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Table of Contents

Acknowledgements

Letter from the Editors

Dear Readers,

With this issue we commemorate the fifteenth year of The New School Psychology Bulletin's publication. This is a huge milestone, not just for the editorial board but for student-led academic research as a whole.

The current political and academic climate poses unique challenges for graduate students, particularly in obtaining funding and publication opportunities. It remains critical for us as editors to ensure that NSPB offers graduate students an opportunity to refine their skills in academic writing and research, and to publish work that showcases up-and-coming contributors to our science. We are proud to not only highlight the dedication and commitment of students, but to do our part to promote new ideas that may not yet be part of the mainstream.

We the editors feel strongly about maintaining this type of engagement, and look forward to bringing you a high caliber of student research that challenges how we see and engage with our world.

With that being said, let us welcome you again to our 15th volume. We hope you enjoy reading the following articles, which represent the hard work and dedication of our authors, reviewers, and editors.

Sincerely,
Jessica Engelbrecht
Shama Subramony
Gregory Weil

Dedication

The New School Psychology Bulletin would like to dedicate this issue in memory of Dr. Jeremy Safran, who passed away under tragic circumstances prior to its release. He will be remembered for his immense contributions to the field of psychotherapy research and the development of the New School's Clinical Psychology department over the last 25 years.

Dr. Safran began his career as an expert in Cognitive-Behavioral Therapy. He joined with Les Greenberg to develop the theoretical framework for Emotion-Focused Therapy before delving further into the realm of psychoanalysis. Throughout Dr. Safran's professional life, he produced seminal works of clinical theory and empirical research that were focused on understanding and facilitating the repair of interpersonal ruptures in therapy. He wrote or edited eight books, including one on psychoanalysis and Buddhism, and published several articles. Within his work, Dr. Safran advocated the importance of creating space for clients to speak and be heard, and for therapists to process and constructively address their own emotions. In recognition of his major contributions to clinical psychology research, he received the Distinguished Research Career Award from the Society for Psychotherapy Research and the Award for Distinguished Contributions to Psychotherapy Research from Division 39 of the APA. He also served as President of the International Association for Relational Psychoanalysis and Psychotherapy.

Meanwhile, Dr. Safran joined the New School of Social Research in 1993, at a time when the department was on probation from the APA. He quickly became Director of Clinical Training and later Chair of the Department, while leading the program to full accreditation and shaping it into the respected program it is today. During his tenure, he established a training facility for clinical psychology doctorate students and interns at Beth Israel Medical Center, the low-cost New School Psychotherapy Research Program, and the Sándor Ferenczi Center. In his 25 years at the New School, Dr. Safran is estimated to have taught over 400 students hoping to become clinical psychologists. In addition, he also served on the faculty of New York University Postdoctoral Program in Psychotherapy and Psychoanalysis.

Dr. Safran's untimely death has left the psychology community both at the New School and at-large with a palpable sense of loss. I had a chance to speak with members of these communities in the passing days, and it is clear how profound and influential his presence was as a practitioner, professor, mentor, and scholar. Dr. Safran will be remembered for his open-mindedness, kind-hearted nature, and innate desire to be there for others. As my mentor and faculty advisor, I will never forget his uncanny ability to navigate an open dialogue while remaining genuine and steadfastly himself.

We at the New School Psychology Bulletin extend our thoughts and condolences to his wife, Jenny, and his two daughters, Ayla and Ellie. He will be missed.

Gregory Weil
Assistant Editor, New School Psychology Bulletin

Differentiating Patriotism and Nationalism: Influence of Valence in Primes

David Crittendon
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Individuals' feelings of patriotism and nationalism may rise and fall with events that are broadcasted through media outlets or when elected political officials in times of war use phrases like, "you're either with us or you're with the terrorists," or refer to other countries as "the dark side". The differential effects of these phrases are important, as feelings of patriotism and nationalism may be influenced by political news and/or broadcasted traumatic events. The current study examined to what extent priming influences nationalism-based attitudes such as patriotism, nationalism, and xenophobia. Specifically, the current study first presented participants with famous quotes that referenced the in-group vs out-group, and then measured the various nationalistic attitudes. Results indicated that when participants were exposed to positive quotes, they reported higher patriotism than those who were exposed to negative quotes. Additionally, the relationship between nationalism and xenophobia was significant in both the control and anti-America condition, but disappeared in the pro-America condition.

Keywords: priming, patriotism, nationalism, xenophobia

The relationship between the positive (i.e., patriotism) and the negative (e.g., nationalism) aspects of nationalistic attitudes have been examined for many years, as both are related to in-group evaluation (Kosterman & Feshbach, 1989). A rise in one tends to predict a rise in the other (Ferguson, 1942; Stagner, 1940). However, it may be a misstep to consider these constructs synonymous as patriotism and nationalism are two separate and even opposing aspects of national identity. The difference lies in their relationship to intergroup attitudes (Li & Brewer, 2004) and the consequences that often follow (e.g., intra-group conflict & out-group derogation; Ayub & Jehn, 2006). Patriotism is often described as a love for one's own nation/country with a commitment or readiness to sacrifice for that nation (Kosterman & Feshbach, 1989). It is tied to secure identification with one's national in-group, which can lead to many positive outcomes (Li & Brewer, 2004), such as bonds of solidarity, alignment of personal interests with national interests, motivation to be a good group member, positive internationalist values, and

cooperation (Li & Brewer, 2004). Patriotic attitudes are related to commitment or readiness to sacrifice for the good of the nation but are not necessarily related to support of war (Takeuchi, et al., 2016). Instead, highly patriotic individuals tend to approach international or global conflict in a cooperative and peaceful way (Bar-Tal, 1993; Kelman, 1997). Thus, patriotism can be considered a healthy national self-concept representative of positive affect (Li & Brewer, 2004).

Conversely, nationalism is tied to insecure in-group identification, an unhealthy national self-concept, and an arrogant perception of superiority or desire to dominate others, particularly minority groups (Kelman, 1997). Individuals high in nationalism may be high in commitment to one's own nation but also simultaneously hold derogatory attitudes and endorse explicit exclusion of other nations (Kosterman & Feshbach, 1989; Li & Brewer, 2004). Individuals that score high in nationalism tend to be more competitive, aggressive in their political stances, hold a militaristic or authoritarian view of the world, are culturally intolerant, and often warmongering (Druckman, 1994; Duckitt, 1989; Furia, 2002; Kosterman & Feshbach, 1989; Li & Brewer, 2004; Takeuchi, et al., 2016; Van Evera, 1994).

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As both constructs share in-group identification, scores on measures of each are positively correlated but often predict very opposing behavior. Thus, distinguishing and attempting to differentiate between these two concepts is of the utmost importance. In attempts to do this, the current research utilized priming to determine if the two concepts can be differentially activated.

Priming

Priming refers to the notion that unconsciously presented acts as an unconscious mechanism that enhances or reduces attitudes and/or behaviors in an individual or a group (Murphy & Zajonc, 1993). For example, priming one's social identity can activate specific social based attitudes, such as stereotypes and war supporting attitudes (Althaus & Coe, 2011; Sparrow & Wegner, 2006). In fact, past research has indicated that priming, either directly through patriotic phrases (e.g., "God bless America," "I have a dream") or indirectly through associated items (e.g., baseball, apple pie) tends to activate both patriotic and nationalistic attitudes (Althaus & Coe, 2011; Citrin, Wong, & Duff, 2001).

Relevant to the current research, past studies have attempted to determine what factors might prime patriotism and nationalism separately. For example, Kemmelmeier and Winter (2008) found that presenting the flag of the United States increased nationalism and other negative outcomes (i.e., social dominance orientation), but not patriotism. Over two studies, the findings from this study, suggest that regardless of an individual's conscious motives, the consequences of flying the American flag is potentially aversive. These findings were as counter-intuitive as they were troubling.

Importantly, these constructs are not country dependent or applicable only to a single nationality. Instead, these constructs have a global application. Similar definitions of patriotism and nationalism have been defined in the political psychological literature in China (Johnston, 2017), Russia (Goode, 2018; Omelchenko, 2015), the United Kingdom and Australia (Fozdar, Spittles, & Hartley, 2015). In line with the American findings, one study found that when presenting the German national flag to German participants there was an increase in out-

group derogation (Becker, Enders-Comberg, Wagner, Christ, & Butz, 2011). Another study, investigating an annual flag flying day (i.e., car-flag-flying) in Australia found that those whom participated in the car-flag-flying had higher attitudes of nationalism and patriotism and lower attitudes on positivity to diversity than non-car-flag-flyers (Fodzar, Spittles, & Hartley, 2015).

However, these findings may be explained by an earlier study. Administered a few weeks after the events of 9/11, Li and Brewer (2004) examined whether the in-group nature of patriotism could be triggered, without necessarily producing nationalism. The authors primed participants for two alternative conceptualizations of American identity by manipulating a description inserted into the instructions of the questionnaire. Participants either saw references to what the authors coined as "the core essence" of being an American (p. 732) or saw references to common goals of being an American (p. 732). Their results indicated that priming the notion of a "core essence" strengthened the relationship between patriotism and nationalism more than priming a specific common goal. Importantly, in the "core essence" condition a greater relationship between patriotism and cultural intolerance was found, suggesting that when we are reminded of group identification, the nationalism (i.e., negative) attitudes are also primed. In support of this, in the common goal condition, the relationship between patriotism, and nationalism was weakened, as was the relationship between patriotism and cultural intolerance. In other words, individuals who were primed of common goals were more multicultural and positive than those who were primed of the homogenous parts of their in-group (i.e., what it means to be an "American"). These findings suggest that patriotism and nationalism are separate constructs and thus could be manipulated separately.

Additionally, the findings from Li & Brewer (2004) could also potentially explain the patterns found in the Kemmelmeier and Winter (2008) study. Li and Brewer (2004) showed that the situation or how patriotism is primed could change the resulting attitudes and behavior. That is, how national attitudes manifest is based on whether one's national identity is primed, which varies as a function of the perceived

intergroup context (i.e., promoting the common bond vs. promoting a common goal). Perhaps the American flag merely primes the core essence of what it means to be an American, instead of priming more cooperative and multicultural goals. This would explain the way in which the American flag primes nationalism and other negative attitudes, but not patriotism and its positive relatives (Kemmelmeier & Winter, 2008).

Although identification is the perception of one's belongingness to a group, the salience of other's groups can have a tremendous impact on one's own identification (Wann, 2006). Past research indicates that when a rival becomes salient, identification with one's own group is primed and strengthened (Luellen & Wann, 2010). When one's national identification is primed, negative attitudes, such as nationalism, are increased (Li & Brewer, 2004). This is important and applicable to the real world because media coverage often approaches political and war-time stories with us-versus-them divisions that make the rival group (e.g., another nation) salient and simultaneously increasing one's national identification (Althaus & Coe, 2011). Current political figures often attempt to target nationalistic attitudes by using phrases such as "you are either with us or with the terrorists", and "we will bring terrorists to justice", or "we will bring justice to the terrorist" in times of war as well as during campaigns (Tesler, 2008)

Past research has examined the ability to prime American patriotism and nationalism, and shows that patriotism and nationalism, although related, are distinguishable constructs (Li & Brewer, 2004). Currently, few known studies have explicitly investigated what happens when the prime is inherently – or explicitly – pro-America or anti-America. Althaus and Coe (2011) showed that conflict-related news headlines increase nationalistic attitudes but was correlational in nature. Thus, the current study used positively and negatively valenced quotes as primes to experimentally examine differential effects on patriotism and nationalism. Based on the research of Li and Brewer (2004), and Althaus and Coe (2011), we expected that primes that encourage a common goal for Americans would increase positive outcomes (e.g., patriotism). Conversely, primes that increase the saliency of the American common bond would increase negative outcomes, such as nationalism and cultural intolerance.

Current Study

The current study attempted to experimentally examine whether the attitudes of patriotism and nationalism could be differentially primed through changes in context. As past studies have shown that rival saliency tends to prime group identification (Luellen & Wann, 2010), which leads to negative out-group attitudes, such as nationalism (Kosterman & Feshbach, 1989), we examined the influence of positively or negatively valence political quotes on nationalistic attitudes. Specifically, we presented famous quotes that referenced the in-group vs out-group, and then measured the various nationalistic attitudes. We expected that political quotes would be able to replicate the findings of Li and Brewer's (2004) findings. Thus, we made the following hypotheses:

H1. Participants exposed to negative quotes (i.e., anti-American) should have more negative nationalistic attitudes than those who are not.

H2. As a second test of the hypothesis, the same hypotheses as made in Li & Brewer's (2004) study was made here. That is, we expected that under the negative conditions (anti-America quotes) the relationship between the nationalistic attitudes and negative outcomes would be stronger. Specifically, the relationship of nationalism to patriotism and/or xenophobia scores will be stronger in the anti-America condition than in the pro-America or control condition.

H3. Finally, to expand upon the past research, we also hypothesized that patriotism and nationalism would differentially predict cultural intolerance dependent upon condition. Thus, we hypothesized that nationalism would be a significant positive predictor of xenophobia in the anti-America condition; conversely patriotism would be a negative predictor of xenophobia in the pro-American condition.

Method

Participants

Participants (N = 76) enrolled in undergraduate courses at a Midwestern regional state university were recruited to participate in this study. Five participants were omitted because they were not United States citizens, which was a study requirement, and three participants failed to complete large portions of

the survey (over one-third). This resulted in a final sample of 68 participants.

Three-fourths ($n = 51$) of the participants were females, and the remaining one-fourth reported being male ($n = 17$). The sample was predominately Caucasian (85.3%), with small numbers of the other racial/ethnic backgrounds such as African-American (7.4%), Hispanic (2.9%), Asian (2.9%), and Biracial (1.5%). Participants' ages ranged from 18 to 31 years ($M = 19.28$, $SD = 2.26$), and they were enrolled in the University as freshmen (66.2%), sophomores (10.3%), juniors (19.1%), seniors (1.5%), or post-baccalaureates (2.9%).

Materials and Procedure

Participants were recruited via an online participant management system (i.e., SONA) adopted and maintained by the Department of Psychology. The current study was listed under the headline of "Quote Recognition." There were no listed restrictions for participation in this study. Participants who were interested in participating in the study made an appointment to come into a classroom where they filled out a survey.

Conditions. Prior to the appointment, participants were randomly assigned to one of three conditions: Pro-America ($n = 24$), Anti-America ($n = 23$) or control ($n = 21$). Depending on their condition, participants received a questionnaire packet that contained five famous quotes (followed by the author's name and year they made the statement) embedded within the packet. The quotes were pilot tested, and results indicated that participants perceived the quotes as representative of the condition (e.g., anti-America quotes being identified as such).

Additionally, three items that measured familiarity followed each quote (e.g., I have heard this quote multiple times). For each familiarity item, participants were asked to place an X on a semantic differential line, ranging from *strongly disagree* to *strongly agree*, that contained no numerical information. Each item's score could range from 0 to 16 centimeters. Total scores for familiarity could range from 0 to 48 centimeters, with higher scores indicating higher familiarity ($M = 24.72$, $SD = 12.74$). Thus, this was not included as a covariate in any of the analyses.

Pro-America. Participants in the pro-America condition received quotes that were originally stated from famous American politicians and promoted positive affect toward America in general. For example, one quote was "*Ask not what your country can do for you; ask what you can do for your country*; John F. Kennedy, 1961".

Anti-America. Participants were exposed to quotes that were stated by political figures from countries that are typically in conflict with the United States and promoted negative affect toward the United States. For example, one quote was "*All Americans are infidels, and the pieces of the bodies of infidels were flying like dust particles*; Osama bin Laden, 2001".

Control. For the purposes of comparison, participants in the control condition received quotes that were from movies. It was intended that these quotes would be related to movies that also depicted a positive vs. negative nature but were not related to the United States. An example of one quote is "*Hogwarts is my home*; J.K. Rowling, 2013 *Harry Potter and the Order of the Phoenix*".

The remainder of the questionnaire packets contained the dependent and relevant measures. All scales and items were randomly ordered, and six different versions of the surveys were presented to counterbalance the measures within the groups. To keep all the items consistent, all survey items were measured using a sematic differential line consisting of no numerical values, that ranged from *strongly disagree* to *strongly agree*. Participants were asked to place an "X" on the line that reflected their attitude toward the item; afterwards the line was measured using a ruler, and numbers ranging from zero to sixteen centimeters were used as scores on each item. Scores on each construct were constructed from an average of centimeters on each item, with higher scores depicting higher representation of the constructs. Thus, for each construct, the range of final scores is from 0 to 16. For the purposes of matching past research (Li & Brewer, 2004), and for brevity of the study, brief versions of the measures were given.

Patriotism (Appendix A). The same five items used in Li and Brewer's (2004) study from the Kosterman and Feshbach (1989) Patriotism scale were used to assess this positive aspect of identification

with America. This scale showed adequate reliability in the current sample (α = .79).

Nationalism (Appendix B). Again, we used the same five items from the Kosterman and Feshbach (1989) Nationalism scale, as in Li and Brewer's (2004) methodology. Analysis indicated that the scale showed lower reliability in the current sample than we would like, however for the purposes of replication it remained in the analyses (α = .63).

Xenophobia (Appendix C). The five-item hierarchical Xenophobia scale (van Der Veer, Ommundsen, Yakushko, Higler, Woelders, & Hagen, 2013) was used to measure cultural intolerance. Higher scores represent higher negativity toward immigrants. This scale showed adequate reliability in the current sample (α = .78).

Demographics. Finally, participants' basic demographic information was collected. Participants were queried on their sex, age, ethnicity, political affiliation, religiosity, and military affiliation.

Upon completion of the questionnaire packet, participants were debriefed regarding the purpose of the study and excused.

Results

Prior to testing the specific hypothesis, preliminary investigations were conducted to test the integrity of the study and its materials. First, as there were six different versions of this survey, one-way analysis of variance was conducted to ensure the study was properly counter-balanced. Results indicated there were no significant differences between survey versions on any of the dependent measures ($ps > .05$).

Second, a series of bivariate correlation analyses were conducted. All tests were conducted at the .05 level of significance criterion, and as the hypotheses were directional, one-tailed p-values were used. As would be expected in light of past research, patriotism and nationalism were significantly correlated, $r(66) = .48$, $p < .001$. Moreover, as expected nationalism and xenophobia were also correlated $r(66) = .46$, $p < .001$. However, patriotism and xenophobia were not significantly correlated, although the relationship was trending in the expected direction, $r(66) = .19$, $p = .057$.

Preliminary analysis on the familiarity of the quotes used was also conducted. These familiarity ratings were only included as part of the cover story

and were not specifically included in the hypotheses. Analysis of variance indicated that familiarity scores differed across conditions, $F(2, 65) = 64.27$, $p < .001$. Participants were more familiar with Pro-America quotes ($M = 36.53$, $SD = 8.04$), than the control quotes ($M = 25.44$, $SD = 8.62$), and the Anti-America quotes ($M = 36.53$, $SD = 8.04$). All conditions were significantly different from one another ($ps < .001$). However, in all conditions, familiarity with the quotes was not significantly related to any of the hypothesized dependent variables ($ps > .05$).

To test the first hypothesis that nationalism and xenophobia will be higher in the anti-America condition than in the pro-America or control conditions, a one-way MANOVA (as the dependent variables are correlated) was conducted. The results indicated a significant difference between the conditions, *Wilk's Lambda* = .85, $F(6, 126) = 1.85$, $p = .048$, partial η2 = .08. Follow-up univariate analysis indicated that the only significant difference between conditions was on patriotism, $F(2, 65) = 5.15$, $p = .004$, partial η2= .14. Specifically, the pro-America condition had significantly higher patriotism scores ($M = 13.68$, $SD = 2.25$) than the anti-America condition ($M = 11.56$, $SD = 1.97$, $p = .003$). However, the pro-America condition was only trending toward higher patriotism scores than the control condition ($M = 12.38$, $SD = 2.64$, $p = .073$), and there was no difference between the anti-America condition and the control condition ($p = .235$). Additionally, there were no differences between conditions on nationalism, $F(2, 65) = 1.31$, $p = .139$, partial η2 = .04, or xenophobia, $F(2, 65) = .85$, $p = .217$, partial η2 = .03.

To test the second hypothesis regarding stronger relationships between the nationalistic attitudes and negative outcomes in the anti-America condition, the dataset was split by condition. Then, bivariate correlations were conducted between each of the three variables showing that, patriotism and nationalism were significantly correlated ($ps < .05$) in all three conditions; Anti-American ($r = .58$), Pro-American ($r = .35$), and Control ($r = .45$). Additionally, Nationalism and Xenophobia were significantly correlated ($ps < .05$) in two conditions; Anti-American ($r = .47$) and Control ($r = .64$). Finally, a Fisher's r to z correlation coefficient was calculated for each pair of significant correlations (Preacher, 2002). The results indicate

Table 1
Comparison of Correlations within Conditions

	Anti-America	Pro-America	Control	Fisher's (Anti vs. Pro)	Fisher's (Anti vs. Control)	Fisher's (Pro vs. Control)
Patriotism & Nationalism	.58**	.35*	.45*	$Z = .95$, $p = .171$	$Z = .55$, $p = .291$	$Z = .37$, $p = .356$
Nationalism & Xenophobia	.47*	.27	.64***	NA	$Z = .76$, $p = .224$	NA
Patriotism & Xenophobia	.22	.33	-.08	NA	NA	NA

*$p < .05$, **$p < .01$, ***$p < .001$

that there were no significant differences between any of the correlations. See Table 1 for the comparison of correlations by condition.

Finally, we tested our last hypothesis regarding whether patriotism and nationalism would differentially predict xenophobia. Specifically, we expected that nationalism would be a positive predictor in the anti-America condition whereas patriotism would be a negative predictor in the pro-American condition. Thus, a series of multiple regression analyses using patriotism and nationalism as predictors was conducted for each condition. Importantly, tolerance values were above .68 for the predictors in each condition, suggesting that there were no problems with multicollinearity. Our analyses indicated that overall, we were able to significantly predict xenophobia in the control ($R^2 = .51$, $F(2, 18) = 11.72$, $p < .001$) and anti-America conditions ($R^2 = .21$, $F(2, 20) = 2.92$, $p = .039$), but not in the pro-America condition ($R^2 = .05$, $F(2, 21) = 1.64$, $p = .109$). See Table 2 for the outcomes of the regression analyses and the coefficients for each predictor.

Discussion

In line with the goals and methods of past research, we examined the ability to differentially prime patriotism (i.e., positive affect toward one's own country) and nationalism (i.e., negative affect toward other countries). Additionally, we examined the relationship between these nationalistic attitudes and multicultural intolerance. Overall, our results support our hypotheses and replicate the findings of past research despite failure of the first hypothesis. We examined whether participants who were exposed

to negative quotes about America from an out-group member would have more negative nationalistic attitudes (i.e., nationalism and xenophobia) than those who are not. For the first hypothesis, we merely looked across conditions, and there were no significant differences between nationalistic attitudes at all. There was a difference between conditions regarding patriotism, but the results suggested that when participants were exposed to positive quotes, they reported higher patriotism than those who were exposed to negative quotes.

The lack of difference between groups is not actually very surprising, given what the past research suggests. As the constructs are so closely related, it is difficult to parse out a flat difference. Perhaps, it is better to examine the strength of the relationship between the variables instead, as Li & Brewer (2004) reported. Thus, our second hypothesis proposed the same postulations and analysis as those authors. We examined whether the relationships between the positive and negative aspects of nationalistic attitudes were strengthened when exposed to negative quotes. In the control group, the relationship between patriotism and nationalism was moderately strong. Despite non-significant comparison analyses, this relationship strengthened in the anti-America condition, and weakened in the pro-America condition. This is direct support for the hypothesis and is identical to the findings of Li & Brewer (2004).

