluntary, and participants will be able to leave the experiment at any time. There will also be assured anonymity and confidentiality. Due to the clinical nature of this study, certain medical records will be obtained, as well. These records are necessary only to confirm diagnosis of a personality disorder of focus (BPD, NPD, SPD, or OCPD). Otherwise, researchers will not have access to these records and they will remain confidential. Reports of any data collected will remain anonymous and confidential, as no personally identifying information will be included.

Expected Results

It is hypothesized that the route of persuasion used (central versus peripheral) will impact attitudes toward treatment. More specifically, it is predicted that patients with personality disorders SPD, OCPD, BPD will be more likely to have a higher level of positive attitude change when given the persuasive appeal with information pertinent to individuals engaging the central route of information processing. Conversely, participants diagnosed with NPD will show a higher level of positive attitude change when given the persuasive appeal with information pertinent to those using the peripheral

route of information processing. To evaluate these predictions, attitude change will be measured by subtracting the initial average scores of the three questionnaire items from the average scores of the three questionnaire items after receiving the persuasive appeals. A 2 x 4 factorial ANOVA will be employed and analyzed. In addition, several main effects will be tested for. It will be expected that the main effect of persuasive route presented will be significant at $\alpha=0.05$, such that rates of attitude change will vary significantly between exposure to the central or peripheral route. It will also be predicted that the main effects of personality disorder will be null, such that rates of attitude change will not vary significantly across disorders. In addition, post-hoc tests will be employed so as to measure the simple main effects of each disorder. It will be expected that participants with OCPD, SPD, and BPD will show a greater rate of positive attitude change when exposed to the central route appeal, than when exposed to the peripheral route appeal. Conversely, it will be expected that participants with NPD will show a higher rate of attitude change when exposed to the peripheral, rather than the central route appeal. These projected results are influenced and informed by previous studies, primarily those relating to the relationship between various personality characteristics and ELM persuasive methods. As previously noted, each personality disorder of interest in this study is generally characterized by certain traits. OCPD patients have often been found to exhibit high levels of conscientiousness and neuroticism, traits that have been linked to a higher likelihood in using the central route when

evaluating persuasion (Chen & Lee, 2008) (Samuel & Widiger, 2010). Patients with BPD have been found to exhibit high levels of emotionality, primarily marked by negative affect, which has been found to increase the likelihood of an individual engaging in the central route to process persuasive information (Petty & Briñol, 2014). Additionally, traits often characteristic of SPD are low levels of extraversion and ambivalence, which have been shown to predispose individuals to using the central route to evaluate information (Cavazza & Butera, 2008) (Chen & Lee, 2008). Lastly, individuals diagnosed with NPD often present high levels of extraversion and low levels of agreeableness, each of which have been found to induce a higher likelihood of processing information using the peripheral route. Each of the four personality disorders being investigated in this study is characterized by unique traits. As shown, many of those traits have the ability to influence an individual's appraisal of persuasive information presented. Specifically, the majority collectively increase the likelihood of more thorough consideration of all material presented in the process of attitude formation, and therefore the use of the central route of persuasion highlighted by the ELM, while only NPD displays traits shown to increase the likelihood of using low elaboration, and therefore the peripheral route. As such, it is predicted that a significant effect at $\alpha=0.05$ will be found between type of persuasive appeal used and length of treatment retention.

Discussion

Based on the varying characteristics of the four personality disorders of interest in this study (SPD, NPD, OCPD, BPD) and their known interactions with the use of the ELM, it is predicted that participants with SPD, OCPD, and BPD will show a higher level of positive attitude change toward treatment when given the persuasive appeal with information likely to be more persuasive to individuals using the central route of processing. It is also hypothesized that participants with NPD will display higher levels of positive attitude change toward treatment when given the persuasive appeal with information likely to be more persuasive to individuals using the peripheral route of processing. The predictions will be analyzed using statistical calculations and analysis. It is expected that SPD, OCPD, and BPD patients will rate the importance of treatment, their likelihood of engaging in treatment, and their general feelings toward treatment as higher after reading the central route appeal, while NPD patients will rate those measures higher after reading the peripheral route appeal.