Moreover, the relationship found between nationalism and xenophobia was significant in both the control and anti-America condition, but disappeared in the pro-America condition. Again, this provides support for the notion that exposure

Table 2
Predicting Xenophobia from Nationalist Attitudes across Conditions

	t	p	β	F	df	p	Adj. R^2
Anti-America							
Overall Model				2.92	2, 20	.039	.21
Patriotism	-.36	.724	-.09				
Nationalism	**2.15**	**.022**	**.52**				
Pro-America							
Overall Model				1.64	2, 21	.109	.05
Patriotism	1.21	.239	.26				
Nationalism	.84	.408	.18				
Control							
Overall Model				11.72	2, 18	<.001	.51
Patriotism	**-2.60**	**.009**	**-.45**				
Nationalism	**4.81**	**<.001**	**.84**				

Note. The dependent variable for all regressions was xenophobia.

to negative quotes primes our own ingroup identification, or perhaps core essence (Li & Brewer, 2004; Luellen & Wann, 2010; Wann, 2006), which ultimately motivates these negative outcomes. Moreover, when out-group members become salient and are perceived as a threat to the in-group, negative outcomes are usually exacerbated (Luellen & Wann, 2010). What we might also draw from this is that one can prime nationalist-based attitudes without priming the often behaviorally negative consequences (e.g., xenophobia) through simple positivity. Future studies will want to examine this idea further.

Finally, to expand upon the past research, we also expected that patriotism and nationalism would differentially predict cultural intolerance in each of the three conditions. As would be expected, both nationalistic and the patriotic attitudes were significant predictors in the control condition, and in the opposite direction. This further supports the notion that these two constructs are closely related, and that differential priming is warranted. Importantly, when participants were exposed to negative comments, only nationalism was a significant predictor of xenophobia. Patriotism was no longer related, or at least able to accurately predict xenophobia. Contrary to our hypothesis

though, when exposed to positive comments, neither attitude predicted xenophobia.

In conjunction, all our findings further support past research that suggests out-group members prime our in-group identification, or essence, which then leads to an increase in negative nationalistic attitudes. This is important as patriotism and nationalism may be inadvertently (or purposefully) affected by political news. For example, Billings, Brown, and Brown (2013) found that Olympic media viewing increased nationalistic attitudes (e.g., smugness towards one's own country).

Despite the replicating findings, there were some limitations in the current study. A brief analysis of the familiarity with the quotes indicated that participants were much less familiar with the anti-America quotes than the quotes in the other conditions. Perhaps this hindered some of the effects and differences between groups or in the relationships among the constructs and could potentially be rectified by making quotes anonymous. In all the Fisher's r to z comparisons, the results were null. Importantly, the power in Fisher's is relatively low, and often very large sample sizes are needed to appropriately find differences between them (Schmidt, Hunter, & Raju, 1988). As our sample size met only minimal requirements to

conduct the analysis, power was potentially lacking. Thus, further studies are still warranted.

One other concern specific to this study was the implementation of the quotes. The quotes were intermixed throughout the questionnaire packets, and this style may have been too obvious to participants. Past research in priming has shown that there are many ways to prime participants (e.g., associative, subliminal, or repetition). However, it is possible that because the quotes were direct, that participants felt some social desirability pressure or psychological reactance. Importantly, this would not negate the current findings, but could lead us to underestimate the actual effects. Future researchers in this area will want to examine whether political experience is related to the strength of the effects, especially in regard to differences between the negative and positive conditions.

Finally, the current study did not directly measure the participants' identification with America, as an in-group. American identification could potentially be an important covariate, as it would be expected that a highly identified participant would be more affected by the quotes, than a minimally identified individual. Identification with any object or group is driven by the motive to enhance an individual's social identity (Tajfel & Turner, 1986). The degree to which an individual identifies with a specified social category (i.e. American) reflects the degree of similarity between the qualities attributed by individuals (i.e. good or bad) to a social category and the qualities that the individual currently incorporates in his or her self-image (Doise, 1988; Dutton, Dukerich, & Harquail, 1994; Weinreich, 1986). As this was a priming study, it was feared that certain measures would automatically prime national identity for the participants. Additionally, asking participants American in-group questions after the fact could have been fruitless, as they may have become exaggerated simply due to the primes. Thus, the variable was omitted. It is not believed that omitting this variable was harmful to the current study, because it is just as interesting to know that individuals do not have to be highly identified (or potential extremists) for positive quotes to influence one's patriotism. However, future studies may want to conduct a longer term or two-part study in which participant's complete identification measures a week or more prior to priming measures.

Conclusion

In the aftermath of the attack on the World Trade Center in New York City on September 11, 2001, American national pride skyrocketed (Kemmelmeier & Winter, 2008; Skitka, 2005). This nationalistic phenomenon has been recorded in other nations as well (e.g., America, Madrid, London), which typically show increases of patriotism, social cohesion, and religious faith after a terrorist attack (Vazquez, 2008). According to the current findings from this study, such increases in positive attitude expression (i.e., patriotism) may be attributed to the positively valenced statements made by political leaders (e.g., President, Minister, and the Pope). This research is particularly timely given the tension between the United States and North Korea, our continued fight in the "War on Terrorism", and the frequency and fervor in which the media has covered current political statements. Therefore, the current findings suggest that the use of positively valenced statements by political officials should be encouraged, while negatively valenced statements should potentially be avoided.

References

Althaus S. L., & Coe K. (2011). Priming patriots: Social identity processes and the dynamics of public support for war. *The Public Opinion Quarterly, 75*, 65-88.

Ayub, N., & Jehn, K. A. (2006). National diversity and conflict in multinational workgroups: The moderating effect of nationalism. *International Journal of Conflict Management, 17*, 181-202.

Bar-Tal, D. (1993). Patriotism as fundamental beliefs of group members. *Politics & The Individual, 3*, 45-62.

Becker, J. C., Enders-Comberg, A., Wagner, U., Christ, O., & Butz, D. A. (2011). Beware of national symbols. *Social Psychology, 43*, 3-6.

Citrin, J., Wong C., & Duff B. (2001). "The meaning of American national identity." In R. D. Ashmore, L. Jussim, and D. Wilder. (Eds.). *Social identity, intergroup conflict, and conflict reduction* (pp. 71-100). New York: Oxford University Press.

Doise, W. (1988). Individual and social identities in intergroup relations. *European Journal of Social Psychology, 18*, 99–111.

Duckitt, J. (1989). Authoritarianism and group identification. A new view of an old construct. *Political Psychology, 10*, 63-84.

Dutton, J. E., Dukerich, J. M., & Harquail, C. V. (1994). Organizational images and member identification. *Administrative Science Quarterly, 39*, 239–263.

Ferguson, L. W. (1942). The isolation and measurement of nationalism. *Journal of Social Psychology, 16*, 215-228.

Fozdar, F., Spittles, B., & Hartley, L. K. (2015). Australia Day, flags on cars and Australian nationalism. *Journal of Sociology, 51*, 317-336.

Furia, P. (2002). Democracy, liberalism, and war: rethinking the democratic peace debate. *International Affairs, 78*, 367-368.

Goode, J. (2018). Everyday Patriotism and Ethnicity in Today's Russia. In H., Blakkisrud (Eds.), *Russia before and after crimea: Nationalism and Identity* (258-281), Edinburgh University Press.

Johnston, A. I. (2017). Is Chinese nationalism rising? Evidence from Beijing. *International Security, 41*, 7-43.

Kelman, H. C. (1997). Nationalism, patriotism, and national identity: Social-psychological dimensions. In D. Bar-Tal & E. Staub (Eds.), *Patriotism in the life of individuals and nations* (pp. 165-189), Chicago: Nelson-Hall.

Kemmelmeier, M., & Winter, D. G. (2008). Sowing patriotism but reaping nationalism. Consequences of exposure to the American flag, *Political Psychology, 29*, 859-879.

Kosterman R., & Feshbach S., (1989). Toward a measure of patriotic and nationalistic attitudes. *Political Psychology, 10*, 257-274.

Luellen, T. B., & Wann, D. L. (2010). Rival salience and sport team identification. *Sports Marketing Quarterly, 19*, 97-105.

Li, Q., & Brewer, M. B. (2004). What does it mean to be an American? Patriotism, nationalism, and American identity after 9/11. *Political Psychology, 25*, 727-739.

Marques, J. M., & Paez, D. (1994). The 'black sheep effect': Social categorization, rejection of ingroup deviates, and perception of group variability. *European Review of Social Psychology, 5*, 37-68.

Murphy, S. T., & Zajonc, R. B. (1993). Affect, cognition, and awareness: affective priming with optimal and suboptimal stimulus exposures. *Journal of Personality and Social Psychology, 64*, 723-739.

Omelchenko, D., Maximova, S., Noyanzina, O., Goncharova, N., & Avdeeva, G. (2015). National identity and patriotism among Russian youth: Representations, feelings and actions. *Asian Social Science, 11*, 27-36.

Schmidt, F. L., Hunter, J. E., & Raju, N. S. (1988). Validity generalization and situational specificity: A second look at the 75% rule and Fisher's z transformation. *Journal of Applied Psychology, 31*, 665-672.

Sparrow, B., & Wegner, D. M. (2006). Unpriming: the deactivation of thoughts through expression. *Journal of Personality and Social Psychology, 91*, 1009-1019.

Stagner, R. (1940). A correlational analysis of nationalistic opinions. *Journal of Social Psychology, 12*, 197-212.

Tajfel, H., & Turner, J. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. Austin (Eds.), *Psychology of intergroup relation* (pp. 7–24). Chicago: Nelson-Hall.

Takeuchi, H., Taki, Y., Sekiguchi, A., Nouchi, R., Kotozaki, Y., Nakagawa, S., . . . & Yamamoto, Y. (2016). Differences in gray matter structure correlated to nationalism and patriotism. *Scientific Reports, 6*, 29912.

Tesler, M. (2008). Patriot priming in presidential elections: When and why American patriotism matters in voting for president. *Freeman, 2004*(2), 1-42.

Van Der Veer, K., Ommundsen, R., Yakushko, O., Higler, L., Woelders, S., & Hagen, K. (2013) Psychometrically and qualitatively validating a cross-national cumulative measure of fear-base xenophobia. *Quality & Quantity: International Journal of Methodology, 47*, 1429-1444.

Van Evera, S. (1994). Hypotheses on nationalism and war. *International Security, 18*(4), 5-39.

Vázquez, C., Pérez-Sales, P., & Hervás, G. (2008). Positive effects of terrorism and posttraumatic growth: An individual and community perspective. In S. Joseph & P.A. Linley (Eds.), *Trauma, recovery, and growth: Positive psychological*

perspectives on posttraumatic stress (pp. 63-91). Hoboken, NJ: John Wiley & Sons.

Wann, D. L. (2006). The causes and consequences of sport team identification. In A.A. Raney & J. Bryant (Eds.), *Handbook of Sports and Media* (pp. 331-352). Hillsdale, NJ: Erlbaum.

Weinreich, P. (1986). The operationalism of identity theory in racial and ethnic relations. In J. Rex (Ed.), *Theories of race and ethnic relations: Comparative ethnic and race relations* (pp. 299–320). Cambridge: Cambridge University Press.

Appendix A

Patriotism Measure

1. I am proud to be an American.

2. I am emotionally attached to America and emotionally affected by its actions.

3. Although at times I may not agree with the government, my commitment to the U.S. always remains strong.

4. The fact I am an American is an important part of my identity.

5. In general, I have very little respect for the American people.

Appendix B

Nationalism Measure

1. In view of America's moral and material superiority, it is only right that we should have the biggest say in deciding United Nations policy.

2. The first duty of every young American is to honor the national American history and heritage.

3. Other countries should try to make their government as much like ours as possible.

4. Foreign nations have done some very fine things but it takes America to do things in a big way.

5. It is really NOT important that the U.S. be number one in whatever it does.

Appendix C

Xenophobia measure

1. Interacting with immigrants makes me uneasy.

2. With increased immigration I fear that our way of life will change for the worse.

3. I am afraid that our own culture will be lost with increase in immigration.

4. Immigration in this country is out of control.

5. I doubt that immigrants will put the interest of this country first.

Psychological Construction of Shame in Disordered Eating

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Several features have been shown to cause, perpetuate, and characterize anorexia nervosa (AN) and bulimia nervosa (BN). These range from internal factors, such as neurobiological and cognitive dispositions, to external influences, such as social interactions and culture. One of these key features is shame, particularly around one's body. This paper aims to further explore body shame in the context of disordered eating from the perspective of four primary models of emotion: basic emotion theory, appraisal theory, social construction theory, and psychological construction theory. This paper suggests that psychological construction theory most adequately explains the development of body shame that is unique to each individual. Not only does this theoretical model carry implications for eating disorder treatment, but it may also be used to explain emotional states prevalent in other disorders.

Keywords: body shame, eating disorders, emotion, psychological construction theory

Approximately 20 million females and 10 million males suffer from some type of eating disorder in the United States (Wade, Keski-Rahkonen, & Hudson, 2011). Disorders such as anorexia nervosa (AN) and bulimia nervosa (BN) have become more prevalent among adolescents and young adults since the mid-1900s (Wade et al., 2011). Unfortunately, these pathologies are associated with several health consequences, including dehydration, osteoporosis, bradycardia, comorbid psychiatric disorders, and even mortality (Swanson, Crow, Le Grange, Swendsen, & Merikangas, 2011; Wade et al., 2011).

Not only are AN and BN clinically prevalent, but unhealthy dieting behaviors and the drive for thinness are normalized in the general American population as well. For example, nearly one-half of teenage girls and one-third of teenage boys engage in harmful behaviors to lose or maintain weight, such as skipping meals, self-induced vomiting, using laxatives, excessive exercising, and cigarette smoking (National Eating Disorders Association, 2016). Even girls as young as age six begin to express concerns about their weight and body shape (National Eating Disorders Association, 2016).

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Research has shown that the risk factors associated with AN and BN range from internal factors, such as neurobiological and cognitive dispositions, to external influences, such as social interactions and culture. Some of these risk factors include dysregulated neural circuits associated with reward and impulse control, familial interactions that promote perfectionism, cultural ideals for thin bodies, cognitive internalization of thin-body ideals, and feelings of body shame (Duarte, Ferreira, & Pinto-Gouveia, 2016; Stice & Shaw, 2002; Troop, 2016; Weir, 2016).

Shame is an unpleasant self-conscious emotion typically associated with a negative evaluation of the self, withdrawal motivations, and feelings of distress, exposure, mistrust, powerlessness, and worthlessness (Duncan & Cacciatore, 2015). It often occurs in response to painful and powerful experiences, such as personal failure, public humiliation shame predict an increase in calorie consumption, whereas anticipated feelings of body shame predict a decrease in calorie consumption, suggesting that current and anticipated feelings of shame may contribute to bingeing and purging behavior (Troop, 2016). Similarly, Stice and Shaw (2002) demonstrated a significant relationship between body dissatisfaction and BN, which is mediated by increased dieting and negative affect.

Even the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) classifies AN and BN based on the intense fear of gaining weight, disturbance in the way in which one's body shape is experienced, and excessive influence of body shape on one's self-evaluation, highlighting the importance of body image and negative self-evaluation in differential diagnosis (American Psychiatric Association, 2013). Given its relevance in understanding the development and diagnosis of pathological eating, body shame may be a salient aspect of eating disorders that warrants further investigation.

Theoretical Interpretations of Body Shame

Four dominant models of emotion have emerged in the literature that explain the development and experience of shame: basic emotion theory, appraisal theory, social construction theory, and psychological construction theory. These models provide an account for why shame occurs, how shame is experienced, and the types of responses that shame elicits. Furthermore, each perspective places special emphasis on either neurobiological, cognitive, sociocultural, or psychological factors involved in emotion. This paper will provide a brief explanation of each model, speculate how each model would explain body shame in disordered eating, and analyze each model's strengths and weaknesses.

Basic Emotion Theory

Basic emotion theory is one of the most well-known models in evolutionary and cross-cultural psychology. According to this framework, there is a core group of discrete emotions that are "basic", meaning that they are psychologically primitive, culturally universal, and neurologically hardwired through natural selection (Levenson, 2011; Tracy, 2014). Basic emotions, such as happiness, fear, anger, sadness, disgust, and surprise, have distinct neurological "programs", making their qualitative experiences similar across all individuals (Levenson, 2011; Tracy, 2014).

More complex affective states, such as shame, guilt, jealousy, pride, and love, are thought to arise out of the fundamental building blocks that are basic emotions (Ekman & Cordaro, 2010). As a model

based on evolutionary theory, the survival value of basic emotions and other affective states is integral. Shame is considered an adaptive self-conscious emotion, particularly on the interpersonal level, as it helps to maintain social relations and in-group membership via heightened awareness of public self-representation, increased adherence to social norms, and increased approval from others (Dansie, 2009; Levenson, 2011; Tracy, 2014).

Rather than viewing body shame as purely pathological, basic emotion theory helps explain this phenomenon in terms of its survival value and functionality. Attractiveness is thought to indicate healthy genes and reproductive capabilities, placing greater survival value on female attractiveness than that of men (Dansie, 2009). Body shame occurs among women who do not fulfill thin-body ideals, as this represents a transgression of social norms regarding female beauty. These shame reactions serve a purpose in that they motivate women to fulfill beauty norms via dieting behaviors, thereby enhancing their attractiveness to potential mates and strengthening in-group membership (Dansie, 2009; Levenson, 2011; Tracy, 2014). Observations that support this type of explanation include higher rates of eating disorders among women compared to men, as well as greater risk for body dissatisfaction and pathological eating among cultures and subcultures that actively promote thin-body ideals (National Eating Disorders Association, 2016; Stice & Shaw, 2002).

Though basic emotion theory offers relevant insight into body shame, it has some drawbacks. For example, there is much disagreement concerning the intrapersonal function of shame. Whereas a basic emotion model views shame as interpersonally adaptive, others suggest that guilt is the more adaptive and healthier counterpart of shame, particularly on the intrapersonal level (Duncan & Cacciatore, 2015). Guilt entails a negative evaluation of one's behaviors, which may help elicit expressions of regret or remorse for specific transgressions without necessarily impacting one's self-concept (Duncan & Cacciatore, 2015). Shame, on the other hand, entails a negative evaluation of the self in its entirety, which may elicit maladaptive reactions, such as poor self-esteem, social withdrawal, hostility, anger, anxiety, and depression (Dansie, 2009; Duncan & Cacciatore, 2015).

Another drawback is that this model does not fully explain why those who do fulfill thin-body ideals may still experience shame. According to this theory, only those who fail to fulfill thin-body norms would logically experience shame. However, DSM-5 criteria note that those with AN typically exhibit an intense fear of gaining weight or becoming fat, despite having a significantly low body weight (American Psychiatric Association, 2013). Therefore, there may be other factors mediating the relationship between body shape and feelings of shame that are not explained by basic emotion theory.

Appraisal Theory

According to appraisal theory, emotions and subsequent behavioral responses are caused by evaluations of external and internal stimuli (Lazarus, Coyne, & Folkman, 1982). The ways in which stimuli are evaluated depend on a variety of factors, such as agency, controllability, expectancy, stability, goal relevance, and goal congruence (Moors, 2014). Agency and controllability refer to the ability to cause and control an event. Expectancy and stability refer to the predictability and permanence of an event. Goal relevance and goal congruence refer to the extent to which an event is pertinent and conducive to goals (Moors, 2014). It should be noted that the exact list of appraisal factors may vary among individual theorists (Moors, 2014).

Appraisal factors then merge together to form a unified theme, necessarily triggering a specific emotion (Moors, 2014). For instance, if an individual evaluates an unfavorable condition as externally caused, unexpected, uncontrollable, and goal-incongruent, then he or she will inevitably experience anger. Since each emotion has a distinct appraisal process, individuals experience and express an emotion the same way as one another (Moors, 2014). In other words, everyone who experiences anger, for example, will have undergone the same appraisal process and respond with the same anger-specific behaviors, regardless of individual and contextual differences (Moors, 2014).

An appraisal model of emotion might assume that those who evaluate their bodies in a shame-inducing way will develop feelings of body shame and consequently respond with dieting behaviors.

Research indeed shows that shame is associated with internal, stable, and uncontrollable attributions for failure (Duncan & Cacciatore, 2015; Weiner, 2000). In the case of body shame, individuals who "fail" to meet thin-body ideals may blame themselves for their failure and perceive their body types as stable (e.g., I will always look like this) and outside of their control (e.g., I cannot control the way I look). Such appraisal processes are similar to Beck's (1967) cognitive triad in which internal, stable, and global attributions of failure cause depression. As discussed later, however, this explanation seems paradoxical in the context of body shame and dieting.

Unlike basic emotion theory, appraisal theory successfully accounts for the cognitive processes that mediate relationships between shame-triggering stimuli and feelings of body shame (Moors, 2014). This model also offers some explanation for individual differences in the development of body shame. For instance, not everyone who fails to achieve thin-body ideals experiences shame or responds with disordered eating. Similarly, there are individuals who do achieve thin-body norms yet still experience shame and disordered eating. By accounting for cognitive mediators that shape how individuals perceive themselves and where they stand in comparison to others, appraisal theory offers a solution as to why there is variability in who feels body shame and when.

While this model is supported by the efficacy of cognitive therapies that address maladaptive appraisals and schemas, there are some concerns underlying its explanation of how shame develops (Moors, 2014). One of the most salient concerns is its emphasis on the causal link between appraisals and subsequent emotional reactions. After all, one appraisal may not always lead to the same emotional reaction. For instance, not everyone who evaluates their bodies in a shame-eliciting way goes on to develop body shame and eating disordered behavior. Similarly, although shame is associated with attributions of stability and uncontrollability, it may not be accurate to assume that this relationship is unconditional. If this is the case, then it would not make sense that individuals diet in response to body shame in the first place.

Social Construction Theory

Emotions are traditionally thought of as private

and internal experiences. Social construction theory, however, suggests that emotions are not inherent in the human psyche, nor are they simple individual-stimulus responses (Boiger & Mesquita, 2012; Parkinson, Fischer, & Manstead, 2005). Instead, emotions are constructed by immediate interactions, ongoing relationships, and the greater cultural context, as well as how these social transactions are made meaningful (Boiger & Mesquita, 2012). Because they are fundamentally intertwined in social exchanges, emotions do not typically occur in the absence of social transactions (Parkinson, Fischer, & Manstead, 2005).

Emotions also serve a functional purpose for the social context in which they occur (Mesquita & Boiger, 2014). For example, the concept of interpersonal emotion regulation refers to "episodes occurring in the context of a live social interaction" in the pursuit of controlling, adjusting, or improving unpleasant emotional experiences, via responses such as social sharing, affirmation, validation, empathy, and prosocial behaviors (Zaki & Williams, 2013, p. 804). Shame is a public emotion that arises when individuals perceive that they have failed to meet important social norms (Dansie, 2009; Boiger, Mesquita, Uchida, & Barrett, 2013). As a result, shame motivates individuals to correct their transgressions and "earn forgiveness" from others, leading to greater social acceptance (Dansie, 2009; Boiger et al., 2013).

A social constructionist approach might propose that body shame arises out of social exchanges and cultural expectations that elicit someone to evaluate his or her body negatively (Boiger et al., 2013). Specifically, body shame and internal attributions of failure are caused by social messages expressing the importance of thinness and the responsibility of individuals to appear beautiful. Body shame also serves a functional purpose in that it signals attentiveness to social expectations and elicits favorable opinions from others. In the case of interpersonal emotion regulation, individuals might express their internalization of thin-body ideals and dieting behaviors to validate or normalize their experiences, thereby regulating their feelings of body shame and unintentionally perpetuating eating disordered behavior.

Like basic emotion theory, social construction theory provides a functional explanation as to why

body shame occurs, as well as why it is more common among women and social groups that promote thin-body ideals (Boiger & Mesquita, 2012; Mesquita & Boiger, 2014). More importantly, this framework offers a reason as to why body shame and disordered eating often arise out of the features of relationships, such as family dynamics where parents promote perfectionism to their children. Another strength of this perspective is that it integrates the cognitive factors (i.e., thin-ideal internalization, negative self-evaluation, and upward social comparisons) mediating between sociocultural environments and body shame, creating a more complete picture of how this phenomenon arises.

Although social construction theory provides a functional explanation of body shame and why this arises out of social interactions, it has some limitations. One issue is that it overemphasizes the importance of interpersonal adaptiveness (e.g., social acceptance) while minimizing the importance of intrapersonal wellbeing (e.g., self-concept and distress), similar to basic emotion theory. As mentioned previously, shame is found to be maladaptive because it heightens the risk for poor self-esteem, social withdrawal, hostility, anger, anxiety, and depression (Dansie, 2009; Duncan & Cacciatore, 2015). These consequences, however, may not be as concerning to basic emotion theorists and social constructionists, as their view on shame is specific to the public sphere (Duncan & Cacciatore, 2015). Yet to carefully treat shame in pathological eating and other disorders, it may be beneficial to address the intrapersonal consequences of this emotion.

Another issue involves the assumption that shame exclusively occurs in the context of social exchanges. Research indicates that shame is more often elicited by personal failures, suggesting that body shame can be experienced privately, since immediate social interactions are not necessary for individuals to experience personal failure (Dansie, 2009; Duncan & Cacciatore, 2015). Social construction theory also underestimates the role that biology plays in emotions. For instance, shame is associated with specific neurological changes, such as greater activation of self-referential brain regions (e.g., dorsomedial prefrontal cortex) and emotion-processing regions (e.g., amygdala) via the limbic system (Roth, Kaffenberger, Herwig, & Bruhl, 2014).

Psychological Construction Theory

Emotions are complex phenomena that are composed of several different factors, including genetics, neurological networks, physiology, cognitive schemas, appraisals, behavioral responses, facial expressions, social interactions, and culture. Unlike other theoretical models, psychological construction theory attempts to capture these by suggesting that emotions are an amalgamation of various components, rather than purely biological, cognitive, or social (Barrett, 2013; Lindquist, 2013; Russell, 2003). Specifically, emotions are said to emerge from bottom-up input, such as "core affect" and neurophysiological changes, as well as top-down input, such as appraisals and sociocultural expectations (Russell, 2003). Each individual makes meaning out of these components to create a cohesive emotional experience (Russell, 2003).

According to this model, body shame would arise out of the ways in which people construct their emotional experiences in response to shame-eliciting stimuli (Barret, 2013; Lindquist, 2013; Russell, 2003). These constructions are based on changes in biological, cognitive, and social environmental states. For example, individuals who receive thin-body ideal messages from peers may evaluate their bodies negatively while undergoing biological changes that induce negative affect. Subsequently, individuals make meaning out of these changes and interpret their negative experience as body shame.

Because emotions are psychologically constructed, body shame occurs, feels, and manifests differently for every person, every time. Due to alternate gender role expectations and appraisal styles, for example, women's experience of body shame may develop and present differently compared to that of men. For instance, Strauss, Muday, McNall, and Wong (1997) showed that although women and men were equally likely to report self-distraction in the face of negative emotional experiences, women tended to report greater rumination. Even among women, variability in body shame exists depending on factors such as individual temperament, body surveillance, and the extent to which beauty ideals are internalized. For instance, women who objectify their bodies more tend to demonstrate a stronger relationship between thin-ideal internalization and body dissatisfaction (Fitzsimmons-Craft, Harney, Koehler, Danzi, Riddell, & Bardone-Cone, 2012).

By suggesting that emotional states are uniquely constructed, psychological construction theory sufficiently explains individual differences in body shame and disordered eating, making this a strength (Russell, 2003). By accounting for individual variability and all possible components in the development of emotional states, this model also allows for greater flexibility in how body shame is clinically addressed. For instance, if body shame is largely due to negative appraisals for one patient, then clinicians may address this particular case with an appraisal-based model via cognitive therapy. However, if body shame arises out of rigid and perfectionist family relations for another patient, then clinicians might address this case with a social constructionist approach via family systems therapy.

Despite these strengths, psychological construction theory has some limitations. As a model that emphasizes individual difference, it may not be the most appropriate to use in the context of standardized clinical treatment and public health intervention, such as computerized cognitive-behavioral therapy (CBT) and classroom-based mental health programs. Similarly, this approach does not necessarily offer a clear and concise understanding of emotional experiences, nor does it suggest definitive guidance in how to address them.

According to this model, emotions are ever-changing, inherently relative, and uniquely constructed experiences that do not entail clear-cut characteristics, indicators, or distinctions (Russell, 2003). However, this idea may seem overwhelming, overly philosophical or even useless for some clinicians and researchers. It should also be noted that several aspects of emotion are indeed shared and should not be minimalized, such as the neurobiological and physiological changes involved in shame and other affective states (Levenson, 2011; Roth et al., 2014; Tracy, 2014). By combining a psychological constructionist approach with models that emphasize more concrete and universal features of emotion, its theoretical limitations may be better addressed when applied to clinical endeavors.

Clinical Implications

Unified theories of psychology can often present problems to clinicians. While a psychological constructionist approach addresses the various facets of body shame and its relationship to disordered eating, psychologists must ask whether it is even possible to address all facets of body shame. Which risk factors and contributors need to be addressed first? Perhaps the answer lies in the main premise of psychological construction theory, which suggests that emotional experiences are constructed by individuals, making them the active change agents in their lives, rather than passive bystanders of their biological dispositions, cognitive styles, and social environments (Barrett, 2013; Lindquist, 2013; Russell, 2003).

By viewing emotional experiences as individually constructed phenomena, clinicians can better tailor their treatments to each patient based on what they believe is most salient to their experiences of body shame, rather than relying exclusively on manualized approaches, which do not necessarily appreciate the idiosyncratic nature of emotions. Although uniform or manualized approaches are typically evidence-based, they may not be as effective for diverse patients who present with unique circumstances, such as pre-existing medical conditions, psychiatric comorbidity, trauma history, or social oppression (Kazdin, 2011). Perhaps by combining these treatments with a psychological constructionist framework, clinicians can increasingly focus their evidence-based efforts on the most salient aspects of patient-reported experiences, thereby maximizing treatment effectiveness while allowing patients to feel "heard." Another benefit of integrating this framework with evidence-based treatments is that it may offer patients a more active role in therapy, facilitating their self-awareness and self-efficacy, as well as improving treatment compliance and therapeutic relationships. This may be especially helpful given that evidence-based treatments often sacrifice the therapeutic alliance for shorter-term intervention and measurable change (Ackerman & Hilsenroth, 2001).

While there is no formal psychological construction therapy per se, principles of this model are found in different therapeutic styles, such as client-centered and humanistic therapies (Benjamin, 2014). According to these models, clients are the main change agents in their lives, since they are the ones who construct and create meaning out of their experiences (Benjamin, 2014; Rogers, 1951). For instance, Carl Rogers, one of the most influential proponents of client-centered and humanistic therapies, argued that clinicians' primary role is not to "discover" unconscious attitudes and simply give advice to patients (Benjamin, 2014; Rogers, 1951). Instead, clinicians should prioritize reflecting patients' experiences back to them, in hopes of enhancing their self-exploration, self-awareness, sense of control, and psychological maturity (Benjamin, 2014; Rogers, 1964; Rogers, 1951).

As such, client-centered and humanistic therapies may be helpful adjuncts in addressing subjective experiences of body shame, as they are more sensitive to the nuanced ways in which individuals perceive themselves and construct their narratives (Benjamin, 2014). Furthermore, these therapies may encourage clients to reflect on their core values and how these contribute to their experiences of body shame, thereby increasing their insight and awareness (Rogers, 1964). Client-centered and humanistic therapies may also encourage patients to dissect the meanings they attribute to their experiences and learn how to better manage them, rather than simply objectify these experiences and treat them as uncontrollable or fundamentally "pathological" entities to be eliminated. By learning how to question, explore, and manage the meanings they ascribe to their experiences, patients may strengthen their sense of agency and control over their feelings of body shame.

Given their similar emphasis on agency and meaning-making, psychological construction theory may help inform client-centered and humanistic therapies, particularly when applied to body shame and eating disordered behavior, while these therapies can help inform the theoretical model in return. Furthermore, by combining client-centered and humanistic approaches with evidenced-based treatments for AN and BN, symptoms such as distorted beliefs, negative self-schemas, strict dieting behaviors, and subjective feelings of body shame may improve among diverse or resistant patient populations by strengthening their self-awareness, self-efficacy, psychological maturity, and investment in treatment.

Discussion

There are four primary models of emotion that account for the development, experience, and expression of affective states: basic emotion theory, appraisal theory, social construction theory, and psychological construction theory. While each perspective offers valuable insight into emotions, the question remains as to how they hold up when applied to various clinical disorders. This paper reviews the ways in which each theory might explain the occurrence of body shame in disordered eating. This author suggests that psychological construction theory provides the most adequate explanation for body shame because it integrates neurobiological, cognitive, and sociocultural factors in how shame is constructed. Because of its flexible and individualized approach, this model may also be used to help inform therapeutic styles that reflect similar principles, such as client-centered and humanistic therapy.

Future research may illustrate the utility of a psychological constructionist approach to body shame by exploring the variable nature of shame experiences among those affected by AN and BN. For instance, a qualitative examination of the salience of shame experiences, as well as the weight of potential factors contributing to these experiences, may demonstrate the unique way body shame is constructed among those with similar etiologies. A step further might involve functional neuroimaging to illustrate the potential similarities and differences in shame-related neural networks and how the activities of these networks either converge with or diverge from self-reported experiences of body shame. Another line of research might analyze the effectiveness of client-centered and humanistic therapy in reducing body shame and compare these outcomes with treatments that do not traditionally reflect psychological construction theory, such as psychiatric medication and CBT.

Given its potential benefits, there is also a need for researchers to further explore how psychological construction theory might explain particular emotional experiences in other clinical disorders. Suvak and Barrett (2011), for instance, examine how psychological construction theory explains the heterogeneity of symptoms in post-traumatic stress disorder (PTSD) more adequately than strictly neurological or behavioral accounts. Similar investigations need to be completed in order to fully understand the fluidity of emotions when addressing diverse clients. After all, patients with similar affective experiences often present a wide variety of symptoms, characteristics, histories, and risks. For example, children with underlying social anxiety may demonstrate an array of behaviors in response to social situations, such as fear, sadness, crying, anger outbursts, and failure to speak (American Psychiatric Association, 2013). Even among etiologies in which there is strong evidence for neurobiological causes, such as Alzheimer's disease, patients may display the same affective feature, such as depression, with distinct behavioral expressions, such as agitation versus apathy (Budson & Solomon, 2016).

It therefore seems beneficial, and even necessary, for clinicians and researchers to endorse theoretical models that account for such variability in order to better diagnose and treat patients with similar underlying pathologies yet unique affective presentations. Implications of research investigating the use and effectiveness of psychological construction theory to reduce maladaptive emotional experiences may help inform client-centered and humanistic therapies when applied to eating disordered symptomology. Potential findings of such research may also offer clinicians additional therapeutic tools when faced with cases of eating disordered behavior, particularly when clients are not responsive to techniques that are less aligned with psychological construction theory, such as psychopharmacologic and cognitive-behavioral methods.

References

Ackerman, S. J., & Hilsenroth, M. J. (2001). A review of the therapist characteristics and techniques negatively impacting the therapeutic alliance, *Psychotherapy, 38*(2), 171-185.

Ahrens, C. E., & Campbell, R. (2000). Assisting rape victims as they recover from rape: The impact on friends. *Journal of Interpersonal Violence, 15*(9), 959-986. Retrieved from https://scholars.opb.msu.edu/en/publications/assisting-rape-victims-as-they-recover-from-rape-the-impact-on-fr-4

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th edition). Arlington, VA: American Psychiatric Publishing.

Barrett, L. F. (2013). The conceptual act theory: A précis. *Emotion Review, 6*(4), 292-297. doi:10.1177%2F1754073914534479

Beck, A. T. (1967). *Depression: Causes and treatment.* Philadelphia, PA: University of Pennsylvania Press.

Benjamin, L. T. (2014). *A brief history of modern psychology* (2nd ed.). Malden, MA: Blackwell Publishing.

Boiger, M., Mesquita, B., Uchida, Y., & Barrett, L. F. (2013). Condoned or condemned: The situational affordance of anger and shame in the United States and Japan. *Personality and Social Psychology Bulletin, 39*(4), 520-553. doi:10.1177/0146167213478201

Boiger, M., & Mesquita, B. (2012). The construction of emotion in interactions, relationships, and cultures. *Emotion Review, 4*(3), 221-229. doi:10.1177%2F1754073912439765

Budson, A. E., & Solomon, P. R. (2016). *Memory loss, Alzheimer's disease, and dementia: A practical guide for clinicians* (2nd ed.). New York, NY: Elsevier.

Dansie, E. J. (2009). An empirical investigation of the adaptive nature of shame. *All Graduate Theses and Dissertations, 226*, 1-166. Retrieved from https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1228&context=etd

Duarte, C., Ferreira, C., & Pinto-Gouveia, J. (2016). At the core of eating disorders: Overvaluation, social rank, self-criticism and shame in anorexia, bulimia and binge eating disorder. *Comprehensive Psychiatry, 66*(1), 123-131. doi:10.1016/j.comppsych.2016.01.003

Duncan, C., & Cacciatore, J. (2015). A systematic review of the peer-reviewed literature on self-blame, guilt, and shame. *OMEGA-Journal of Death and Dying, 71*(4), 312-342. doi:10.1177/0030222815572604

Ekman, P., & Cordaro, D. (2010). What is meant by calling emotions basic. *Emotion Review, 3*(4), 364-370. doi:10.1177%2F1754073911410740

Felblinger, D. M. (2008). Incivility and bullying in the workplace and nurse' shame responses. *Journal of Obstetric, Gynecologic and Neonatal Nursing, 37*(2), 234-242. doi:10.1111/j.1552-6909.2008.00227.x

Fitzsimmons-Craft, E. E., Harney, M. B., Koehler, L. G., Danzi, L. E., Riddell, M. K., & Bardone-Cone, A. M. (2012). Explaining the relation between thin ideal internalization and body dissatisfaction among college women: The roles of social comparison and body surveillance. *Body Image, 9*(1), 43-49. doi:10.1016/j.bodyim.2011.09.002

Kazdin, A. E. (2011). Evidence-based treatment research: Advances, limitations, and next steps. *American Psychologist, 66*(8), 685-698.

Lazarus, R. S., Coyne, J. C., & Folkman, S. (1982). Cognition, emotion, and motivation: the doctoring of Humpty-Dumpty. In R. W. J. Neufeld (Ed.), *Psychological Stress and Psychopathology* (pp. 218-239). New York, NY: McGraw-Hill.

Levenson, R. W. (2011). The autonomic nervous system and emotion. *Emotion Review, 6*(2), 100-112. doi:10.1177%2F1754073913512003

Lindquist, K. (2013). Emotions emerge from more basic psychological ingredients: A modern psychological constructionist model. *Emotion Review, 5*(4), 356-368. doi:10.1177%2F1754073913489750

Mesquita, B., & Boiger, M. (2014). Emotions in context: A socio-dynamic model of emotions. *Emotion Review, 6*(4), 298-302. doi:10.1177%2F1754073914534480

Moors, A. (2014). Flavors of appraisal theories of emotion. *Emotion Review, 6*(4), 303-307. doi:10.1177%2F1754073914534477

National Eating Disorders Association (2016). Retrieved from https://www.nationaleatingdisorders.org/general-information

Parkinson, B., Fischer, A., & Manstead, A. S. R. (2005). *Emotion in social relations: Cultural, group, and interpersonal processes*. New York, NY: Psychology Press.

Rogers, C. R. (1964). Toward a modern approach to values. *Journal of Abnormal and social Psychology, 68*(2), 160-167.

Rogers, C. R. (1951). Client-centered therapy. New York, NY: Houghton-Mifflin.

Roth, L., Kaffenberger, T., Herwig, U., & Bruhl, A. B. (2014). Brain activation associated with pride and shame. *Neuropsychobiology, 69*(2), 95-106. doi:10.1159/000358090

Russell, J. A. (2003). Core affect and the

psychological construction of emotion. *Psychological Review, 110*(1), 145-172. doi:10.1037/0033-295X.110.1.145

Stice, E., & Shaw, H. E. (2002). Role of body dissatisfaction in the onset and maintenance of eating pathology: A synthesis of research findings. *Journal of Psychosomatic Research, 53*(5), 985-993. doi:10.1016/S0022-3999(02)00488-9

Strauss, J. Muday, T., McNall, K., & Wong, M. (1997). Response style theory revisited: Gender differences and stereotypes in rumination and distraction. *Sex Roles, 36*(11-12), 771-792. doi:10.1023/A:1025679223514

Suvak, M. K., & Barrett, L. F. (2011). Considering PTSD from the perspective of brain processes: A psychological construction approach. *Journal of Traumatic Stress, 24*(1), 3-24. doi:10.1002/jts.20618

Swanson, S. A., Crow, S. J. Le Grange, D., Swendsen, J., & Merikangas, K. R. (2011). Prevalence and correlates of eating disorders in adolescents. Results from the national comorbidity survey replication adolescent supplement. *Archives of General Psychiatry, 68*(7), 714-23. doi:10.1001/archgenpsychiatry.2011.22

Tracy, J. L. (2014). An evolutionary approach to understanding distinct emotions. *Emotion Review, 6*(4), 308-312. doi:10.1177%2F1754073914534478

Troop, N. A. (2016). The effect of current and anticipated body pride and shame on dietary restraint and caloric intake. *Appetite, 96*, 375-382. doi:10.1016/j.appet.2015.09.039

Wade, T. D., Keski-Rahkonen A., & Hudson, J. I. (2011). Epidemiology of eating disorders. In Tsuang, M. T, Tohen, M., & Jones, P. B. (Eds.), *Textbook of psychiatric epidemiology* (3rd ed.) (pp. 343-360). New York, NY: Wiley.

Weiner, B. (2000). Intrapersonal and interpersonal theories of motivation from an attributional perspective. *Educational Psychology Review, 12*(1), 1-14. doi:10.1023/A:1009017532121

Weir, K. (2016). New insights on eating disorders. *American Psychological Association, 47*(4), 36. Retrieved from http://www.apa.org/monitor/2016/04/eating-disorders.aspx

Zaki, J., & Williams, W. C. (2013). Interpersonal emotion regulation. *Emotion, 13*(5), 803-810. doi:10.1037/a0033839

Supervised Exercise in Anorexia Nervosa Treatment:
Directions for Research and Recovery

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Anorexia Nervosa (AN) is a pervasive mental disorder, one that not only threatens a patient's mental health, but also poses a serious, sometimes life-threatening risk to the individual's physical health. Despite advances in treatment, developments are still necessary to raise recovery rates and lower the risk of relapse. The present review examines some of the obstacles that may inhibit full recovery, the role that supervised exercise (SE) may play as an adjunctive treatment, and its contribution to the relationship between body and mind. Suggestions for future research on SE as a treatment component are discussed, with a consideration of potential risks to patients.

The Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5) classifies Anorexia Nervosa (AN) as a disorder in which an individual severely deprives his or her body of adequate energy, either through restriction of calorie intake, excessive exercise, or binging and purging behaviors. This leads to a bodyweight under that which is considered minimally normative, as defined by that individual's height, age, sex and physical health. This low weight is often maintained due to an intense fear of gaining weight and becoming overweight. For many patients suffering from AN, this fear continues to intensify even as their weight continues to decrease. Typically occurring along with this concern are distorted perceptions of one's body size and extreme body dissatisfaction. Whereas some individuals perceive their overall bodies as being overweight, others focus on specific body parts that they wish were smaller – commonly the thighs, abdomen, or buttocks.

With its estimated 5% mortality rate (Meczekalski, Podfigurna-Stopa, & Katulski, 2013), it may be the deadliest of all psychiatric conditions (Kaye, 2014). Although there are treatments available for AN, many individuals fall short of making a full recovery. A recent review (Waller, 2016) has determined that the recovery rate still remains around 30%, even when employing the most effective form of psychotherapy.

Despite the positive results obtained from some treatments (e.g., Karpowicz, Skärsäter, & Nevonen, 2009), as well as advances made in the efficacy of treatments available (Waller, 2016), AN continues to be a complicated disorder to treat (Espíndola & Sergio, 2013). Waller (2016) concluded that results obtained from cognitive behavioral therapies, the leading method of treatment, are disappointing.

A lack of motivation to engage in treatment (Espíndola & Sergio, 2013; Kaye 2014; Nordbø et al., 2012), residual body image disturbances (Boehm et al., 2016; Fichter, Quadflieg, & Hedlund, 2006; Lo Sauro, Castellini, Lelli, Faravelli, & Ricca, 2012), the risk of relapse associated with these concerns (Carter, Blackmore, Suntandar-Pinnock, & Woodside, 2004; Keel et al., 2005), and persistent low self-esteem (Brockmeyer et al., 2013; Button & Warren 2002; Steinhausen & Vollrath, 1992) are all obstacles that many AN patients continue to face, both during and after treatment. These factors have significant implications. At worst, it is possible that a lack of motivation or resistance towards treatment could contribute to non-compliance. Body image concerns could contribute to the risk of relapse (Carter et al., 2004); this is a serious problem by itself, as the risk of relapse remains high for individuals with this disorder (Khalsa, Portnoff, McCurdy-McKinnon, & Feusner, 2017). At best, it could be contended that low self-esteem and body image concerns lower the quality of life for remitted patients who continue to face these symptoms (Button & Warren, 2002).

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Due to the roadblocks that are often faced in the treatment of AN, a multimodal approach may prove beneficial for this population. The present paper aims to present the case for supervised exercise (SE) as an option for a treatment component that could be used alongside one of the leading forms of treatment, Enhanced Cognitive Behavioral Therapy (CBT-E). The goal of an SE intervention for AN patients is not to burn calories, and the forms of exercise may vary depending on patients' needs. Options that will be discussed in this paper are resistance training (RT), light, aerobic-style exercise, and yoga. The focus of such an intervention is the implementation of a program that does not inhibit or interfere with weight restoration, but can contribute to improvements in the symptoms, risks, and obstacles associated with AN. These include negative body image, low self-esteem, the risk of relapse, and reluctance to engage in treatment.

Exercise has been shown to improve body image concerns (Finnochiaro & Schmidt, 1984; Fisher & Thompson, 1994; Hausenblas & Fallon, 2006; Hös 2005; Sundgot-Borgen, Rosenvinge, Bahr, & Sundgot Scheinder, 2002; Taspinar, Asban, Agbuga, & Taspinar, 2014) and levels of self-esteem (Bosscher, 1993; Hutchinson, Skrinar, & Cross, 1999; Legrand, 2014; Sung, 2009; Taspinar et al., 2014; Taylor & Fox, 2005) in other populations. Furthermore, SE has been associated with treatment compliance (Beumont, Arthur, Russell, & Touyz, 1994; Moola, Gairdner, & Amara, 2013) and may be a protective factor against relapse in AN populations.

An intervention implemented at the residential level of treatment (e.g., Beumont et al., 1984) under the supervision of a multidisciplinary team (e.g., Cook, Wonderlich, Mitchell, Thompson, Sherman & McCallum, 2016) may benefit this population. An emphasis on RT may help facilitate weight restoration (Cook et al., 2016, Moola et al., 2013; Vancampfort et al., 2014). Moreover, incorporating light, aerobic-style exercise (e.g., a stationary bike) has been shown not to impede weight gain (e.g., Tokumura, Yoshiba, Tanaka, Nanri, & Wantanabe, 2003). A focus on increasing levels of body awareness may also be emphasized in an SE intervention by incorporating psychoeducational and debriefing components (e.g., Cook et al., 2016), or through forms of exercise such

as yoga (e.g., Dale et al., 2009). Increases in body awareness have been linked to improvements in AN patients' body image perceptions in previous research (e.g., Key et al., 2002). Such interventions may contribute to a more robust recovery and improve quality of life for the patients who continue to face obstacles, such as low self-esteem and negative body image perceptions (e.g., Taspinar et al., 2014; Wallin, Kronovall, & Majewski, 2000).

The objectives of this paper are to first provide a brief overview of common treatments for AN, and some of the barriers to recovery that many patients continue to face, even after treatment has ended. This will be followed by a discussion of the available literature regarding SE both in eating disordered (ED) populations and in other populations. This will include the ways a well-implemented SE program may aid patients in achieving a successful recovery, and help them to overcome the barriers noted in previous sections. The final sections of this paper will describe types of SE programs that may be used as effective, adjunctive components of treatment. Though the types of exercise vary, it is possible that each of the main components introduced (strength and resistance training, aerobic-style exercise, and yoga) may be combined to create individualized exercise programs for patients, depending on their needs. The following sections discuss how each may be beneficial for improving poor body image perceptions and low self-esteem.

Current Treatments for AN

Importantly, the DSM-5 distinguishes partial remission from full remission, determining that to have achieved full remission from AN, a patient must no longer meet any of the diagnostic criteria. This includes the psychological symptoms, such as the intense fear of gaining weight and distorted body perceptions (American Psychiatric Association, 2013). It has been reported that only about 30% of AN patients will reach the point of a full recovery (Lock & Fitzpatrick, 2009), indicating that a high number of individuals diagnosed with this disorder remain symptomatic. Many factors may underlie the development and maintenance of AN. This points to the importance of integrating physical and psychological treatments in a condition which

genuinely resides at the intersection of a physiological illness and psychiatric disorder.