Given these predicted findings, there are several implications for the fields of clinical and social psychology. These findings will add to the base of knowledge regarding the ELM, providing initial evidence for the use of the ELM in a clinical setting, for which there is little to no precedence. These results will also provide preliminary insight into how mental health disorders impact an individual's attitude change process.

Understanding if and how a personality disorder can influence persuasive informational processing regarding attitudes toward treatments, specifically, is critical. Given the current difficulties in engaging personality disorder patients in treatment, understanding how patients with different disorders vary in the underlying cognitive processes leading to attitude change, mental health professionals can pinpoint the information most likely to improve attitudes toward treatment. If mental health professionals can create multiple brochures or speeches targeted toward different personality disorder patients based on the route of persuasion they are mostly to take, increased number of patients may choose to engage in treatment. In addition, targeted persuasive appeals regarding treatment may induce long-term action and increase patients' treatment plan retention.

While this study attempts to address all possible biases that could influence results, there are several limitations to the design. This study investigates attitudes toward treatment in a general sense, but does not account for the differences in treatments used for the range of personality disorders, as individual treatment plans often significantly vary. Another limitation to this study is the use of a self-report questionnaire.

Participants may be driven to respond in a socially desirable manner. A final limitation to the design of this study is that it focuses on a category of mental disorders that are very difficult to diagnose. This study may not produce the most complete and representative results as only patients

who have actually been diagnosed may participate. Given that they have been previously diagnosed, it may be assumed that they have already sought some form of help for their symptoms and will more likely have a more positive toward treatment to begin with.

In the future, it would be relevant to continue examining the pattern of information processing in patients with other personality disorders to look for more widespread trends across different types of patients. It would also be pertinent to compare the attitude change patterns across the three clusters of personality disorders. Additionally, as this study focuses primarily on attitude change, it would be logical to next look at action initiation resulting from attitude change. In the future, it would be ideal to create a longitudinal study to assess how likely personality disorder patients are to initiate engaging in treatment after receiving targeted persuasive appeals regarding treatment. Evaluating the likelihood of personality disorder patients using the central versus peripheral routes to attitude change and the subsequent likelihood of engaging in treatment has the potential to address of the severe lack of treatment retention in the population of NPD, OCPD, BPD, and SPD patients, while also hopefully making their treatment process more highly individualized and less of a complicated process.

Appendix A

Persuasive Appeals

Central Route:

Thank you for agreeing to participate in this study. Please read the following statements.

1. There are many different techniques and treatment variations often used for managing a personality disorder, making it possible for you to explore the options and choose the best treatment plan for yourself.
2. Psychotherapy as a form of treatment often leads to lower instances in relapse of problem behaviors.
3. Mental health concerns are one of the top reasons Americans seek medical treatment.
4. Maintaining commitment to a chosen treatment regimen can potentially save you from wasted time or money spent on repeatedly dealing with the health care system.
5. Engaging in treatment can provide you with skills to improve your social relationships and family life.
6. Engaging in treatment can result in improved occupation or work life functioning.
7. Treatment can result in increased feelings of joy and life satisfaction.

Peripheral Route:

Thank you for agreeing to participate in study. Please read the following statements.

1. Treatment can lead to better daily functioning, which can allow you succeed in areas you might never have expected to.
2. Treatment can help you make more friends.
3. Treatment can lead to increased financial stability and work life success.
4. Getting treatment can save you money on future health services costs.
5. Many celebrities have gotten treatment for their mental health.
6. Engaging in treatment can make you happier.
7. Your symptoms will not get better without engaging in some form of treatment.

Appendix B

Treatment Attitudes Questionnaire

Please respond to the items following items on a scale from 1-7

1. How do you feel about engaging in treatment for your personality disorder? (1=not favorable at all, 7=extremely favorable)
2. How likely are you to engage in treatment for your personality disorder? (1=not likely at all, 7=extremely likely)
3. How important do you feel treatment is to managing to your personality disorder? (1=not important at all, 7=extremely important)

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