AN often requires intensive medical intervention due to the threat it poses to the patient's physical health. Thus, weight restoration is a necessary and appropriate primary goal. Due to this need for immediate medical attention, there are some cases wherein patients report feeling as if their psychological health has been overlooked (e.g., Offord et al., 2006; Robinson, Kukucska, Guidetti, & Leavey, 2015). Although this cannot be generalized to all treatment facilities or to all patients, it can speak to the importance of integrating psychological and physical interventions, rather than focusing on one at the expense of the other.

In some patients, the depressive symptoms have indeed manifested as a result of starvation, and thus subside once weight is restored (American Psychiatric Association, 2013). However, it is imperative not to undermine the persistence of the psychological symptoms that occur in AN, as they may not remit on their own as patients move towards a healthier weight. These include residual symptoms, such as shape and body image concerns and low self-esteem.

Fennig et al. (2015) found that in an inpatient program where the primary criterion for discharge was reaching a target weight, no significant improvement was observed in the patients' core anorexic thoughts, body dissatisfaction, weight and shape concerns, or desire to be thin as a function of weight restoration at the time of discharge. Similarly, a separate study (Accurso, Ciao, Fitzsimmons-Craft, Lock, & Le Grange, 2014) found that weight restoration was directly related to a reduction in many psychological symptoms, including depressive symptoms, general ED pathology, eating concerns, and dietary restraint. However, it did not change body shape and weight concerns, and had no impact on self-esteem (Accurso et al., 2014). Though weight restoration is an essential component of treatment, it may not be sufficient in and of itself to treat all of the psychological symptoms experienced by many AN patients.

Further elucidating the importance of integrating physical and psychological treatment, regiments that target psychological disturbances have shown higher rates of success. Recent reviews of treatment advances in AN (Watson & Bulik, 2011) and in ED (Waller, 2016)

have concluded that Family Based Therapy (FBT) is a common treatment choice for younger patients (Waller, 2016; Watson & Bulik, 2011). This seems to be the most effective form of treatment for this subset of the anorexic population, especially in more short-term cases (Waller, 2016). Enhanced Cognitive Behavioral Therapy (CBT-E) is the superior treatment option for adults. Advances in CBT-E treatments have trumped the advances made in other forms of psychotherapy, including Dialectical Behavior Therapy (DBT), the Maudsley Model of Anorexia Nervosa Treatment for Adults (MANTRA), and Specialist Supportive Case Management (SSCM; Waller, 2016). Despite acknowledging the advances and improvements that have been made in CBT-E for treating AN, Waller (2016) concluded that the recovery rate for adults with AN using CBT-E is only around 30%, and stressed that the need to improve the treatments available for this population is still as serious a consideration as it was a decade ago (Waller, 2016).

The same review suggested that it may be useful to incorporate into treatment components that are not meant to bring about remission on their own, but that are intended to aid in the recovery process. Included were nutritional work, support for caregivers, and Cognitive Remediation Therapy (CRT; Waller, 2016). Similarly, the benefits of symptom-based treatments can be seen from the results of mirror exposure therapy, which was shown to reduce levels of body dissatisfaction in a pilot study of AN patients (Key et al., 2002). Acceptance and Commitment Therapy (ACT) has also proved effective in lowering levels of body dissatisfaction, though many patients still reported feelings of negativity towards their bodies (Fogelkvist, Parling, Kjellin, & Gustafsson, 2016).

The inclusion of multiple components within a treatment regimen is consistent with positive results obtained using a multifaceted model of treatment in a Swedish inpatient sample. Patients displayed improved levels of self-esteem, lower levels of body dissatisfaction and weight phobia, and an increased BMI at time of discharge (Karpowicz et al., 2009). Additionally, results from a qualitative study by Espíndola & Sergio (2013) revealed that for some patients, multifaceted models of treatment are viewed as important for achieving recovery.

In conclusion, although advances have been made in the treatment of AN, issues still persist regarding the efficacy of available options. The literature discussed above suggests that full recovery rates remain fairly low (Lock & Fitzpatrick, 2009), especially for adult patients (Waller, 2016). Moreover, positive results have been obtained for programs taking multifaceted approaches to treatment (e.g., Espíndola & Sergio, 2013; Waller, 2016). It is possible that SE is a viable component to add to a multifarious treatment design. This may help to address some of the obstacles some AN patients face during and after the treatment process. These will be discussed in the following section.

Obstacles to Full Remission

A comprehensive review of all obstacles faced by patients suffering from AN is beyond the scope of this paper. Instead, the following discussion will focus on some of the barriers that AN patients often face that may prevent them from receiving treatment, or achieving a full recovery. The objective of this section is to present four serious obstacles that can lead to negative consequences for both physical recovery and psychological recovery in AN patients. Importantly, the implementation of an SE component into a treatment program may help patients to overcome these obstacles.

Treatment Factors

Reluctance. One factor that may complicate the recovery process is that many AN patients display ambiguity or reluctance towards treatment (Espíndola & Sergio, 2013; Nordbø et al., 2012), and may not be motivated to recover (Kaye 2014). For instance, Nordbø et al. (2012) reported numerous reasons that AN patients had identified as deterrents of recovery. Patients reported that sensitivity to the perceived judgment of their bodies by other persons, denial of being sick, and eating and gaining weight contributed to a reluctance towards becoming healthy. Patients also reported that feeling stuck inside the disorder or feeling as if the positive aspects of AN outweighed the negative ones contributed to this reluctance as well (Nordbø et al., 2012). In a separate study, remitted AN patients described that coming to terms with recovery was difficult, and that they began treatment

with little or no motivation to progress (Espíndola & Sergio, 2013).

Relapse. Another factor adding to the complications of treating this disorder is that relapse remains an issue for many patients. A recent review (Khalsa et al., 2017) on this topic has determined that a lack of consensus on the definition of relapse exists within the AN literature, and that relapse rates range from 9 to 52%. However, this paper concluded that the majority of the studies reviewed reported a rate of above 25%. The authors suggested that this variation in reported relapse rates may indicate that many patients experience a brief period of recovery, and then later relapse.

Though the literature has pointed to a number of factors that are predictive of relapse in remitted AN patients, determining reliable predictors has also proven difficult (Khalsa et al., 2017). Some factors associated with a higher risk of relapse include suicide attempts, previous specialized treatment for an ED (Carter et al., 2004), further treatment after being discharged from an inpatient program, internalizing a lower target body weight (Richard et al., 2005), and excessive exercise (Carter et al., 2004; Zunker et al., 2011). Higher levels of body image concerns are cited as another factor that can predict relapse (Carter et al., 2004; Keel et al., 2005). Further, an examination of adolescents three years after being treated for AN at an inpatient facility demonstrated that lower body image disturbance was associated with a better long-term outcome, as measured by physical, psychological and psychosocial adjustment. The same study concluded that early weight gain during treatment was also associated with a better long-term outcome, thus highlighting the importance of addressing both physical and psychological concerns (Boehm et al., 2016).

Psychological Disturbances

Body image. Importantly, body-image concerns are often observed in remitted patients. Lo Sauro et al. (2012) conducted three and six-year follow-up studies with AN patients who had been treated with individual CBT. The results indicated that though fully remitted patients reported significantly less eating and shape concerns when compared to partially remitted patients, the levels of these concerns remained higher

than controls without a history of AN. Similar results have been obtained from a separate study conducted on patients at a twelve-year follow-up, which demonstrated that remitted AN patients displayed higher levels of body dissatisfaction when compared to controls without a history of AN (Fichter et al., 2006). Although adolescent patients treated with The Day Hospital Multifocal Integrated Treatment (MIT) showed improvements in disordered eating behaviors and numerous psychological disturbances, no effect was found on body dissatisfaction at a one-year follow-up (Zanna et al., 2017). Finally, in a sample of patients assessed three years after beginning treatment, 87% still showed perceptual body image disturbances (Boehm et al., 2016).

Steinhausen and Vollrath (1992) provided evidence for the long-term negative self-view associated with AN. In their sample of adolescents with AN, they found that although aspects of self-image–including body image–improved significantly during inpatient treatment, they still did not reach the levels of the healthy control group. Further support for this notion is also found in the results of the earlier-mentioned studies (Accurso et al., 2014; Fennig et al., 2015) where body image issues consistently showed minimal improvement after treatment. This is especially salient in Accurso et al.'s (2014) study, where other symptoms, such as general ED pathology, did show improvement.

Self-esteem. There are numerous studies which suggest that AN patients exhibit low levels of self-esteem. In a study examining adolescents with AN, for instance, patients had lower self-esteem, more contempt towards themselves and their weight, and evaluated themselves as less valuable socially than the general population of adolescents in the same age group (Gila, Castro, Gómez, & Toro, 2005). A separate study (Björck, Clinton, Sohlberg, Hällström, & Norring, 2003) concluded that ED are generally characterized by a negative self-image consisting of high levels of self-blame, self-hate, and little self-affirmation. AN patients in particular were found to internalize high levels of self-blame and self-hate (Björck et al., 2003). Similarly, other findings have characterized chronic AN patients by a high degree of self-loathing and feelings of unworthiness (Robinson et al., 2015).

Low self-esteem can persist for years after treatment has ended. In one study, self-esteem remained significantly lower for remitted AN patients when compared to controls with no history of AN (Brockmeyer et al., 2013). Furthermore, in a study examining AN patients seven-and-a-half years post-treatment, 74% of the sample scored in the range of low self-esteem. The same study demonstrated that low self-esteem levels were related to an overall decrease in psychological well-being (Button & Warren, 2002), highlighting the impact of this issue on overall quality of life.

In addition, for some patients, AN is tied closely to self-concept and self-esteem. Some patients have reported that their success at maintaining such a low body weight protected them from feeling like failures in other aspects of their lives, and that it made them feel as though they were successful at something in their lives (Nordbø et al., 2012). Similarly, chronic patients have reported feeling as though their disorders gave them a sense of pride and accomplishment, and that life without the disorder would be intolerable (Robinson et al., 2015). Similar results were obtained in a qualitative study conducted by Skåderud (2007), wherein one patient expressed pride in the appearance she had been able to achieve, and another felt extraordinary as a result of AN.

Results such as these suggest that for some, AN may indeed be a perceived source of protection from negative self-perception. Thus, recovery could be conceptualized as the loss of that source of self-esteem for these patients. Karpowicz et al. (2009) suggested that a high level of self-esteem observed in a patient entering treatment may reflect the perceived accomplishment of maintaining such a low weight, whereas low self-esteem may reflect feelings manifesting from "having to let go of AN ideals, with fading self-identity as the result" (Karpowicz et al., 2009, p. 323). Similarly, Brockmeyer et al. (2013) stressed the necessity of addressing self-esteem early on in treatment, as a loss of a crucial source of self-esteem may occur with early weight gain.

Overcoming the Obstacles

The obstacles of reluctance, relapse, poor body image perceptions and low self-esteem may benefit from the inclusion of an SE into treatment.

The following sections will suggest some potential mechanisms through which SE may contribute to alleviating the obstacles of low self-esteem and poor body image, and discuss the effects of exercise on these issues in other populations. The available literature on the inclusion of SE in AN treatment will be reviewed, including a discussion of the ways in which it has shown positive effects on reluctance to engage in treatment. The circumstances wherein it may aid as a protective factor against relapse will also be discussed.

The Relationship Between Body and Mind

Shape concerns, body dissatisfaction, body image disturbances, and self-esteem may be intricately related within this disorder. Indeed, a study of a non-clinical undergraduate sample found that low self-esteem predicted restrained eating behavior, and that this relationship was mediated by body dissatisfaction (Gianini & Smith, 2008). Furthermore, for many patients who suffer from AN, their perceptions of their body greatly influence how they see themselves as individuals, as they often place an inappropriate amount of importance on their physical appearances. Thus, their self-esteem is very closely related to their perceptions of their bodies (American Psychiatric Association, 2013). This is an important issue, as the distorted way in which these individuals experience their bodies may impact their perceived value as individuals, and subsequently, their levels of self-esteem. This relationship between body weight and self-esteem was examined by Brockmeyer et al. (2013), who found that self-esteem was negatively correlated with body weight in patients with acute AN–that is, the lower the patient's BMI, the higher his or her level of self-esteem.

Though this connection between the physical body and self-esteem may weaken when a patient achieves remission, it is unlikely that it disappears altogether. Brockmeyer et al. (2013) observed that the negative correlation between BMI and self-esteem lost significance for remitted AN patients; however, these patients still reported lower levels of self-esteem than did controls with no AN history. Importantly, no data was collected on how dissatisfied participants were with their bodies, nor on their perceptions of body image. Due to this, it is not possible to conclude

that body image and self-esteem are detached, even once a patient has achieved remission. Further, this is unlikely since body dissatisfaction–which is often found in remitted AN patients–has been shown to be predictive of low self-esteem, even in a non-clinical adolescent sample (Tiggermann, 2005).

Due to the difficulties that still exist regarding the efficacy of treatments for AN, it may be beneficial to consider emphasizing the relationship between physical and psychological recovery. Including SE as a treatment component alongside interventions such as CBT-E may help to accomplish this goal. In a disorder where the perception of the self is so closely related to physical body image, it is logical that this factor should be addressed during treatment. A majority of the long-lasting dysfunctional thoughts and beliefs center around the way an AN patient perceives his or her body, as can be observed in the residual body image concerns discussed above. Thus, a treatment program which adequately addresses the relationship between an AN patient's psychopathologies and self-image may be the key to providing relief from these symptoms. This is supported by Moola et al.'s (2013) suggestion that individuals with AN may benefit from a body-based treatment, as AN is "fundamentally not only a disorder of the psyche but also of the soma" (Moola et al., 2013, p. 66). The researchers suggested that the current practice of correcting thoughts and behaviors solely through cognitive methods may not be adequate treatment for patients with AN (Moola et al., 2013).

One such way to address this relationship may be through SE. Exercise has been shown to benefit populations displaying psychiatric symptoms, including patients in other ED samples (e.g., Vancampfort et al., 2013; Vancampfort et al., 2014). Vancampfort et al.'s (2014) review concluded that supervised exercise was related to an improved quality of life for patients with bulimia nervosa (BN). A review of exercise interventions for patients with binge-eating disorder (BED) determined that exercise was useful in reducing binge-eating pathology, and the combination of exercise and CBT was more effective for relieving depressive symptoms than CBT alone (Vancampfort et al., 2013).

The incorporation of exercise into interventions for other clinical and sub-clinical populations has had

positive results as well (e.g., Knapen, Vancampfort, Moriën, & Marchal, 2015; Legrand, 2014; Tkachuk & Martin, 1999). In Legrand's (2014) study, participants who were placed on a waitlist for a seven-week aerobic exercise program showed high rates of depression at the conclusion of the study, whereas significant drops in depression rates were found for the group who had been placed in the exercise condition. Nearly 70% of the participants in this condition no longer met the criteria for depression after completing the exercise program (Legrand, 2014). Further, a review conducted on the use of therapeutic exercise in psychiatric patients concluded that both aerobic and anaerobic exercise can be used as an effective modality to treat moderate depression, and may also prove to be useful when included in the treatment protocols for more severe episodes (Tkachuk & Martin, 1999). Finally, a review conducted by Knapen et al. (2015) concluded that exercise can be just as effective as both antidepressants and psychological therapies for treating some cases of depression.

Exercise in Body Image Perceptions and Self-Esteem

While the literature has not yet thoroughly examined the role of SE in both body image perceptions and self-esteem levels in AN populations, some studies have alluded to the role it may play in improving these symptoms. Markser's (2015) review of SE in ED therapy stressed the importance of changing the perceptions of the body to facilitate recovery. Beumont et al. (1994) included posture improvement exercises in their SE protocol to address self-esteem issues. Similarly, Probst et al. (2014) proposed that physiotherapy, a broad range of body-oriented adjunctive therapies, may reduce the disturbed body experience inherent within this disorder. However, though the exercise component of physiotherapy was discussed in relation to a number of positive treatment outcomes, its potential for reducing body image dissatisfaction was not addressed.

In one of the only empirical tests of SE on body image dissatisfaction in AN patients, Schlegel et al. (2015) did not find a significant reduction in drive for thinness or body dissatisfaction. However, the authors acknowledged that this might have been a product of either the duration of the study or the frequency of the meetings, as the study was limited to 12 weekly sessions. Though disappointing, it is likely that 12 sessions is not sufficient for eradicating symptoms of body dissatisfaction, when these disturbances have been observed in patients at six- (Lo Sauro et al., 2013) and 12-year follow-ups (Fichter et al., 2006). It is also important to note that the sample in this study did not consist of only AN patients but included BN and Eating Disorder Not Otherwise Specified (EDNOS) patients as well (Schlegel et al., 2015). Interestingly, this conflicts with the results obtained by Sundgot-Borgen et al. (2002), where SE was found be more effective than CBT in reducing drive for thinness in a bulimic sample. Clearly, the conflicting results of these studies highlight the need for future research in this area.

This is especially relevant since exercise interventions are shown to have a positive impact on the body perceptions and self-esteem levels of a number of diverse populations (e.g., Hös, 2005; Taspinar et al., 2014). Future research on the inclusion of SE may show similar effects on an AN population as well. SE interventions have been shown to elicit positive effects on other aspects of AN treatment, as discussed above (e.g., Moola et al., 2013; Vancampfort et al., 2014; Zunker et al., 2011). Furthermore, in a disorder where self-esteem is so dependent on perception of the physical body, addressing these disturbances in a physical, body-based way may prove especially effective in this population.

In a year-long study examining middle-aged women, total self-image improved significantly for the women who had been assigned to the exercise group, which consisted of an aerobic dance program. Importantly, improvements were most extensive in regards to body image (Hös, 2005). A meta-analysis (Hausenblas & Fallon, 2006) which examined the effects of exercise on body image concluded that exercisers tended to have a better body image than non-exercisers. Importantly, Hausenblas and Fallon (2006) asserted that this was not simply a correlational relationship, but that these effects were also found in studies that had implemented exercise interventions. Participants who received the interventions reported more positive body image perceptions compared to controls who did not receive the interventions. Finally, the participants assigned to the exercise

intervention conditions reported increases in positive body image perceptions at the conclusion of the studies (Hausenblas & Fallon, 2006). Perhaps one of the most compelling arguments for the efficacy of exercise in improving body image perceptions comes from a study where undergraduate students experiencing body image disturbances were assigned to either complete six weeks of CBT or therapeutic exercise. The exercise protocol included both aerobic and anaerobic (weight lifting) exercises. By the end of the intervention, the results showed that therapeutic exercise was as effective as CBT in reducing overall body dissatisfaction, cognitive-behavioral aspects of appearance, and body image disturbances (Fisher & Thompson, 1994).

Exercise interventions have been shown to have an impact on self-esteem as well as on body image in both clinical and normative populations. In an inpatient sample of depressed patients, those who were assigned to complete eight weeks of "running therapy" showed significant increases in self-esteem, compared to those who were assigned to engage in the usual treatment with added physical activities and relaxation exercises (Bosscher, 1993). In a sample of adults with psychiatric disorders (e.g., bipolar disorders, schizophrenia, and personality disorders), Hutchinson, Skrinar, and Cross (1999) demonstrated that engaging in regular aerobic exercise resulted in increased levels of self-esteem. Similarly, a pilot study that examined an inpatient exercise program documented a case study wherein the participant showed an improvement in self-image (Finnochiaro & Schmidt, 1984).

These effects are not limited to clinical populations, thus demonstrating the benefits on self-esteem in subclinical (Legrand, 2014) and psychologically healthy (Sung, 2009; Taspinar et al., 2014; Taylor & Fox, 2009) populations as well. A study involving women of low socioeconomic status who displayed depressive symptoms found that after completing an exercise intervention, the women experienced significant improvements in both their physical self-esteem and their physical self-worth (Legrand, 2014). Another study wherein participants either completed seven weeks of Hatha Yoga, seven weeks of resistance exercise, or were assigned to a control group, demonstrated that both exercise

groups had a positive impact on self-esteem and body image. However, resistance exercise had a greater impact on body image, and Hatha Yoga on self-esteem, but both groups scored significantly higher than the control group on these measures at the end of the seven weeks (Taspinar et al., 2014). A 16-week exercise program (consisting of stretching to enhance strength, and a dance component) implemented in an assisted living home for elderly South Korean women was shown to improve levels of self-esteem from baseline levels (Sung, 2009). Similarly, adults at risk for heart disease who received a prescription for physical exercise showed an increase in positive physical self-perception after completing a nine-month program (Taylor & Fox, 2009).

Supervised Exercise in AN Populations

Although SE has yet to be thoroughly examined in the context of body image and self-esteem in AN patients, the improvements in these issues in various other populations (e.g., Taspinar et al., 2014) may point to the ways that SE could benefit these factors in AN patients as well. Moreover, the available literature on the inclusion of SE as an AN treatment component has yielded positive results, and points to improvement in other domains of recovery (e.g., Moola et al., 2013). Importantly, the available studies suggest that SE may also combat the other two obstacles discussed in this paper: reluctance to treatment (e.g., Beaumont et al., 1994), and relapse (e.g., Zunker, Mitchell, & Wonderlich, 2011).

Two systematic reviews of the literature surrounding exercise treatment in AN concluded that implementing SE as a part of treatment is related to an improved quality of life for patients with AN (Moola et al., 2013; Vancampfort et al., 2014). Both Moola et al.'s (2013) and Vancamport et al.'s (2014) reviews included both aerobic and resistance/strength training interventions. The incorporation of SE was indeed related to both physical and psychosocial improvements (Moola et al., 2013; Vancampfort et al., 2014). Consistent with these results, a study conducted by Lemberg and May (1991) examined patients' perceptions of the efficacy of a multifaceted treatment regimen. Patients rated "exercise group" amongst the components they perceived to be helpful and expressed that they wished more time had been

dedicated to this aspect of their treatment. In response to open-ended questions, patients indicated that the "exercise group" was as beneficial as individual meetings with a clinician. Moreover, these two aspects were rated as the most beneficial components of treatment by the majority of the inpatients (Lemberg & May, 1991).

It is essential to also acknowledge the potential issues that may arise from adding an SE component to treatment for AN. It is likely that many clinicians will fear that it can undermine the goal of weight restoration. Moola et al.'s (2013) examination of the literature revealed that this does not occur as a result of incorporating SE into treatment. The researchers concluded that safe, appropriate exercise did not negatively impact BMI, and that no adverse effects of exercise on weight restoration were found in any of the studies reviewed. Similarly, a separate review on the inclusion of exercise in ED treatment conducted by Vancampfort et al. (2014) determined that no adverse effects were found as a function of therapeutic exercise. A recent pilot study (Schlegel, Hartmann, Fuchs, & Zeeck, 2015) found that the implementation of a sport-based SE program in an outpatient ED sample did not result in weight reduction. Overall, results from the literature suggest that SE does not cause further physical harm to an AN patient's already fragile body (Moola et al., 2013).

Contrary to the expectation of weight loss, Zunker et al.'s (2011) review of the literature concluded that incorporating SE into treatment programs was positively related to weight restoration. In Vancampfort et al.'s (2014) review, RT was related to increases in BMI, body fat percentage, and strength. The authors also noted that aerobic training might benefit weight restoration and ED pathology in AN patients (Vancampfort et al., 2014). Similarly, Moola et al. (2013) concluded that RT was tolerated well by AN patients, and resulted in an increase in strength. Additionally, one inpatient treatment center reported incorporating an SE component into their treatment program. This included stretching, low-impact aerobic exercise, posture-improvement exercises, weight training, and social sport. Although it was not tested empirically, authors noted improved patient compliance to treatment (Beumont et al., 1994). Similarly, Moola et al.'s (2013) review concluded

that supervised physical activity seems to facilitate patients' willingness to participate in treatment. As discussed earlier, increasing compliance to treatment would help to overcome a substantial obstacle in treating AN, as many patients are reluctant to engage in treatment.

The risk of relapse is another obstacle that may be helped by incorporating SE in AN treatment. Many AN patients engage in excessive exercise, and a return to this level of physical activity following treatment has been related to an increased risk of relapse (Carter et al., 2004; Zunker et al., 2011). Thus, prohibiting exercise during treatment may increase the likelihood of patients falling back into old patterns once treatment has ended (Moola et al., 2013; Zunker et al., 2011). Similarly, Beumont et al. (1994) suggested that prohibiting exercise during treatment can prevent patients from learning healthy ways to do so. They cautioned that the diet maintained in the hospital (while restricted from physical activity) would not be sufficient to support the levels of activity the patient may later attempt to engage in, and that this may lead to a decrease in weight upon release from the hospital.

Moreover, Beumont et al. (1994) suggested that many AN patients have misconceptions regarding exercise, and how much is needed to maintain a healthy body weight. The authors suggested that incorporating an SE program into treatment may help to eradicate these false beliefs and provide them with accurate information (Beumont et al., 1994). Indeed, Moola et al.'s (2013) review concluded that including exercise in treatment programs has been found to change distorted beliefs about exercise and helps it to play a healthier role in the patients' lives. In support of this, Schlegel and colleagues (2015) found that 12 weekly exercise sessions significantly reduced dysfunctional exercise engagement in an outpatient sample of ED patients.

Practical Implications and Future Research

The previous sections have discussed the ways in which a multimodal treatment program may benefit AN patients, a population that often struggles to achieve a full recovery. They have also provided suggestions as to why SE can be viewed as a viable component of a multifarious approach to treatment and recovery. The final sections of this article will

focus on future directions for research in this area. They will provide suggestions for the practical implementation of an SE intervention for AN patients that aim to improve treatment compliance, help to reduce the risk of relapse for some patients, and aid in alleviating low self-esteem and poor body image perceptions.

A Need for Future Research

Moola et al.'s (2013) review concluded that if these positive results continue to be obtained as more research on SE in AN treatment emerges, SE may have a significant impact on treatment outcomes for patients with AN. The results of both Vancampfort et al.'s (2014) and Moola et al.'s (2013) reviews suggested that the incorporation of exercise into treatment programs may improve quality of life for AN patients, and similar results were obtained for Schlegel and colleagues' (2015) outpatient sample. Vancampfort et al. (2014) noted that SE may relieve symptoms of eating pathology and depressive symptoms. Despite the promising trend this type of treatment is showing, it has been left largely unexplored until recently, and many treatment programs may still view exercise as a symptom of the disorder, rather than a possible healing factor.

There is still much to be learned about the potential efficacy of SE on AN recovery (Moola et al., 2013), and how it can be practically implemented in a treatment program. As concluded by Vancampfort et al. (2014), the literature surrounding this construct is limited, and Zunker et al. (2011) acknowledged the paucity of work available in this area. Relatively few studies have tested the effects of exercise on AN treatment (Thien, Thomas, Markin & Birmingham, 2000), and most of the research surrounding exercise in AN define the structure and implementation of the programs poorly (Moola et al., 2013). Moreover, a meta-analysis conducted by Ng, Ng, and Wong (2013) concluded that the types of exercise used in the available studies are heterogeneous, and many contain samples of 20 or fewer participants (Ng et al., 2013). Similarly, Vancampfort et al. (2014) noted that methodological issues in the available research, such as small sample sizes and lack of power analyses, limit the clarity of the findings and make them difficult to interpret. Future research should include more explicit

delineations of the interventions themselves, as well as address these methodological issues.

It is also worth noting that while the literature examining the role of SE on body image and self-esteem in AN treatment is sparse, it is even harder to locate in North American samples. One of the only empirical tests of the effects of SE on body image took place in Germany (Schlegel et al., 2015), as did the review that suggested the importance of this relationship (Marsker, 2015). Physiotherapy research on this subject comes from Europe as well (e.g., Probst et al., 2014). Future research is needed to determine whether these suggestions and findings would generalize to a North American sample. This points to the need for further research, especially in North American treatment centers.

SE for Body Image and Self-Esteem: Suggestions

Although previous research has suggested that SE may increase treatment compliance (e.g., Moola et al., 2013), and in some cases, be protective against future relapse (e.g., Carter et al., 2004). Little attention has been paid to the potential of SE for improving low self-esteem and poor body image perceptions. In a disorder where psychopathology is so intertwined with one's perception of his or her physical body, it may be beneficial to address psychological symptoms in a physical way. This may help to break through the barriers of low self-esteem and body dissatisfaction, and thus facilitate a full recovery. It is possible that patients who are enrolled in a program that incorporates SE into its course of treatment may report a significant reduction in psychological disturbances, such as low self-esteem and poor body image.

Improving an AN patient's physical self-esteem and physical self-worth may be the key to breaking the pattern of chronic global low self-esteem (Brockmeyer et al., 2013; Button & Warren, 2002), as a preoccupation with the physical body may be an obstacle in addressing and treating this larger issue. This preoccupation may also complicate the treatment of feelings of worthlessness (Gila et al., 2005), underlying psychological issues (Offord et al., 2006), and comorbid disorders (Karatzias et al., 2010; Yager & Anderson, 2005). A successful SE program may serve as a gateway to addressing the prominent issues of overarching low self-esteem

and negative self-image that may result from body dissatisfaction. It may aid in removing the barrier that prevents AN patients from seeing their worth beyond their physical bodies. Decreasing this preoccupation may allow patients to turn their focus inwards to address the underlying issues and disturbances that may have contributed to the onset and maintenance of the disorder.

In addition, attempting to improve self-esteem and body dissatisfaction without acknowledging the increased unhappiness and anxiety a patient may feel in response to weight restoration (Nordbø et al., 2012) may prove to be difficult. Neglecting these feelings may contribute to the persistent levels of low self-esteem and body dissatisfaction that are often observed in remitted AN patients. Markser's (2015) review suggested that normalizing weight may only be successful if body image perceptions are changed as well, and that SE may facilitate such a change. It may help prevent patients from feeling as though their bodies are completely out of their control, which may be perceived as a distressing experience. The relationship between weight gain and distress demonstrates the inadequacy of limiting physical recovery to weight restoration (Nordbø et al., 2012), and of restricting psychological recovery to cognitive methods of treatment (Moola et al., 2013).

However, with the limitations and heterogeneity of the available literature, developing and implementing an effective program remains a task for future research. Recently, advancements are being made in this area. A review paper by Cook et al. (2016) synthesized results from 18 articles outlining therapeutic exercise interventions for ED. From these interventions, they developed 11 guidelines for building an intervention for use in ED populations. Cook et al. (2016) suggested employing a multidisciplinary team (i.e., medical experts, exercise coaches) to create individualized regiments based on patients' needs. Cook and colleagues (2016) emphasized the importance of including a dietician for nutritional counseling. They noted the necessity of focusing on the patient's individualized concerns, screening for exercise-related psychopathology, creating a contract that specifies the goals and conditions of the program, and a focus on positive reinforcement (e.g., participation is contingent on treatment compliance). They also acknowledged the importance of implementing a graded program, where frequency and intensity are gradually increased. Some of these guidelines may be effective for improving negative body image and poor self-esteem in AN populations; these suggestions will be discussed and further developed below.

Body awareness: Psychoeducation, debriefing, and yoga. The awareness of internal bodily states refers to the ability to recognize physiological cues (Fredrickson & Roberts, 1997), and has been negatively associated with ED symptoms (e.g., Spoor, Bekker, Van Heck, Croon, & Van Strien, 2005). Cook et al. (2016) suggested debriefing after or during an exercise session. This can help patients explore the sensations, emotions, and thoughts that they experienced during the session. The authors also noted the importance of a psychoeducational component, which includes re-educating patients about healthy exercise, and helping to change pathological exercise beliefs (Cook et al., 2016). These debriefing and psychoeducational components may be helpful for alleviating body image concerns in AN patients, as the aims of these aspects include cultivating body awareness and learning to recognize bodily states (Cook et al., 2016).

Increasing body awareness may help to lower levels of body dissatisfaction. For instance, Key et al. (2002), found that body dissatisfaction improved as a function of mirror exposure therapy, a paradigm wherein patients had to observe their bodies in a mirror for an increasing amount of time. Additionally, this aligns with Fogelkvist et al.'s (2016) work, where body dissatisfaction decreased as a function of ACT, a form of treatment that incorporates mindfulness and acceptance processes (Hayes, Luoma, Bond, Masuda, & Lillis, 2006).

What these studies have in common with each other, and with the goals of the debriefing and psychoeducational components of SE, is an increase in body awareness (e.g., Key et al., 2002). An increase in interoceptive awareness and a decrease in body avoidance was found as a result of mirror exposure therapy (Key et al., 2002). Additionally, mindfulness and acceptance processes of ACT cannot be practiced in relation to body image if the body is being continuously avoided and awareness is hindered.

It is possible that increasing body awareness and decreasing avoidance contributed to the improvements in body dissatisfaction found in Key et al.'s (2002) and Fogelkvist's et al.'s (2016) studies. Probst et al. (2014) suggested that mirror exposure exercises aim to increase body awareness and may help to combat unrealistic body size perceptions.

In support of this notion, Vancampfort et al.'s (2014) review concluded that body awareness therapies (BAT) were related to a decrease in eating disorder pathologies. Moreover, Wallin and colleagues (2000) employed BAT in a sample of adolescents with AN who were receiving Family Based Therapy (FBT). This intervention included practices such as learning about the body and its functionality, and a focus on understanding bodily signals. Though improvements in body dissatisfaction were not found, the patients who received BAT reported a significant reduction in their drive for thinness compared to the patients who received FBT only. Moreover, for patients who had overestimated their body size, BAT normalized these distortions (Wallin et al., 2000). Increasing body awareness through SE interventions could serve as a first step towards acceptance and facilitating improvements in body image perceptions. This may work to improve body image perceptions in conjunction with the exercise practices themselves, which have been shown to improve body image perceptions in other samples (e.g., Hausenblaus & Fallon, 2006).

Aside from psychoeducation and debriefing, another mechanism through which body awareness can be improved is through a form of exercise itself. Yoga has been linked to lower levels of self-objectification (Daubenmier, 2005). Impett, Daubenmier, and Hierschman (2006) found decreased levels of self-objectification in a non-clinical sample following a two-month yoga immersion. This is relevant in the context of ED, as self-objectification is thought to be highly related to the development of these disorders (Fredrickson & Roberts, 1997). Additionally, yoga participation is related to greater body satisfaction and fewer disordered eating symptoms in non-clinical samples (Daubenmier, 2005).

Importantly, body awareness seems to play a role in these positive outcomes. Daubenmier (2005) separated body awareness into two components:

body awareness (i.e., perceptual awareness of bodily sensations) and body responsiveness (i.e., the responsiveness to these sensations). Yoga practitioners were higher in both body awareness and body responsiveness than were individuals who participated in aerobic exercise or no exercise. Moreover, both these factors contributed to the relationship between yoga participation and higher levels of body satisfaction and lower levels of self-objectification. Additionally, body responsiveness was responsible for the association between yoga participation and lower levels of disordered eating symptoms.

Yoga programs have also been employed in ED samples (e.g., Dale et al., 2009). One study demonstrated that incorporating yoga into outpatient ED treatment decreased symptomology over a 12-week period (Carei, Fyfe-Johnson, Breuner, & Brown, 2010). A pilot study conducted by Dale et al. (2009) implemented a six-day yoga intervention for women with a history of ED. The intervention emphasized yoga, but also included components such as cooking classes and meditation. At the time of the study, the sample displayed ED symptoms. Following the intervention, the women reported lower scores on a measure of ED symptomology, improvements in mood, and an increase in both emotional and physical awareness of their bodies.

It is also interesting to note that large effect sizes were obtained for the women's scores on the Drive for Thinness subscale of the Eating Disorder Inventory (EDI). However, due possibly to the small sample size, this relationship was not significant. Though Dale and colleagues acknowledged that it is unclear whether some or all of the effects were due to a different component of the workshop (e.g., the cooking class), the main emphasis of the program was on the yoga aspect (Dale et al., 2009). Taken together, the results of these studies suggest that yoga may be an efficacious way to approach the task of increasing body awareness. Moreover, they add to the contention that increasing body awareness may be beneficial for improving body image concerns in AN populations.

Resistance and aerobic training. Cook et al. (2016) suggested that an SE intervention should be comprised of a combination of aerobic and resistance training. Moreover, the proportions of each should

vary, depending on the patients' ED diagnoses and needs. For AN, the authors concluded that RT has shown to be helpful in facilitating weight restoration (Cook et al., 2016). This conclusion has also been drawn by earlier reviews of the literature (e.g., Vancampfort et al., 2014). Additionally, Touyz et al. (1993) found that the inclusion of anaerobic exercise did not interfere with re-feeding. In their sample of AN patients, weight did not significantly differ between those patients comprising an exercise group, and those in the control group (Touyz et al., 1993). Moola et al.'s (2013) review concluded that RT was a viable option for patients with AN due to its feasibility, positive reception by patients, and the increase in strength observed following such interventions. The authors suggested that RT may be a crucial component of an SE intervention for AN. It may help to prevent some of the physical consequences that can occur as a result of the disorder, such as osteoporosis (Moola et al., 2013).

Additionally, RT may also be helpful in alleviating body image concerns and improving self-esteem (e.g., Taspinar et al., 2014). Taspinar and colleagues (2014) demonstrated that body image perceptions and self-esteem levels improved as a function of RT in a non-clinical adult sample. Lubans, Aguiar, and Callister (2010) employed an eight-week, free-weight, RT intervention in a non-clinical adolescent sample. This form of exercise significantly improved levels of perceived body attractiveness in the girls included in the study (Lubans et al., 2010). In a sample of over 300 adolescents who were overweight or obese, a six-month RT intervention significantly improved levels of global self-esteem (Goldfield et al., 2015).

Based on Cook and colleagues' (2016) guidelines, it is likely that an exercise component of AN treatment would include a greater emphasis on resistance training than on aerobic training. However, the inclusion of both types of exercise may be possible and effective (e.g., Vancampfort et al., 2014). For instance, one study implemented 30 minutes of supervised biking on a stationary exercise bike in a sample of adolescents with AN. No adverse effects on weight were observed. At a one-year follow-up, the BMI of the patients assigned to the exercise intervention was higher than that of the patients in the control group (Tokumura et al., 2003). Vancampfort

et al.'s (2014) paper stated that aerobic exercise may benefit weight and ED psychopathology. Cook et al. (2016) suggested that this type of exercise may help to decrease body dissatisfaction and drive for thinness in bulimic patients. This type of exercise has been shown to improve body image satisfaction (e.g., Hös, 2005) and self-esteem (e.g., Hutchinson et al., 1999) in other samples.

Moreover, Hausenblas and Fallon's (2006) meta-analysis concluded that participants who engaged in both anaerobic and aerobic types of exercise showed more positive body image perceptions than those who engaged in one or the other. Similarly, Fisher and Thompson's (1994) intervention on body image disturbances included a combination of RT and aerobic activity. Sung (2009) demonstrated that a combination of strength and aerobic exercise is beneficial for self-esteem. Finally, Vancampfort et al. (2014) concluded that aerobic exercise was effective for reducing depressive symptoms in AN patients as well as in other populations (e.g., Legrand, 2014). However, Tkachuk and Martin (1999) concluded that anaerobic exercise, such as strength training, was as effective as aerobic exercise for treating depression. Overall, these results highlight the benefits of including both types of exercise in an intervention.

Inpatient care. For implementing an SE intervention, Cook et al. (2016) noted the necessity of a graded program, wherein the exercise begins as short intervals of a mild intensity, and gradually builds to a more moderate level. The program outlined in Cook et al.'s (2016) work was designed for a residential treatment center. Though outpatients may benefit from an exercise intervention as a part of continuing care, it may be essential to introduce such a program at the inpatient level. For instance, Cook et al. (2016) noted that the careful supervision and monitoring needed when beginning such an intervention is more feasible at this level of care. Additionally, Beumont et al. (1994) suggested that if activity is restricted at the inpatient level, weight loss may occur if the patient continues to consume the same number of calories upon release from treatment. It was suggested that incorporating SE into treatment may help to tailor a diet to levels of activity that are more reflective of daily life outside of treatment. Moreover, establishing healthy exercise

behaviors at this level of care may help patients to continue exercising healthily once residential treatment has ended (Beaumont et al., 1994).

Finally, in Schlegel et al.'s (2015) study of an SE intervention conducted with an outpatient ED sample, the dropout rate was higher than 30%. Schlegel and colleagues (2015) noted that many participants reported leaving the program due to the difficulty of confronting issues such as their body and their ED, or because of an aversion to the group environment (Schlegel et al., 2015). However, it is possible that another factor contributing to the dropout rate was that patients might have felt that the SE program was not rigorous enough. Similarly, patients may continue to exercise in a pathological way outside of the program if they are not in a supervised environment such as a residential treatment facility. Both of these factors may prevent them from learning healthy exercise patterns and point to the importance of beginning an intervention at a higher level of care.

Towards the Development of an Intervention

The above discussion provides some of the pieces for developing a successful exercise intervention for AN patients. Clearly, as Cook and colleagues (2016) have suggested, the program must be individually tailored to meet patients' needs and accommodate their limitations. However, it is possible that the combination of yoga, RT, and light, aerobic-style training may benefit patients, and each may contribute to the desired result. In addition to the exercise sessions themselves, a psychoeducational session should be incorporated into the treatment program (Cook et al., 2016).

The graded aspect of an exercise program is crucial (Cook et al., 2016). Thus, beginning with yoga and gradually incorporating RT and light aerobic-style exercise may be a feasible method for many patients. For instance, patients may initially participate in just one short yoga session per week, beginning with stretching and breathing exercises, to facilitate the beginnings of body awareness. As patients meet goals in regard to weight restoration and other aspects of recovery, other types of SE may then be added as is seen fit by the treatment team. For instance, an additional session per week may be added wherein patients gradually engage in low-intensity

RT. Following each exercise session, patients should engage in a debriefing session to further facilitate body awareness.

Should patients continue to improve, they may gradually increase to higher levels of exercise, both in intensity and frequency, and eventually work up to exercising at a moderate level of intensity (Cook et al., 2016). Cook et al. (2016) suggested that such increases should only occur when patients understand the psychological motivations, bodily sensations, and health outcomes that are associated with exercise.

The aim of such a program is to provide patients with a foundation for improving body image perceptions and self-esteem at an inpatient level of care, while also educating them about healthy ways to exercise and improving body awareness through reintroducing patients to their own bodies. It is the hope that when they are released from a residential setting, they have the tools to continue exercising in a healthy way, and that gradual improvements in body image perceptions and low self-esteem will follow. This may have implications for reducing the chronicity of these features often observed in remitted AN patients (Button & Warren, 2002; Lo Sauro et al., 2012).

Finally, the intervention should include outpatient SE sessions as a component of continuing care. Cook et al. (2016) noted that future research studies should aim to develop programs that are suited for outpatient levels of care. The ability to continue working with a familiar exercise coach may be appealing to patients who are re-acclimating to their daily routines. This may be a stressful experience for some, especially if patients must find a new coach or facility in order to continue exercising healthily. Continuing outpatient SE sessions, even for a short period of time, may help to keep patients on track and away from falling into unhealthy exercise patterns.

Conclusion

In summary, AN's high mortality rate (Kaye, 2014) is both a pressing and disturbing issue, and it is crucial to continuously explore effective avenues of treatment. A multifaceted approach may prove beneficial (Espíndola & Sergio, 2013). Incorporating SE as a component of this multifarious model may help to address some of the obstacles that complicate the treatment of this illness. Previous research has

suggested that SE may increase treatment compliance (e.g., Beumont et al., 1994; Moola et al., 2013), and is positively related to weight restoration (e.g., Vancampfort et al., 2014; Zunker et al., 2011). Instilling healthy exercise patterns in patients early on may also help to address misconceptions about exercise (Beumont et al., 1994) and help to create healthy exercise behaviors that will continue once treatment has ended.

Because excessive exercise (Carter et al., 2004; Zunker et al., 2011) and body image disturbances (Carter et al., 2004; Keel et al., 2005) are related to relapse, SE may be a factor that assists in lowering the risk of relapse for patients in remission. Importantly, as discussed above, SE has been shown to be related to an increase in self-esteem, especially physical self-esteem, (e.g., Legrand, 2014) and body image (e.g., Hös, 2005) in other populations.

Future research should examine the effects of SE on the body image disturbances and self-esteem of AN patients. These symptoms are often difficult to target during treatment and may persist after remission has been achieved (e.g., Button & Warren, 2002; Lo Sauro et al., 2012). Improvement in self-esteem and body image concerns in AN patients through the incorporation of SE would further make it a viable component in a multimodal approach to treatment.

A program that begins at the inpatient level of care and follows a graded structure (Cook et al., 2016) may aid in alleviating these and other symptoms. The goals of such programs would not be to burn calories, but rather to augment recovery without impeding weight restoration. This includes a focus on increasing levels of body awareness (Cook et al., 2016). Programs that include individualized combinations of RT (e.g., Moola et al., 2013), light aerobic-style exercise (e.g., Tokumura et al., 2003), yoga (e.g., Daubenmier et al., 2005), and psychoeducation (Cook et al., 2016) may serve these purposes. Finally, the opportunity to participate in SE as a component of continuing care may also prove beneficial for helping patients continue patterns of healthy exercise. Future research is crucial and could lead to improved quality of life for many patients with AN, both during treatment and after they have achieved remission.

References

Accurso, E. C., Ciao, A. C., Fitzsimmons-Craft, E. E., Lock, J. D., & Le Grange, D. (2014). Is weight gain really a catalyst for broader recovery?: The impact of weight gain on psychological symptoms in the treatment of adolescent anorexia nervosa. *Behaviour and Research Therapy, 56*, 1-6. doi:10.1016/j.brat.2014.02.006.

American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

Beumont, P. J. V., Arthur, B., Russell, J. D., & Touyz, S. W. (1994). Excessive physical activity in dieting disorder patients: Proposals for a supervised exercise program. *International Journal of Eating Disorders, 15*(1), 21-36.

Björck, C., Clinton, D., Sohlberg, S., Häilström,T., & Norring, C. (2003). Interpersonal profiles in eating disorders: Ratings of SASB self-image. *Psychology and Psychotherapy: Theory, Research and Practice, 76*, 337-349.

Boehm, L., Finke, B., Tam, F. I., Fittig, E., Scholz, M., Gantchev, K., . . . & Ehrlich, S. (2016). Effects of perceptual body image distortion and early weight gain on long-term outcome of adolescent anorexia nervosa. *European Child Adolescent Psychiatry, 25*, 1319-1326. doi:10.1007/s00787-016-0854-1.

Bosscher, R. J. (1993). Running and mixed physical exercises with depressed psychiatric patients. *International Journal of Sport Psychology, 24*(2), 170-184.

Brockmeyer, T., Grosse Holtforth, M., Bents, H., Kāmmerer, A., Herzog, W., & Friederich, H. C. (2013). The thinner the better: Self-esteem and low body weight in anorexia nervosa. *Clinical Psychology and Psychotherapy, 20*, 394-400. doi:10.1002/cpp.1771.

Button, E. J. & Warren, R. L. (2002). Self-image in anorexia nervosa 7.5 years after initial presentation to a specialized eating disorders service. *European Eating Disorders Review, 10*(6), 399-412. doi:10.1002/erv.484.

Carei, T. R., Fyfe-Johnson, A. L., Breuner, C. C., & Brown, M. A. (2010). Randomized controlled clinical trial of yoga in the treatment of eating

disorders. *Journal of Adolescent Health, 46*(4), 346-351. doi:10.1016/j.jadohealth.2009.08.007.

Carter, J. C., Blackmore, E., Sutandar-Pinnock, K., & Woodside, D. B. (2004). Relapse in anorexia nervosa: A survival analysis. *Psychological Medicine, 34*, 671-679. doi:10.1017/S0033291703001168.

Cook, B., Wonderlich, S. A., Mitchell, J., Thompson, R., Sherman, R., & McCallum, K. (2016). Exercise in eating disorders treatment: Systematic review and proposal of guidelines. *Medicine and Science in Sports and Exercise, 48*(7), 1408-1414. doi:10.1249/MSS.0000000000000912.

Dale, L. P., Mattison, A. M., Greening, K., Galen, G., Neace, W. P., & Matacin, M. L. (2009). Yoga workshop impacts psychological functioning and mood of women with self-reported history of eating disorders. *Eating Disorders: The Journal of Treatment and Prevention, 17*(5), 422-434. doi:10.1080/10640260903210222.

Daubenmier, J. J. (2005). The relationship of yoga, body awareness, and body responsiveness to self-objectification and disordered eating. *Psychology of Women Quarterly, 29*(2), 207-219.

Espíndola, C. R., & Sergio, L. (2013). Long term remission of anorexia nervosa: Factors involved in the outcome of female patients. *PLoS ONE 8*(2), e56275. doi:10.1371/journal.pone.0056275.

Fennig, S., Klomek, A. N., Shahar, B., Sarel-Michnik, Z., & Hadas, A. (2015). Inpatient treatment has no impact on the core thoughts and perceptions in adolescents with anorexia nervosa. *Early Intervention in Psychiatry, 11*(3) doi:10.1111/eip.12234.

Fichter, M. M., Quadflieg, N., & Hedlund, S. (2006). Twelve-year course and outcome predictors of anorexia nervosa. *International Journal of Eating Disorders, 39*, 87-100. doi:10.1002/eat.20215.

Finocchiaro, M. S., & Schmitz, C. L. (1984). Exercise: A holistic approach for the treatment of the adolescent psychiatric patient. *Issues in Mental Health Nursing, 6*(3-4), 237-243. doi:10.3109/01612848409140895.

Fisher, E., & Thompson, J.K. (1994). A comparative evaluation of cognitive-behavioral therapy (CBT) versus exercise therapy (ET) for the treatment of

body image disturbance. *Behavior Modification, 18*(2), 171-185.

Fogelkvist, M., Parling, T., Kjellin, L., & Gustafsson, S. A. (2016). A qualitative analysis of participants' reflections on body image during participation in a randomized controlled trial of acceptance and commitment therapy. *Journal of Eating Disorders, 4*(29), 1-9. doi:10.1186/s40337-016-0120-4.

Fredrickson, B. L., & Roberts, T. A. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly, 21*(2), 173-206.

Gianini, L .M., & Smith, J. E. (2008). Body dissatisfaction mediates the relationship between self-esteem and restrained eating in female undergraduates. *International Journal of Behavioral Consultation and Therapy, 4*(1), 48-56.

Gila, A., Castro, J., Gómez, M. J., & Toro, J. (2005). Social and body self-esteem in adolescents with eating disorders. *International Journal of Psychology and Psychotherapy, 1*(1), 63-71.

Goldfield, G. S., Kenny, G. P., Alberga, A. S., Prud'homme, D., Hadjiyannakis, S., Gougeon, R., . . . Sigal, R. S., (2015). Effects of aerobic training, resistance training, or both on psychological health in adolescents with obesity: The HEARTY randomized controlled trial. *Journal of Consulting and Clinical Psychology, 83*(6), 1123.

Hausenblas, H. A., & Fallon, E. A. (2006). Exercise and body image: A meta-analysis. *Psychology and Health, 21*(1), 33-47. doi:10.1080/14768320500105270.

Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A., & Lillis, J. (2006). Acceptance and commitment therapy: Model, processes and outcomes. *Behaviour Research and Therapy, 44*(1), 1-25.

Hös, A.T. (2005). The effects of a guided systematic aerobic dance programme on the self-esteem of adults. *Kinesiology, 36*(2), 141-150.

Hutchinson, D. S., Skrinar, G. S., & Cross, C. (1999). The role of improved physical fitness in rehabilitation and recovery. *Psychiatric Rehabilitation Journal, 22*(4), 355-359.

Impett, E. A., Daubenmier, J. J., & Hirschman, A. L. (2006). Minding the body: Yoga, embodiment, and well-being. *Sexuality Research and Social Policy, 3*(4), 39-48. doi:SRSP.2006.3.4.39

Karatzias, T., Chouliara, Z., Power, P., Collin, P., Yellowees, A., & Grierson, D. (2010). General psychopathology in anorexia nervosa: The role of psychological factors. *Clinical Psychology and Psychotherapy 17*, 519-527. doi:10.1002/cpp.701.

Karpowicz, E., Skärsäter, I., & Nevonen, L. (2009). Self-esteem in patients treated for anorexia nervosa. *International Journal of Mental Health Nursing, 18*, 318-325. doi:10.1111/j.1447-0349.2009.00621.x.

Kaye, W. H. (2014). Eating disorders: Understanding anorexia nervosa. Psychiatric Times, 31(5), 17.

Keel, P. K., Dorer, D. J., Franko, D. L., Jackson, S. C, & Herzog, D. B. (2005). Post relapse predictors in women with eating disorders. *The American Journal of Psychiatry, 162*(12), 2263-2268.

Key, A., George, C.L., Beattie, D., Stammers, K., Lacey, H., & Waller, G. (2002). Body image treatment within an inpatient program for anorexia nervosa: The role of mirror exposure in the desensitization process. *International Journal of Eating Disorders, 31*(2), 185-90.

Khalisa, S. S., Portnoff, L. C., McCurdy-McKinnon, D., & Feusner, J. D. (2017). What happens after treatment? A systematic review of relapse, remission, and recovery in anorexia nervosa. *Journal of Eating Disorders, 5*(20), 1-12. doi:10.1186/s40337-017-0145-3.

Knapen, J., Vancampfort, D., Moriën Y., & Marchal Y. (2015). Exercise therapy improves both mental and physical health in patients with major depression. *Disability and Rehabilitation, 37*(16), 1490-1495. doi:10.3109/09638288.2014.972579.

Legrand, F. D. (2014). Effects of exercise on physical self-concept, global self-esteem and depression in women of low socioeconomic status with elevated depressive symptoms. *Journal of Exercise and Sports Psychology, 36*, 357-365.

Lemberg, R., & May, M. (1991). What works in in-patient treatment of eating disorders: The patient's point of view. *British Review of Bulimia and Anorexia Nervosa, 5*(1), 29-37.

Lock, J., & Fitzpatrick, K. K. (2009). Anorexia nervosa. *BMJ Clinical Evidence*, 1-36.

Lo Sauro, C. L., Castellini, G., Lelli, L., Faravelli, C., & Ricca, V. (2013) Psychopathological and clinical features of remitted anorexia nervosa patients: A six-year follow-up study. *European Eating Disorders Review, 21*, 78-83. doi:10.1002/erv.2177.

Lubans, D. R., Aguiar, E. J., & Callister, R. (2010). The effects of free weights and elastic tubing resistance training on physical self-perception in adolescents. *Psychology of Sport and Exercise, 11*(6), 497-504. doi:10.1016/j.psychsport.2010.06.009.

Markser, V. A. (2015). Sports and exercise therapy for eating disorders. *Sports and Exercise Therapy for Mental Illness: Research and Practice Recommendations,* 113-132.

Meczekalski, B., Podfigurna-Stopa A., & Katulski K. (2013). Long-term consequences of anorexia nervosa. *Maturitas, 75*(3), 215-220.

Moola, F. J., Gairdner, S. E., & Amara, C.E. (2013). Exercise in the care of patients with anorexia nervosa: A systematic review of the literature. *Mental Health and Physical Activity, 6*, 59-68.

Ng, L. W. C., Ng, D. P., & Wong, W. P. (2013). Is supervised exercise training safe in patients with anorexia nervosa? A meta-analysis. *Physiotherapy, 99*(1), 1-11.

Nordbø, R. H. S., Espeset, E. M. S., Gulikson, K. S., Skårderud, F., Geller, J., & Holte, A. (2012). Reluctance to recover in anorexia nervosa. *European Eating Disorders Review, 20*, 60-67. doi:10.1002/erv.1097.

Offord, A., Turner, H., & Cooper, M. (2006). Adolescent inpatient treatment for anorexia nervosa: A qualitative study exploring young adults' retrospective views of treatment and discharge. *European Eating Disorders Review, 14*, 377-387. doi:10.1002/erv.687.

Probst, M., Majeweski, M. L., Albertsen, M. N., Catalan-Matamoros, D., Danielsen, C., De Herdt, A., . . . Vancampfort, D. (2013). Physiotherapy for patients with anorexia nervosa. *Advances in Eating Disorders: Theory, Research and Practice, 1*(3), 224-238, doi:10.1080/21662630.2013.798562.

Richard, M., Bauer, S., Kordy, H., & COST Action B6. (2005). Relapse in anorexia and bulimia nervosa – a 2.5 year follow-up study. *European Eating Disorders Review, 13*, 180-190. doi:10.1002/erv.638.

Robinson, P. H., Kukucska, R., Guidetti, G., &

Leavey, G. (2015). Severe and enduring anorexia nervosa (SEED-AN): A qualitative study of patients with 20+ years of anorexia nervosa. *European Eating Disorders Review, 23*, 318-326.

Schlegel, S., Hartmann, A., Fuchs, R., & Zeeck, A. (2015). The Freiburg sport therapy program for eating disordered outpatients: A pilot study. *Eating and Weight Disorders, 20*(3), 319-327. doi:10.1007/s40519-015-0182-3.

Skädured, F. (2007). Shame and pride in anorexia nervosa: A qualitative descriptive study. *European Eating Disorders Review, 15*, 81-97. doi:10.1002/erv.774.

Spoor, S. T., Bekker, M. H., Van Heck, G. L., Croon, M. A., & Van Strien, T. (2005). Inner body and outward appearance: The relationships between appearance orientation, eating disorder symptoms, and internal body awareness. *Eating Disorders: The Journal of Treatment and Prevention, 13*(5), 479-490. doi:10.1080/10640260500297267.

Steinhausen, H. C., & Vollrath, M. (1993). The self-image of adolescent patients with eating disorders. *International Journal of Eating Disorders, 13*(2), 221-227.

Sundgot-Borgen, J., Rosenvinge, J. H., Bahr, R., & Schneider, L. S. (2002). The effect of exercise, cognitive therapy, and nutritional counseling in treating bulimia nervosa. *Medicine and Science in Sports and Exercise, 34*(2), 190-195.

Sung, K. (2009). The effects of 16-week group exercise program on physical function and mental health of elderly Korean women in long-term assisted living facility. *Journal of Cardiovascular Nursing, 24*(5), 344-351.

Taspinar, B., Aslan, U. B., Agbuga, B., & Taspinar, F. (2014). A comparison of the effects of hatha yoga and resistance exercise on mental health and well-being in sedentary adults: A pilot study. *Contemporary Therapies in Medicine, 22*, 433-440. doi:10.1016/j.ctim.2014.03.007.

Taylor, A. H., & Fox, K. R. (2005). Effectiveness of a primary care exercise referral intervention for changing physical self-perceptions over 9 months. *Health Psychology, 24*(1), 11-21. doi:10.1037/0278-6133.24.1.11.

Tiggemann, M. (2005). Body dissatisfaction and adolescent self-esteem: Prospective findings. *Body Image, 2*(2), 129-135. doi: 10.1016/j.bodyim.2005.03.006.

Tkachuk, G. A., & Martin, G. L. (1999). Exercise therapy for patients with psychiatric disorders: Research and clinical implications. *Professional Psychology, 30*(3), 275-282.

Tokumura, M., Yoshiba, S., Tanaka, T., Nanri, S., & Watanabe, H. (2003). Prescribed exercise training improves exercise capacity of convalescent children and adolescents with anorexia nervosa. *European Journal of Pediatrics, 162*(6), 430-431.

Touyz, S. W., Lennerts, W., Arthur, B., & Beumont, P. J. (1993). Anaerobic exercise as an adjunct to refeeding patients with anorexia nervosa: does it compromise weight gain?. *European Eating Disorders Review, 1*(3), 177-182.

Vancampfort, D., Vanderlinden, J., De Hert, M., Adámkova, M., Skjaerven, L. H., . . . Probst, M. (2013). A systematic review of physical therapy interventions for patients with binge eating disorder. *Disability and Rehabilitation, 35*(26), 628-634. doi:10.3109/09638288.2013.771707.

Vancampfort, D., Vanderlinden, J., De Hert, M., Soundy, A., Adámkova, M., Skjaerven, L. H., Catalán-Matamoros, D., Gyllensten, A. L., Gómez-Conesa, A., & Probst, M. (2014). A systematic review of physical therapy interventions for patients with anorexia and bulemia nervosa. *Disability and Rehabilitation, 36*(8), 628-634. doi:10.3109/09638288.2013.808271.

Waller, G. (2016). Recent advances in psychological therapies for eating disorders. *F1000Research, 5*. doi:10.12688/f1000research.7618.1.

Wallin, U., Kronovall, P., & Majewski, M. L. (2000). Body awareness therapy in teenage anorexia nervosa: outcome after 2 years. *European Eating Disorders Review, 8*(1), 19-30.

Watson, H. J., & Bulik, C. M. (2013). Update on the treatment of anorexia nervosa: Review of clinical trials, practice guidelines and emerging interventions. *Psychological Medicine, 43*, 2477-2500. doi:10.1017/S0033291712002620.

Yager, J., & Anderson, A. E. (2005). Anorexia nervosa. *The New England Journal of Medicine, 353*(14), 1481-1488.

Zanna, V., Castiglioni, M. C., Criscuolo, M.,
      Chianello, I., Elisei, M., . . . Vicari, S. (2017).
      Day-hospital multifocal integrated treatment
      for anorexia nervosa in adolescents: A one-year
      follow-up. *Journal of Child and Family Studies,
      26*, 1460-1471. doi:10.1007/s10826-017-0666-z.
Zunker, C., Mitchell, J. E., & Wonderlich, S. A.
      (2011). Exercise interventions for women with
      anorexia nervosa: A review of the literature.
      International Journal of Eating Disorders, 44,
      579-584. doi:10.1002/eat.20862.

Patient Perception in Triggering Events and De-escalation in a Psychiatric Hospital: Implications for Seclusion and Restraint

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Previous research has examined personal, situational, and interpersonal characteristics of psychiatric patients. Other recent studies have compared staff and patient perception on aggression with mixed results reported. Limited research has investigated patient-reported perception on triggers for aggression and techniques for de-escalation. The current study investigated a self-report instrument at a psychiatric hospital as it did or did not apply to the events leading up to an incident of seclusion and restraint (per staff's documentation). This study also investigated the relationship between length of stay in the hospital and number of incidents of seclusion and restraint. The results suggest that patients are accurate at identifying the triggers leading to aggression, the additional factors to aggression, and the successful interventions that decrease aggression. No relationship was observed between days spent in the hospital and number of incidents of aggression. It appears the Behavioral Assessment form is an accurate tool for some psychiatric patients and hospitals.

Keywords: psychiatric violence, aggression, patient perception

A majority of researchers define violence as physical aggression against others (Khadivi, Raman, Atkinson, & Levine, 2004), physical aggression against self (Benedictis et al., 2011), aggression towards an object, and verbal aggression (Khadivi et al., 2004; Ilkiw-Lavalle & Grenyer, 2003). In a small proportion of studies, sexual violence is also included (Claes, Vandereycken, & Vertommen, 2007; Daffern, Mayer, & Martin, 2003). According to Shergill and Szmukler (1998), violence is defined as "an act with propensity to cause harm, psychological or physical" (p. 394). Recognizing patient aggression can help facilities provide specific treatment interventions. The awareness of these triggers may also help with illness-related factors, as well as overall anger management and impulsivity interventions (e.g. cognitive behavioral skills) (Daffern, Mayer, & Martin, 2003; Daffern, Howells, Ogloff, & Lee, 2005). Further, understanding the characteristics of individuals and the environment that may contribute to a higher number of aggressive behaviors could aid in educating staff to be more aware of the patient's

situation and how to cater these responses to each patient's unique needs (Daffern, Howells, & Ogloff, 2007). Staff awareness of patient needs creates an early intervention process, which serves to facilitate a safe environment for staff and patients.

With psychiatric hospitals[1], only a small proportion of patients account for a majority of violent acts (Daffern, Mayer, & Martin, 2003). It is estimated that only 16 percent of inpatients are aggressive during their first week of hospitalization. Daffern, Howell, and Ogloff (2006) found that of the 232 patients admitted to a forensic psychiatric hospital, 105 were aggressive at least once, and of those, 36% were violent. More revealing was the finding that eight patients were responsible for 43% of all aggressive reports. Likewise, Benjaminsen, Gotzxche-Larsen, Norrie, Harder, & Luxhoi (1995) found that 70 patients at a university psychiatric hospital had committed a total of 157 acts. Again, these findings suggest that a small percentage of the psychiatric inpatient population can account for most of the aggressive incidents within facilities. If triggers

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[1]Most studies do not specify whether the data collection occurred at state or private psychiatric hospitals.

for aggression and techniques for de-escalation could be identified *prior* to an act of aggression, hospitals could significantly reduce issues related to safety and security of their patients and staff.

Some scholars have attempted to understand the functionality of psychiatric inpatient aggression. Although it is likely that there are different reported rates of aggression based on clinical diagnosis, most studies do not break down data into specific diagnostic categories. Rather, they compare psychotic disorders with non-psychotic disorders. The rationale for doing so is generally not discussed within the articles. Similarly, scholars have found that a diagnosis of psychosis is predictive of more aggressive incidents while residing in a psychiatric hospital (Cornaggia, Beghi, Pavone, & Barale, 2010). For individuals with a diagnosis of psychosis, the aggression usually served rational functions which were precipitated by issues noted before the event, rather than being spontaneous in nature (Daffern, Howells, & Ogloff, 2006). This likely means these patients experienced some triggering event that lead to their aggressive behavior rather than just acting out impulsively. This would suggest a need for identifying individual level factors and their possible association with inpatient aggression.

In addition to psychiatric diagnosis, some scholars have expanded their scope of understanding psychiatric violence by looking at demographic variables. There are several personal characteristics that have been studied, such as age and sex. For example, Daffern, Howells, & Ogloff (2007) found that women were more likely to be aggressive and to be uncooperative with issues of compliance (e.g. taking medication, adhering to schedule), whereas men were more likely to be aggressive to obtain tangible items. However, Depp (1976) found no such sex differences at a public psychiatric hospital. It was reported that nearly an equal percentage of men and women (63% and 62%, respectively) committed acts of aggression (Depp, 1976). These inconsistent findings leave room for speculation on what type of events trigger aggressive behavior of men and women at inpatient psychiatric hospitals. With respect to the patient age, Daffern, Howells, and Ogloff (2007) found that older patients are more likely to be aggressive than younger patients. Benjaminsen et al. (1995) found similarities in patient violence as a function of both patient age

and sex. More specifically, it was revealed that male patients and female patients under the age of 35 were more likely to behave violently than men and women over the age of 35. However, Daffern, Howells, Ogloff, and Lee (2005) found that when defining aggression as either violent or non-violent, age was not a significant factor. Again, the previous conflicting findings on sex and age leave further room for exploratory research on patient characteristics and one's ability to recognize triggers for aggression.

A clear understanding of what causes patients to be violent may require consideration of more than two variables. Weizmann-Henelius and Suutala (2000) reviewed patient age, sex, and criminal offense at a forensic psychiatric hospital. It was found that the patients who were referred to the state due to their "dangerous and difficult propensities" (Weizmann-Henelius & Suutala, 2000, p. 269) were more violent during hospitalization than the patients who were committed due to lawfully charged criminal acts (Weizmann-Henelius & Suutala, 2000). These findings must be considered when understanding the current research, as the hospital utilized in this study did have a specialized unit for forensic patients (e.g., those incompetent to stand trial and those not guilty by reason of insanity). This unit housed only a small (less than 15 individuals) number of patients, as did all units; therefore, identifying the unit and/ or criminal charge for each patient was not included in the current analysis to avoid patient identification. Those housed in forensic hospitals or on forensic units are likely to spend longer periods of time at the hospital than other patients. Previous literature has addressed aggression of patients in comparison to their overall length of stay in the hospital. After conducting a review of multiple studies, Cornaggia, Beghi, Pavone, and Barale (2010) found that a longer period of hospitalization was associated with more incidents of aggressive behavior. They pointed out that this could be due to the severity of the clinical symptoms *or* that the patient has had more time to show aggressive behavior. These findings suggest that past and current situational variables matter in determining level of aggressiveness.

It is also possible that inpatient violence reflects why the individual was hospitalized. Benjaminsen et al. (1995) found that patient violence was affected

by the way individuals were hospitalized. Individuals involuntarily committed to the hospital were found to be more violent than individuals who had been voluntarily committed. Serper et al. (2005) ran an analysis of variance to reveal potential predictors for inpatient aggression. They found that there was a statistically significant difference in the number of aggressive acts with involuntarily committed patients when compared to voluntarily committed patients (Serper et al., 2005; Cornaggia et al., 2010). Ketelsen, Zechert, Driessen, and Schulz (2007) further described the involuntary admissions as those who had critical or emergency circumstances prior to their admission. The details on admission for each patient could produce insightful findings for future aggression. The patients in the current study could have been voluntarily or involuntarily committed. Due to the low number of voluntarily committed patients, this information was not included in the current study.

Given that many studies have shown behavior to be a function of context (Ketelsen, Zechert, Driessen, & Schulz, 2007; Cornaggia et al., 2011; Daffern, Howells, & Ogloff, 2007), it would seem prudent to determine whether the physical environment of the hospital, may serve as a causal factor. Daffern, Mayer, and Martin (2003) suggested that physical environment alone cannot serve as a causal mechanism for inpatient psychiatric violence. Rather, it is one of many possible predictors of such behavior. Daffern, Mayer, and Martin (2003) sought to determine whether violence levels were notably different at two forensic psychiatric hospitals. One hospital provided lounge and recreation areas while the other hospital did not allow patients access to these resources or their own rooms until evening hours. At both hospitals, the frequency of aggressive incidents increased throughout the day, with most incidents being recorded between 6:00 p.m. and 7:00 p.m. Weizmann-Henelius and Suutala (2000s) hypothesized that the increase in violence at particular times is the result of a change in staff. It should be noted that property damage and verbal aggression towards staff occurred at a higher rate at the second hospital; the units with more incidents were ones where patients were unable to access their rooms during times of irritability. The inability to withdraw

when irritated may have contributed to an increase in aggression. Nonetheless, the results clearly revealed that the levels of aggression were highly similar across both hospitals. The authors suggest that since the facilities were different, similarities may be due to reporting error. Their study used any reports where violence was noted. Staff likely have different thresholds for reporting incidents and thoroughness in completing their incident reports (Weizmann-Henlius & Suutala, 2000).

Patient Experience and Perception

To date, there remains only a small number of studies which have investigated the perceptions of triggers for violence and aggression from the patients themselves. Ireland (2006) utilized 60 staff members and 44 patients to compare views on the causal factors of bullying in a forensic psychiatric hospital. The results revealed that staff members perceived a higher rate of bullying than did patients; however, the difference was not found to be significant. When asked to describe characteristics the victims possessed most, 53.3% of staff and 31.8% of the patients reported the victim as having a "weak personality" or being "vulnerable." It was also found that the staff, more than the patients (31.7% versus 4.5% respectively), believed victims to be "more mentally ill" than the bully. It should be noted that differences were found only regarding victim characteristics. Duxbury and Whittington (2005) reported that patients and nurses disagree about the reasons for the aggressive behavior. Patients saw environmental conditions and poor communication with staff as more significant precursors, whereas staff felt that the mental illness itself was the biggest cause. This was also true of findings from Kontio et al.'s (2012) research with patients, as they reported that they did not have enough information about their treatment plans or the reasoning behind their seclusion and restraint.

Almost all research has neglected to compare the perceptions patients hold of an aggressive or violent incident to the perceptions staff members hold. Bensley, Nelson, Kaufman, Silverstein, and Shields (1995) conducted interviews with both staff and patients at two state hospitals on the hospital's high-assault wards. Patients and staff were engaged in activities to address the following topics: causes

of friction between staff and patients, factors determining whether assaults occurred, and the impact of the assaults (e.g., staff fitness, effective security alarm system), priorities of change, important hospital practices contributing to assaults (e.g. visits with clinical staff, privacy, smoking, medication), and physical characteristic of the hospital believed to contribute to assaults (e.g., overcrowding, lighting, food). For patients, the major contributors to assaults were smoking, access to outdoors, not being treated with respect by staff, excessive use of seclusion and restraint, and a lack of explanation of rules. Major themes among staff were identified practices for handling smoking, seclusion and restraint, and medication. Despite the obvious difference in roles, it is clear that patients and staff share concerns in similar areas (Bensley, Nelson, Kaufman, Silverstein, & Shields, 1995). Although this study found similar areas of concern for patients and staff, Omerov, Edman, and Wistedt (2004) conducted semi-structured interviews with patients and staff and found that they differed notably in their perceptions of what caused or did not cause patient aggression. The researchers concluded that almost all aggressive incidents can be avoided if provocations are identified and certain identified measures are taken during these incidents. These results suggest that by utilizing information from both staff and patients, assault rates are likely to decrease once individual variables are recognized (Omerov, Edman, & Wistedt, 2004).

Kontio et al. (2012) explored inpatients' experiences, areas they noted for improvement, and alternatives to the use of seclusion and restraint. The authors performed 30 interviews and conducted a content analysis to summarize results. The findings of Kontio et al. (2012) further support the idea of allowing patients to suggest less restrictive alternatives to seclusion and restraint. Their results suggested that patients' own perspectives did not receive sufficient attention. They believed that the inclusion of patient perception can never be overemphasized in the treatment planning process, which should begin *before* the patient displays aggressive behavior. A key to this success lies in a mutual understanding, as some studies have shown that staff emphasize different interventions than patients when analyzing ways to reduce aggression

(Bensley et al., 1995; Omerov, Edman, & Wistedt, 2004). For example, Ilkiw-Lavalle and Grenyer (2003) found that staff tend to emphasize medication management as both a cause and intervention for aggression, whereas patients emphasized interpersonal conflict, limit setting, and their own illnesses. In sum, it is crucial that staff consider the patients' perceptions. The first step in providing staff with these skills would be sought through a specific training program followed by a review process for effectiveness (Ilkiw-Lavalle & Grenyer, 2003; D'Orio, Purselle, Stevens, & Garlow, 2004).

Current Study

Although a small body of literature exists in the area of patient perception on aggression triggers and de-escalation skills, the present study sought to assess the accuracy of patient perception in terms of the factors that increase and decrease their aggression while in a psychiatric hospital. The definition of aggression was left to the perception of the patient; they were simply asked to identify factors which they believed were warning signs to becoming angry and/ or upset. The definition of de-escalation was also left to the perception of the patient; they were asked to identify techniques that would help them feel better if they became angry or upset. Therefore, the study investigated the events that patients believed would cause them aggression as well as their views on which choices they preferred as tools in deescalating (e.g., taking a walk or writing in their journal). Although cognitive bias (e.g. one's memory, reasoning, and decision-making) may exist and alter reporting in any self-reporting situation, patients may be able to predict what causes them to act aggressively more accurately than either staff members or researchers. Likewise, patients may be more likely to know what best reduces their aggression. Using information provided by patients as well as additional information in the patient's record, an attempt was made to understand how accurate patients are at identifying their own triggers and needs. Since seclusion without restraint is used around 4% to 44% of the time with escalated inpatient adults, understanding ways to reduce this would be of tremendous benefit. Some studies have even found that staff members strongly oppose these methods (e.g. physical restraint) as inventions and

would prefer alternatives (Benedictis et al., 2011). Additionally, the use of these techniques may actually lead patients to develop a negative perception of mental health facilities. These interventions can weaken the therapeutic alliance and treatment overall (Benedictis et al., 2011). As such, it was hypothesized that:

    1) The identified triggers that patients perceive and report for their own aggression will be the same triggers reported by staff as the reason for patient aggression/violence.

    2) The identified means to decreasing their aggression, as noted by the patients, will help to decrease the aggression.

    3) There will be a positive correlation between the number of patients' aggressive incidents and their length of hospital stay.

Method

Participants

Ninety-seven patient charts were initially reviewed. Seven were excluded because the chart did not include a Behavioral Assessment form (see Appendix A). Of the 90 patient charts reviewed, 55 were men and 35 were women. The individuals were between the ages of 18-72 years old, with an average age of 35.8 ($SD = 3.53$). All of the patients had been admitted to a psychiatric hospital in the Midwest between the years of 2006 and 2008. Although the psychiatric hospital utilized in the study did allow the researcher to review patient charts, they did not grant permission to include a range of demographic identifiers, such as mental health diagnosis or race/ethnicity of patients, as the hospital is situated in a very rural, fairly identifiable community. The hospital also asked that identifying information about the hospital itself not be disclosed (e.g. state versus private facility). It can be noted that the hospital was one of only two psychiatric hospitals available to individuals in the state. They served 36 counties at the time with their main focus being on acute care needs while also providing longer-term care to some patients on the forensics unit (e.g. those deemed not guilty by reason of insanity). The hospital recognized that treatment may be needed for a variety of issues, but as an acute care facility, they focused on treating the problem for which the patient was admitted. The

patients' admittance status was also not included in the analysis. Their admittance status could vary from self-admit patients to involuntary commitment. Within the involuntary commitment category, patients could have been admitted based on self-harming behavior; threatening to harm the well-being of others; a court order as a result of legal charges; issues related to competency to stand trial, among others. Therefore, other than sex and age listed above, no other demographic information was collected.

Moreover, all the patients had been put in seclusion and/or restraint holds on at least one occasion. The 90 patients reviewed had committed a total of 140 incidents of aggression that resulted in seclusion and restraint. The details of each incident varied. Some patients may have been in seclusion and restraint for varying degrees of time depending on their current behavioral status. At least one nurse was assigned to continuous observation during each incident of seclusion. All documentation related to seclusion and restraint were completed by nursing staff. The individual characteristics of the nursing staff were out of the scope of this paper, although the comparisons between staff and patients could produce compelling findings. This psychiatric hospital was in a rural, conservative, Midwestern state comprised of mostly White, middle-class staff. Incidents of restraint typically consisted of hands-on restraints from nursing staff, and at times resulted in chemical restraint as well. For example, if patients were exhibiting aggressive behavior, or behavior deemed to be noncompliant, nursing staff could immediately contact a psychiatrist to order medication with a sedative response.

Materials

Information about each participant was obtained from the individual's chart. Each patient's chart contained the Behavioral Assessment form, which would have been completed upon admission with other required paperwork and clinical interviewing. The form took approximately five to ten minutes to complete. If a patient were unable to read and/or understand the form, the form could be read to them by the intake worker. If a patient was not in a state where they were able to coherently fill out the form, the nursing staff waited until the patient was stabilized

and reintroduced the form to them. The patients' Behavioral Assessment form contained information relating to the factors that the patient believed would increase agitation and the factors that would reduce their agitation. The hospital acknowledged that no reliability or validity statistics were available for the Behavioral Assessment form, as it was an in-house attempt to better understand and bring awareness to patient perceived triggers and techniques for de-escalation. It was the hospital's hope that the current study would provide some exploratory findings on the utility of continuing the use of the form.

Patient charts also contained information about each incidence of violence, the factors that resulted in patient violence, and the methods used in response to an act of patient violence. As will be further discussed in the limitations section, all information about the incidents were written by the nursing staff, and therefore, the incidents of violence are subjected to the perception of the nursing staff themselves.

Procedure

Prior to beginning the research, the researcher secured permission from the administration at the hospital and the research and program development department. The psychiatric hospital did not possess a formal IRB committee, but the head statistician, head clinicians, and executive committee met to approve the project. Additionally, the researcher received the Institutional Review Board's (IRB) full approval from a four-year university[2]. Due to many patients being discharged on an ongoing basis, charts were reviewed from both past and current patients[3]. The seclusion and restraint records were obtained through the risk management department of the psychiatric hospital. The psychiatric hospital records each incident of seclusion and restraint, and thus, a list of names and dates of incidents were supplied. Once a patient was identified as having been put in seclusion or restraints, hard copies of the patient chart were utilized to review the Behavioral Assessment form. The hard copies were

accessed through the medical records department at the psychiatric hospital. Within each chart was a copy of the Behavioral Assessment form as well as a typed report that covered the events leading to the incident of seclusion and restraint. The report was read in an effort to identify any of the information that the patient reported on the Behavioral Assessment form. If the chart indicated that the patient refused to fill out the Behavioral Assessment form, the patient's chart was no longer reviewed.

The Behavioral Assessment form was initially used to determine patient accuracy in knowing the causal factors of that patient's aggression as well as the interventions used for de-escalation. The proportion of violent acts caused by identified factors was compared against the portion of violent acts caused by non-identified factors. The Behavioral Assessment form was subsequently used to determine whether the patient's preferred response to patient violence resulted in a reduction in aggression. If the preferred method was used, then there would be no need for additional actions on behalf of the staff, and thus there would be no subsequent need for seclusion or restraint. Conversely, if another method was used, then it can be expected that seclusion and restraint would be more likely to occur, as the techniques identified by the patient were not followed. For those reasons, the proportion of times seclusion and restraint occurred after the reported method was used was compared against the proportion of times a non-preferred method resulted in seclusion and restraint.

To ensure that the investigator was accurately scoring patient charts, two clinical staff members were asked to review ten patient charts to determine inter-rater reliability. A Cohen's Kappa was used to compare each of the two judges against the researcher. Inter-rater reliability was found to be 0.94 with regards to judge one and 0.81 for judge two.

Data Scoring

To determine the accuracy of patient perception, comparisons were made between the Behavioral Assessment form and staff incident records. The researcher read reports leading up to incidents of seclusion and restraint to identify triggers and de-escalation techniques noted on the Behavioral Assessment form. With that said, the records of such

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[2]The university which approved the IRB application was Washburn University.
[3]Neither the psychiatric hospital nor the IRB required patient consent.

Table 1

*Factors Reported by Patients (**X**) and Staff (X) and the Scoring Method Used to Determine the Accuracy of Patient Perception*

Patient ID #	Perception & Incident	Talk loud/ fast	Isolate self	Hands/arms shake	Clenched fists	Curse	Get very quiet	Face turns red	Pace	Feel/look tense	Disagree	Other	Score
1	**Patient**	**X**			**X**	**X**			**X**				
	Incident	X				X							
		1				1							1.00
4	**Patient**								**X**				
	Incident	X											
		0											0.00
12	**Patient**	**X**											
	Incident	X						X					
		1						0					.50
28	**Patient**					**X**							
	Incident				X	X			X				
					0	1			0				0.33
84	**Patient**	**X**		**X**	**X**	**X**		**X**	**X**	**X**	**X**		
	Incident	X				X	X						
		1				1	0						0.67

incidents were based on the wording identified and used by staff, not patients. As such, overall findings could be due to a disconnect between the perception of the event by the patient and the perception of the event by the nursing staff.

Within each incident, a value of one (1) was assigned whenever the trigger mentioned in the incident report matched a trigger reported by the patient on the Behavioral Assessment form. A score of zero (0) was assigned when a match did not occur. An average accuracy rating was calculated for each incident and ranged from 0 to 1. For hypothesis 1, higher values suggested greater accuracy of patient perceptions; (i.e., the greater the ability of patients to correctly identify the factors that initiate or enhance aggressive behavior). For hypothesis 2, the opposite was true. If a patient reported a factor as reducing the aggression and staff members act in accordance with

patient perception, then there should not have been a reason to restrain or seclude that individual. Thus, the greater the score between the Behavioral Assessment form and staff incident records, the less accurate are patient perceptions. In short, the greater the average incident value, the less able were patients to identify those variables that decrease their aggression.

Results

Table 1 contains an example of a question on the Behavioral Assessment form that pertains to the current study. This example reveals (1) the number of factors/interventions endorsed by patients, (2) those factors documented by the staff during an aggressive incident, and (3) the scoring used to determine the accuracy of patient perceptions.

Tables 2 through 4 contain the frequencies with which various factors were reported by patients and

Table 2

Frequency of Individual Factors Reported by Patients and Staff Relating to Question Three of the Behavioral Assessment Form

Question #3	A	B	C	D	E	F	G	H	I	J	K
Patient Perception	41	30	27	25	36	26	18	27	30	26	0
Staff Perception	22	0	0	21	28	2	3	11	1	0	3

A. Talk loud/fast; B. Isolate self; C. Hands/arms shake; D. Clenched fists; E. Cursing; F. Get very quiet; G. Face turns red; H. Pacing; I. Feel/look tense; J. Disagree; K. Other

Table 3

Frequency of Additional Stressors Reported by Patients and Staff Relating to Question Seven of the Behavioral Assessment Form

Question #7	A	B	C	D	E	F	G
Patient Perception	36	39	38	18	46	18	1
Staff Perception	1	1	1	0	49	0	0

A. Being touched; B. Loud noises; C. Too many people; D. Being isolated; E. Yelling; F. People in uniform; G. Other

Table 4

Frequency of Interventions Reported by Patients and Staff Relating to Question Five of the Behavioral Assessment Form

Question #5	A	B	C	D	E	F	G	H	I
Patient Perception	46	47	22	36	54	29	20	4	21
Staff Perception	107	1	1	0	1	2	1	0	3
	J	K	L	M	N	O	P	Q	R
Patient Perception	26	21	15	48	14	18	10	15	4
Staff Perception	1	1	2	44	1	0	0	91	0

A. Talking with staff; B. Going for a walk; C. Exercising; D. Watching T.V.; E. Listening to music; F. Taking a shower/bath; G. Drawing/Painting/Crafts; H. Holding ice; I. Talking with patients; J. Reading; K. Deep breathing; L. Writing in a diary; M. Relaxing in room; N. Sitting by nurses station; O. Lying down with face cloth; P. Talking to _____; Q. Medications _____; R. Other

staff members. Tables 2, 3, and 4 represent question 3, 7, and 5, respectively, from the Behavioral Assessment from.

A z-test was used to determine the extent to which patients were capable of accurately reporting the personal warning signs of them becoming aggressive. If participants were completely incapable of judging those factors that result in them being aggressive, then the null population would be zero (0). The average accuracy rating was compared against the zero value of the null population. Of the 140 incident reports, 33 did not contain any information about a trigger and thus were excluded from analysis. The results revealed that patients were significantly capable of accurately perceiving the triggers that lead to them becoming aggressive per the documented incident as noted by the facility staff, $z(107) = 7.805$, $p < 0.0001$. Overall, participant accuracy averaged 0.35 ($SD = 0.46$). With respect to the number of incidents, 33 (30.8%) involved a perfect match between perceived and actual triggers while 65 incidents (60.7%) involved a complete mismatch. It should be noted that 19 patients (24.7%) were completely accurate (incident accuracy rating average = 1) in identifying their triggers, while 39 (50.6%) were completely inaccurate (incident accuracy rating average = 0).

A z-test was also used to determine the extent to which patients were capable of accurately identifying the triggers that increase the likelihood of them becoming aggressive. As in the previous analysis, if participants were completely incapable of identifying those factors that result in them being aggressive, then the null population would be zero (0). The average perceptual accuracy rating was compared against the zero value of the null population. Of the 140 incident reports, 88 did not contain any information about a trigger and, thus, were excluded from analysis. The results revealed that patients were capable of accurately perceiving the additional stressor(s) that lead to them becoming aggressive, $z(52) = 10.458$, $p < 0.0001$. Participant accuracy averaged 0.69 ($SD = 0.47$). With respect to the number of incidents, 14 (26.9%) involved a perfect match between perceived and actual triggers, while 30 (57.7%) incidents involved a complete mismatch. More specifically, 16 patients (23.5%) were completely accurate in identifying their stressors while 24 (35.3%) were completely inaccurate.

Finally, a z-test was used to determine the extent to which patients were capable of accurately reporting what interventions would help to de-escalate their own aggression. If patients were completely unaware of those factors that result in de-escalating the incident, then the null population would be one (1). It should be remembered that the patient records that were used in the present study involved individuals who were secluded or restrained because of an aggressive incident. Thus, if the staff attempted to de-escalate patient aggression in a manner indicated on the Behavioral Assessment form, then there should have been no need for restraint/seclusion. Thus, a match between staff reports and the Behavioral Assessment form would indicate that the patient did not correctly identify means by which their aggression could be reduced. Therefore, higher incident scores suggest lower accuracy of patient perceptions. For this reason, the average accuracy rating was compared against a null population of 1. Of the 140 incident reports, all incidents contained at least one intervention, and thus all 140 were included in the analysis. The results revealed that patients were capable of accurately perceiving the intervention(s) that help calm them down during an aggressive incident, $z(140) = -14.897$, $p < 0.0001$. Overall, participant accuracy averaged 0.48 ($SD = 0.41$). More specifically, 45 (32.1%) involved a perfect match between perceived and actual interventions while 49 incidents (35%) involved a complete mismatch. It is worth noting that 13 patients (15.7%) were completely accurate in identifying successful interventions while 31 patients (37.3%) were completely inaccurate.

A Pearson correlation was performed to determine the relationship between the number of days spent in the hospital and the number of reported incidents of seclusion and restraint. In short, the relationship between the two variables was not significant, $r = 0.081$, $p > .05$.

Discussion

Aggressive behavior can generate considerable costs to patients, staff, facilities, and the state (depending on the funding source for the facility). The financial costs aside, injury is a serious concern. General disruption and aggressive behavior can also generate negative responses in other patients

(Daffern, Mayer, & Martin, 2003). Educating staff about the differences in how staff and patients view aggression may help to reduce its likelihood; although, some aggression is inevitable. Daffern, Howells, and Ogloff (2007) believe that most causes of aggression are identifiable and likely avoidable. These scholars believe that aggression is the product of multiple interpersonal and contextual factors. Kontio et al. (2012) found that patients felt they did not know enough about their own treatment planning or about reasons for why the seclusion and restraint were used in many instances. Patients also reported that they were dissatisfied overall with how staff treated them, cared for them, and/or spoke to them. The use of seclusion and restraint is used as a technique to manage extremely disruptive and/or aggressive behavior. However, the ramifications for using this technique may not outweigh the benefits. Kontio et al. (2012) found that being secluded and restrained made patients feel fearful and lonesome causing a secondary negative impact.

Previous studies reported similar perceptions between staff and patient. Ireland (2006) found no difference between patient and staff perception of incidents of bullying. Bensley et al. (1995) found no significant differences among staff and patients when identifying the factors that lead to aggression. However, Omerov, Edman, and Wistedt (2004) found that staff members could identify less than 50% of the provocations that the patient reported. According to Weizman-Henelius and Suutala (2000), not knowing and offering certain interventions to patients is likely to result in the patient becoming more aggressive. Additionally, the use of seclusion and/or restraint damages the perception of mental health facilities as well as staff-to-patient relationships. These issues do not even address any possible negative physical consequences for such procedures (e.g., lacerations and asphyxiation). For those with histories of trauma, such incidents may trigger their previous physical and/or sexual assault memories (Benedictis et al., 2011). Findings such as those noted above, suggest the importance of a closer examination of patient perception.

One purpose of the present study was to determine whether patients are capable of accurately perceiving the triggers (the situation leading up to their aggression) and signs (their bodily response to the situation) leading up to their act of aggression. Overall, the findings revealed that patients can identify those factors that cause them to act aggressively. However, the findings also revealed that patients tend to be more inaccurate than accurate. Approximately one-half of the patients did not accurately report the causes of their aggression per the documented incident report created by a nursing staff member. Similarly, the identification of factors failed to occur in approximately two-thirds of the occasions. Nonetheless, the current findings suggest that asking patients to identify the triggers that lead that patient to become aggressive would be helpful in the hospital setting. Although not all patients were accurate, staff could learn which patients are more accurate and, as a result, help reduce the number of aggressive incidents and uses of seclusion and restraint. Although this is a more reactive approach, staff could assess the first instances of aggression by patients and quickly observe those who were accurate at identifying their triggers and those who were not.

It was also hypothesized that patients would be able to accurately identify those triggers that make them more aggressive once already upset. As before, the results showed that patient perception is fairly accurate. Overall, patients could identify the triggers that increase agitation. This finding suggests that it may be helpful to ask patients to identify what triggers increase agitation once already upset. However, it should be noted that of the incidents reviewed, 88 did not acknowledge an additional stressor in the report. It is unknown as to whether none of the additional stressors were present during the incident, or whether the staff unintentionally forgot to include such information. Moreover, the results clearly revealed that some patients are incapable of identifying those factors that escalate their aggression. The perceptions of approximately one-third of the patients were completely inaccurate, and perceptions were inaccurate on slightly less than two-thirds of the occasions.

A second purpose of this study was to determine whether patients can accurately identify the interventions that help decrease aggression. Overall, the findings revealed that patients can identify those interventions that help them calm down. Similar to first hypothesis, the documented incidents suggested that there were more patients who did not identify

the triggers and de-escalation techniques specific to them than patients who did. Approximately one-third of the patients were completely incapable of judging what helped them to calm down while one-sixth were accurate at identifying what would help to calm them down. Nonetheless, the current findings suggest that asking patients to identify the interventions that calm them down would be helpful especially since the form used at the current hospital took approximately five to ten minutes to complete. Although not all patients were accurate, staff could learn which patients are more accurate and, as a result, help reduce the aggressive incidents.

The third hypothesis was that, on average, patient violence would be positively correlated with the length of patient stay. It was suggested that the less functional ability of an individual outside of the hospital, the more the patient will exhibit aggressive behaviors in a hospital setting. The results revealed the correlation to be insignificant. This finding suggests that the number of days spent in the hospital is not related to how likely a patient is to become violent, and thus to require seclusion and restraint.

Until the present study, the concept of patient perception on aggression has been minimally researched. The results suggest that around one-half of the patients are not able to accurately identify the factors that lead to aggression, and around one-third are unable to accurately identify additional triggers to aggression once already upset. Although these results appear to show that many patients are not accurate, it is believed that those patients who are accurate at identifying such factors are important to the results of the study. Based on the results that some patients are completely accurate at identifying such factors, it is believed that surveying patients about such information would serve a beneficial purpose at any psychiatric hospital. Yet, this would only be beneficial if staff are also aware of the patient-identified factors and are actively supervising the facility. If these pieces are all in place, the need to seclude and restrain should drop significantly. Staff would be better equipped at early intervention and patients would likely support staff intervention, as many studies showed that lack of communication and interaction was a problem for patients (Kontio et al., 2012). The current study found that a portion of patients are excellent

reporters to stressors that cause aggression. This is not to say that all patients are excellent reporters; however, if staff could identify early on those who are accurate at reporting, they would be better able to serve those patients and reduce their need for seclusion and restraint. If staff could recognize such factors immediately, many instances of seclusion and restraint would be eliminated. Thus, the psychiatric hospitals would have less risk management issues as well as improved and safer patient behavior. Once a staff member has observed factors for each patient, a decision can be made as to who is accurate and inaccurate and they can respond accordingly. If it is deemed that a patient is not accurate at identifying factors that lead to aggression, then staff would be able to observe other factors that may be affecting that patient.

Only a handful of studies have sought to identify length of hospital stay as a factor in hospital aggression. For this reason, the relationship between length of stay and the frequency of incidents of seclusion and restraint was examined. The results revealed that the length of hospital stay was not a significant factor in predicting hospital violence. It is recommended that further studies consider the differences between voluntary and involuntary hospital stay length with that of aggression. Considering type of admission (e.g. voluntary or involuntary) would be similar to previous research conducted by both Serper et al. (2005) as well as Ketelsen et al. (2007). Serper et al. (2005) and Ketelsen et al. (2007) found that individuals involuntarily committed to the hospital were found to be more violent than individuals who had been voluntarily committed. However, these researchers did not take into account the length of stay or the type of admission. It is possible that being admitted voluntarily versus involuntarily, along with length of hospital stay, may play a role in the amount of aggression as well as the number of incidents for seclusion and restraint.

Limitations

The overall results suggest that patients can be accurate at identifying the factors leading to aggression, the additional triggers to aggression, and the successful interventions that decrease aggression. These results are based on a self-report of triggers

and de-escalation techniques at the time of admission. It appears the Behavioral Assessment form is an accurate tool for some psychiatric patients and hospitals. As noted in the methods section, this study was an exploratory investigation on the form's utility. The psychiatric hospital in the current study wanted to better understand whether the form was useful, so they can use it to apply protocol that increases the safety and security of their patients.

Some factors outside of the researcher's control may have influenced the results of the current research. First, the hospital where the data was collected was currently making conscious efforts to decrease the need for seclusion and restraint. Although this may have impacted the findings from current patients, charts were reviewed from past patients as well. Therefore, these charts should not reflect a conscious decision to reduce incidents of seclusion and restraint. It is possible that the study would have yielded different results had the seclusion and restraint data been utilized only prior to the hospital-wide effort to decrease this response. It could serve as benefit to compare the current results with that of data observed from a time frame only prior to this conscious change in policy. Since there was not a definitive date on the effort to reduce seclusion and restraint, nor a program to formally promote this cultural change, it was impossible to decide which incidents of seclusion and restraint occurred prior to, or after, the desired change.

A second concern with the current study deals with the reporting practices of hospital staff. It was observed that certain staff wrote more detailed notes on incidents of seclusion and restraint than other staff members. One concern is the degree to which every causal factor and/or intervention was recorded into the staff note. The factor of report writing practices could be a potential confound. It may be helpful to compare reporting practices with other psychiatric hospitals to determine the amount of information that is generally recorded on such incidents. It may also be beneficial to develop patient specific reporting forms. Such forms would provide a specific plan for each patient that could affect future results.

A third concern deals with the characteristics of the staff themselves. Studies have shown that staff members who are more satisfied with their work setting and their work team then perceive lower rates of aggressive behavior by patients (Johnson, 2004). Cornaggia et al. (2010) also found that a good working climate was more useful in preventing aggression than some of the other provided management strategies used. Staff may also feel pressured to control patients who no longer have the rational capability themselves, which takes away the agency and autonomy of patients (Benedictis et al., 2011). Possible solutions, according to Hamrin, Iennaco, and Olsen (2009) include advocating for patients, being present for patients, and having strong overall clinical skills. Aiding in treatment planning is also important. D'Orio, Purselle, Stevens, and Garlow, (2004) found that the two major causes for the use of seclusion and restraint was due to ineffective ability to manage problematic behavior and inadequate monitoring of behavior. Again, the issue lies in the staff's ability to supervise and respond to potential negative behaviors, which was not addressed in the current study.

A fourth concern of the study involved the patients who refused to complete the Behavioral Assessment form. During data collection, it appeared that many of the individuals who refused to complete the form had committed more acts of aggression (which resulted in seclusion and restraint) than did those individuals who completed the form. More specifically, the individuals who refused upon admission, to fill out the form, were amongst the patients with the highest incidents of seclusion and restraint. It could be beneficial to track information on patients who refused to complete the Behavioral Assessment to determine how many incidents of aggression that patient was involved in, as well as whether attempts were made to have the patient fill out the form at a later time. Staff should also consider setting up a procedure to gain rapport from patients prior to engaging them in filling out the Behavioral Assessment. Additionally, if a patient were incapable of filling out the form at the time of admission (due to mental health status), the staff then made efforts to have the form completed once the patient was stabilized. Staff could consider the implications of having patients fill out the form the day of intake or days later when the patient would be believed to be more compliant and/or stabilized. The fact that some patients refuse to fill out the form may also be an indication that that patient is

likely to become aggressive. More information from aggressive offenders may have uncovered more information related to triggers for severely aggressive patients.

The final limitation to the study involves the criteria, which were used to identify subjects. For the chart to be reviewed, the patient had to have been placed in seclusion and restraint on at least one occasion. It may be helpful to view the incidents of aggression that did not reach the level of seclusion and restraint. This information may provide insight into whether patients who are not as aggressive are better or worse at predicting the factors that cause aggression as well as the interventions which de-escalate the incident. It is recommended that a comparison be made with the current data as well as data from aggressive incidents that did not end in seclusion and restraint.

Conclusion

The present study sought to assess the accuracy of patient perception in terms of the factors that increase and decrease their aggression while in a psychiatric hospital. Data suggests that some patients are accurate at identifying what triggers cause them to become aggressive as well as the factors that increase the aggression. The researcher cautions readers against generalizing this to all psychiatric populations. Rather, the current data suggests that some patients are consistently accurate. It is recommended that staff identify these patients and rely on their reporting of triggers and de-escalation techniques when working with these individuals. Some patients were also accurate at judging what interventions help to de-escalate their behavior once they have already displayed aggression. The researcher also raises awareness to the possibility that the perception of an incident may vary between staff members and that of the patient. The results suggest that psychiatric hospitals should utilize such forms as the Behavioral Assessment form to encourage patients to identify such factors related to aggression. The form only takes about five to ten minutes to complete and therefore would not overwhelm the admission process. This form could help decrease the need for seclusion and restraint in any psychiatric hospital setting. The main aim of early identification is to use the information

for a wide range of prevention purposes: prevention of seclusion and restraint, prevention of bodily harm, prevention to facility disruption, and so forth. The implications for a reduction in the use of seclusion and restraint are far-reaching. The benefits extend from the patients themselves to the administration of the psychiatric facility.

References

Benedictis, L.D., Dumais, A., Sieu, N., Mailhot, M., Létourneau, G., Tran, M.M.,…Lesage, A.D. (2011). Staff perceptions and organizational factors as predictors of seclusion and restraint in psychiatric wards. *Psychiatric Services, 62*(5), 484-491.

Benjaminsen, S., Gotzxche-Larsen, K., Norrie, B., Harder, L., & Luxhoi, A. (1995). Patient violence in a psychiatric hospital in Denmark: Rate of violence and relation to diagnosis. *Nordic Journal of Psychiatry, 50*(3), 233-242. doi:10.3109/08039489609081413

Bensley, L., Nelson, N., Kaufman, J., Silverstein, B., & Shields, J. (1995). Patient and staff views of factors influencing assaults on psychiatric hospital employees. *Issues in Mental Health Nursing, 16*, 433-446. doi:10.3109/01612849509006944

Claes, L., Vandereycken, W., & Vertommen, H. (2007). Self-injury in female versus male psychiatric patients: A comparison of characteristics, psychopathology and aggression regulation. *Personality and Individual Differences, 42*, 611-621. doi:10.1016/j.paid.2006.07.021

Cornaggia, C.M., Beghi, M., Pavone, F., & Barale, F. (2010). Aggression in psychiatry wards: A systematic review. *Psychiatry Research, 189*(1), 10-20.

Daffern, M., Howells, K, Ogloff, J., & Lee, J. (2005). Individual characteristics predisposing patients to aggression in a forensic psychiatric hospital. *The Journal of Forensic Psychiatry & Psychology, 16*(4), 729-746. doi:10.1080/14789940500345595

Daffern, M., Howells, K., & Ogloff, J. (2006). What's the point? Towards a methodology for assessing the function of psychiatric inpatient aggression. *Behaviour Research and Therapy, 45*, 101-111. doi:10.1016/j.brat.2006.01.011

Daffern, M., Howells, K., & Ogloff, J. (2007). The interaction between individual characteristics and function of aggression in forensic psychiatric inpatients. *Psychiatry, Psychology and Law, 14*, 17-25. doi:10.1375/pplt.14.1.17

Daffern, M., Mayer, M., & Martin, T. (2003). A preliminary investigation into patterns of aggression in an Australian forensic psychiatric hospital. *The Journal of Forensic Psychiatry & Psychology, 14*(1), 67-84. doi:10.1080/1478994031000074306

Depp, F. (1976). Violent behavior patterns on psychiatric wards. *Aggressive Behavior, 2*, 295-306. doi:10.1002/1098-2337

D'Orio, B.M., Purselle, D., Stevens, D., & Garlow, S.J. (2004). Reduction of episodes of seclusion and restraint in a psychiatric emergency service. *Psychiatric Services, 55*(5), 581-583. doi:10.1176/appi.ps.55.5.581

Duxbury, J., & Whittington, R. (2005). Causes and management of patient aggression and violence: Staff and patient perspectives. *Journal of Advanced Nursing, 50*(5), 469-478. doi:1365-2648.2005.03426

Hamrin, V., Iennaco, J., & Olsen, D. (2009). A review of ecological factors affecting inpatient psychiatric unit violence: implications for relational and unit cultural improvements. *Issues in Mental Health Nursing 30*(4), 214–226. doi:10.1080/01612840802701083

Ilkiw-Lavalle, O., & Grenyer, B.F.S. (2003). Differences between Patient and Staff Perceptions of Aggression in Mental Health Units. *Psychiatric Services, 54*(3), 389-393.

Ireland, J. (2006). Bullying among mentally-ill patients detained in a high-secure hospital: An exploratory study of the perceptions of staff and patients into how bullying is defined. *Aggressive Behavior, 32*, 451-463. doi:10.1176/appi.ps.54.3.389

Johnson, M.M. (2004). Violence on inpatient psychiatric units: State of the science. *Journal of the American Psychiatric Nurses Association, 10*(3), 113-121.

Khadivi, A.N., Raman, C.P., Atkinson, A.R., & Levine, J.M. (2004). Association between seclusion and restraint and patient-related violence. *Psychiatric Services, 55*(11), 1311-1312.

Ketelsen, R., Zechert, C., Driessen, M., & Schulz, M. (2007). Characteristics of aggression in a German psychiatric hospital and predictors of patients at risk. *Journal of Psychiatric and Mental Health Nursing, 14*, 92-99. doi:10.1111/j.1365-2850.2007.01049.x

Kontio, R., Joffe, G., Putkonen, H., Kuosmanen, L., Hane, K., Holi, M., & Valimaki, M. (2012). Seclusion and restraint in psychiatry: Patients' experiences and practical suggestions on how to improve practices and use alternatives. *Perspectives in Psychiatric Care, 48*, 16-24. doi:10.1111/j.1744-6163.2010.00301.x

Omerov, M., Edman, G., & Wistedt, B. (2004). Violence and threats of violence within psychiatric care – a comparison of staff and patient experience of the same incident. *Nordic Journal of Psychiatry, 58*, 363-369. doi:10.1080/08039480410005918

Sampson, R.J., & Raudenbush, S.W. (1999). Systematic social observation of public spaces: A new look at disorder in urban neighborhoods. *Journal of Sociology, 105*(3), 603-651.

Serper, M., Goldberg, B., Herman, K., Richarme, D., Chou, J., Dill, C.,…Cancro, R. (2005). Predictors of aggression on the psychiatric inpatient service. *Comprehensive Psychiatry, 46*, 121-127. doi:10.1097/01.nmd.0000253748.47641.99

Shergill, S., & Szmukler, G. (1998). How predictable is violence and suicide in community psychiatric practice? *Journal of Mental Health, 7*(4), 393-401. doi:10.1080/09638239817996

Weizmann-Henelius, G., & Suutala, H. (2000). Violence in a Finnish forensic psychiatric hospital. *Nordic Journal of Psychiatry, 54*, 269-273. doi:10.1080/080394800448147

Appendix A

Behvioral Assessment

Sometimes, people become so upset or angry that they are unable to manage their behavior for short periods of time. If this happens at the hospital, it is our job to help the individual manage their behavior so that no one is harmed. We do this by talking to the person, helping them to relax, providing activities, encouraging exercise, administering medications, etc. The following information will help us to help you if you cannot successfully manage your behavior.

1. Have you ever lost control of yourself to the point that someone else had to help you manage your behavior?
   □ Yes   □ No
2. In these situations are you likely to harm (check all that apply):
   □ Yourself   □ Others   □ Property   □ Nothing
3. What are your personal warning signs that you are becoming angry/upset? (Check all that apply)

   □ Talk loud/fast   □ Get very quiet
   □ Isolate self   □ Face turns red
   □ Hands/arms shake   □ Pacing
   □ Clenched fists   □ Feel/look tense
   □ Cursing   □ Disagree with everyone
   □ Other   about everything

4. Will you be able to tell staff when you are becoming angry/upset?
   □ Yes   □ No
5. Which of the following are likely to make you feel better when you are angry/upset? (Check all that apply)

   □ Talking with staff   □ Talking with other patients
   □ Going for a walk   □ Reading a magazine/book
   □ Exercising   □ Deep breathing exercises
   □ Watching TV   □ Writing in a diary/journal
   □ Listening to music   □ Relaxing in your room
   □ Taking a shower/bath   □ Sitting by the nurses station
   □ Drawing/painting/crafts   □ Lying down with a cold/warm face cloth
   □ Holding ice to distract from thoughts of self
   harm
   □ Talking to _____
      Phone number _____
   □ Medications _____
   □ Other _____ _____

Appendix A, con't

6. Do you need help learning anger management techniques?
□ Yes   □ No

7. Which of the following are likely to make it more difficult for you when you are angry/upset?

□ Being touched   □ Being isolated
□ Loud noises   □ Yelling
□ Too many people   □ People in uniform
□ Other _____

Times of the day that are hard for you: _____
Times of the year that are hard for you: _____

We will use the information you gave us to help you manage your behavior. If you cannot manage your behavior yourself and it is likely that you will harm yourself or someone else, we may need to put you in a locked room by yourself and/or physically restrain you. You will be observed by staff for your own safety. If this happens, is there a family member or friend you would like for us to call?
□ Don't call people
□ Call: _____
            Name   Relationship   Phone number

Staff will contact this person on your behalf regarding seclusion/restraint issues.
(Your signature below constitutes authorization to contact this individual for this purpose only.)

Comments: _____

_____

_____
Patient/Guardian Signature   Date   Nursing Staff Signature   Date

_____ was contacted regarding notification of seclusion/restraint use.

□ Call at any time
□ Call only between the hours of _____ AM/PM and _____ AM/PM
□ Do not call

_____
Staff Signature   Date

Cultural Implications for Mental Health Professionals Working with Deaf Individuals

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Deaf and Hard of Hearing clients are members of an underserved population whose needs are not well met by mainstream clinical practice. The current paper reviews the history of oppression, education, and mental health treatment of Deaf and Hard of Hearing clients, as well as the clinical and cultural implications of working with these populations in different settings. The impact of specific world events (e.g., World War II) and important controversies (e.g., the cochlear implant debate) are explored in terms of their influence on the development of ethically and culturally sensitive approaches to mental health care for the Deaf. The paper concludes with specific recommendations for clinicians working with Deaf clients, including the need for a greater understanding of the norms and values held by the community.

Keywords: Deaf, Hard of Hearing, culture, cultural implications, mental health

Deaf and Hard of Hearing people are a poorly understood minority group that continues to face oppression in modern society. This has been documented dating back to almost 400 B.C. (Moore & Bruder, 1999), when majority views on deafness began to proliferate. Despite many important advances in recent history that have improved the quality of life for deaf people, the community continues to experience institutional oppression on many levels. In some cases, even groups with good intentions may inadvertently be imposing majority values on the community without consulting its members, which in turn can perpetuate the cycle of oppression.

When psychologists work with deaf or hard of hearing persons, there are certain cultural factors that should be taken into account in order to provide effective care. This paper will first review many of the ways in which deaf people have historically faced oppression, and will then follow with suggestions for successful clinical work with deaf and hard of hearing clients. For the duration of this paper, use of a capital "D" in the word "Deaf" and a capital "H" in the phrase "Hard of Hearing" will indicate membership in the

sociological community, whereas a lowercase "d" and "h" will indicate audiological status without implied community membership (Padden & Humphries, 1988). This distinction is important because the former indicates cultural classification – a particularly salient data point for mental health clinicians – and the latter simply identifies a physiological characteristic.

Deaf People in Society

Throughout history, the recorded prevalence of deafness has remained relatively constant at approximately 2% of the world's population (Lin, Niparko, & Ferrucci, 2011). However, the causes of deafness have varied considerably over time. For example, it is less likely today that a child would lose their hearing due to Scarlet Fever, but it might be more likely for people in certain geographical regions to become deaf after close proximity to a sudden loud noise, such as an explosion of some kind. It is estimated that there are currently 360 million people worldwide with some form of hearing loss (World Health Organization, 2014). More than 50% of pre-lingual deafness is genetic, and there are four different kinds of deafness: 1) Conductive – resulting from abnormalities in the external or middle ear; 2) Sensorineural – resulting from malfunctions in the inner ear (i.e., the cochlea); 3) Mixed – combination of

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conductive and sensorineural; and 4) central auditory dysfunction – resulting from damage or dysfunction at the eighth cranial nerve, the auditory brain stem, or the cerebral cortex (Smith, et al., 1999). It is important to note that 90% of deaf children are born to hearing parents, which strongly influences the choices that are made for children regarding their education and potential cultural membership (NIDCD, 2016b).

Not everyone who identifies as Deaf has profound or complete hearing loss. Some people have hearing loss in only one decibel range, such as older adults who lose the ability to hear higher pitches as they age. In the medical community, severity of hearing loss is categorized as either Mild, Moderate, Moderately severe, Severe, or Profound (Smith, et al., 1999). It is important to understand that many Deaf people reject these categories and feel offended when asked about their specific auditory label (NAD, 2017a). While these labels may be useful for medical professionals in classifying an individual's audiological status, they do nothing to describe the cultural and linguistic membership with which a Deaf person identifies (Atherton, Russell, 7 Turner, 2001). Additionally, these labels frame an individual as having lost something – a perspective which is disability-oriented rather than culturally- or linguistically-oriented (Obasi, 2008).

The "Deaf Community" is defined by the National Association of the Deaf (NAD) as comprising "those deaf and hard-of-hearing individuals who share a common language, common experiences and values and a common way of interacting with each other and with hearing people" (2017a). The community is a diverse entity with people of different demographic, linguistic, political, audiological, social, and spiritual perspectives and identities (Leigh, 2017).

Despite the "common language" cited by the NAD (2017a), it is a misconception amongst hearing people that all deaf individuals know sign language (Moore & Levitan, 2003). An individual's knowledge of sign language or spoken language depends entirely on the type and quality of education they received in childhood or upon onset (Padden, 1980). Some people use sign exclusively and ascribe to the grammatical rules of that sign language, whereas some people use a spoken language-influenced form of sign language. Others rely on more direct transliteration, which depends heavily on fingerspelling. Those with

oral education or experience with spoken language may employ lip-reading in tandem with sound amplification. Some people use cued speech, a manual supplement to lip-reading which is not a language in itself (Cornett, 1967; NCSA, n.d.). Others who have less robust language skills may rely entirely on gesture, which does not make use of letters or words. Some people use a mixture of all the aforementioned systems depending on the context of the encounter (Lane, 1992).

Although a thorough linguistic discussion is outside the scope of this paper, it is important to note that sign languages share all the hallmarks of spoken languages. They vary greatly by region, are developed out of necessity for communication, evolve and adapt with time, have the capacity to describe concrete as well as abstract thought, and have implicit and explicit rules for standardization within a given dialect (Lane, 1992; Pollard, 1996).

A Brief History of the Deaf Community

In the Western tradition, historical documents dating back to the 300s B.C. suggest that early views on deafness were predominantly negative. Aristotle (384-322 BC) claimed that "deaf people could not be educated, [since] without hearing, people cannot learn." This is one of the earliest documentations of the fallible assumption that education is completely reliant on the ability to hear (Moore & Bruder, 1999). Rose (2006) explains that Ancient Grecians, believing that "speech, language, and reason were intertwined," saw the inability to verbally communicate as a serious affliction, even a curse (p. 21). This perspective survived for some time, as early Christians believed that deafness in a child was punishment for the sins of their parents (Moore & Bruder, 1999).

Despite these negative viewpoints, not everyone before the modern era believed that deaf people could not be educated. In the 1500s, in order to better communicate with his deaf son, Italian physician Girolamo Cardano developed a code of manual symbols and later published his system. Although Cardano's system never caught on, it was an important early step for the field of Deaf education (KCDHH, 2017). A short time later in Spain, a monk named Pedro Ponce de Leon successfully educated the deaf children of a few noble families such that they were

legally allowed to inherit their parents' land (Nielsen, 2012). In 1760, a French priest named Abbé de L'Éppé founded the first free school for the deaf after a chance encounter with deaf children in his parish. de L'Éppé acquired their language and is credited with publishing the first standardized system of signs and fingerspelling, contributing to the proliferation of French Sign Language (LSF) (Marschark & Spencer, 2003). It is important to remember that while signed languages like LSF had the opportunity to flourish following attempts to standardize and teach manual methods to deaf students, sign language in many forms existed long before the majority exerted its influence (Schein, 1984). In fact, anthropologists hypothesize that early humans may have communicated with gesture long before they had the physical ability to speak. Our human ancestors developed the ability to walk on two legs, freeing their hands for other uses, hundreds of years before the modern vocal tract or the gene associated with speech and language evolved (Hamilton, 2010).

The first forays into deaf education largely focused on manual alphabets and codes, making use of the natural strengths of deaf people. However, in 1760, the same year Abbé de L'Éppé founded his school, the German Method was gaining ground in Spain, France, Germany, Holland, and England. This was the beginning of oral education, in which children were made to speak by feeling the vocal cord vibrations of their teachers and attempting to mimic them (Moores, 1987). This form of education was largely punitive, and children were physically reprimanded if they used their hands to communicate. A handful of "success stories," usually involving someone who had had access to spoken language early on in their lives but lost their hearing due to illness, contributed to the spread of the oral method. This method is still used today in many schools for the deaf, despite the fact that people with prelingual deafness tend to be unsuccessful using speech exclusively in the real world (Leigh, 2017).

In 1817, the first American school for the deaf was founded in Hartford, Connecticut by a pair of educators, one hearing and one Deaf (KCDHH, 2017). Schools for the Deaf began to open all over the country, and despite the widespread use of the oral method, they served as hubs for sign language,

socialization, and the development of a larger community (Leigh, 2017). Suddenly, deaf children had access to peers and successful adult role models who had previously been out of reach. Sociological research indicates that membership in a peer group is a major contributor to psychosocial well-being (Bradford, 1990).

In the mid-1900s, schools for the deaf began to do away with the oral method and instead embraced sign language, as educators realized that early exposure to sign was the major determining factor in later reading ability, emotional well-being, and general success in adulthood (Leigh, 2017). Unfortunately, this trend was threatened by the introduction of the Individuals with Disabilities Education Act (IDEA) of 1994. The implementation of IDEA meant that every child identified as "disabled" in some way would be provided with a "free and appropriate" Individualized Education Program (IEP) in what was dubbed the "Least Restrictive Environment" to learn within (U.S. Department of Education, 1994). IEPs proved extremely successful for some children, but d/Deaf children were soon mainstreamed to the greatest possible extent. This was partially due to differing interpretations of "appropriate" and "least restrictive," and partially due to the high costs associated with sending children out of district to Deaf schools (Leigh, 2017; Stinson & Antia, 1999; U.S. Department of Education, 1994).

Despite its good intentions, this legislation affects deaf children in a number of negative ways (Supalla, 1989). Not only does mainstreaming contribute to social isolation because there is often one lone deaf student in a school full of hearing students, but said student has absolutely no models of successful Deaf adults to internalize (Starr, 1994). In his seminal work *The Mask of Benevolence: Disabling the Deaf Community*, Harlan Lane illustrates the plight of the mainstreamed deaf student:

> The child who depends on an interpreter relates very little, if at all, to the teacher. Moreover, he must keep his eyes glued on the interpreter for long stretches, while classroom events suit his hearing classmates: maps are unfurled, slides are projected, tables of numbers are displayed, and all the while

the teacher talks, the interpreter interprets, and the deaf child must never look away from the interpreter (1992, p. 136).

Ultimately, being the "odd one out" leads to an emphasis on deficits and weaknesses in comparison to hearing students, rather than individual strengths and abilities (Leigh, 2017; Starr, 1994). Among educators of the deaf, the prevailing belief is that "the Least Restrictive Environment for deaf children is one in which they may acquire a natural sign language and through that language achieve access to a spoken language and the content of the school curriculum" (Johnson, Liddell, & Erting, 1989).

Professionals in the field often find themselves advocating for deaf children to attend schools where signing is the primary mode of communication (Clark, 2003; Lane, 1992). Families must often resort to costly legal battles in order to convince their home district that schools for the deaf constitute the Least Restrictive Environment for their child. Frequently, psychologists who work with deaf clients are called as expert witnesses in these cases, and also take on the role of advocate in addition to the many other hats they wear on a daily basis. Clinics such as the Deaf and Hard of Hearing Program at Boston Children's Hospital are leaders in this work. Change is necessary at the policy level to amend the IDEA and alleviate the many problems it imposes on deaf and hard of hearing students (BCH DHHP, 2005-2017).

A Pathological Lens of Deafness

The widespread pathologizing of deafness is a topic with many important facets to consider. Because a full discussion of the medical perspective is outside the scope of this paper, the focus will be largely on the history of psychological pathologizing.

Prior to 1950, there were fewer than ten psychologists (and zero psychiatrists) in the United States with a full-time commitment to deaf and hard of hearing people (Leigh, 2017). Those that were available worked almost exclusively in residential schools for the deaf in the role of Psychometrist, as they were tasked with administering intelligence tests to determine whether someone should be educated or institutionalized – mutually exclusive options with lifetime consequences. At the time, the general

consensus among psychologists was that if someone relied on signing, they must be educationally and intellectually deficient (Nielsen, 2012).

Also prior to 1950, only eighteen studies had been completed using deaf children, most of which focused on behavioral aspects using inappropriate testing procedures (Leigh, 2017), an issue which will be discussed further. The aforementioned studies were all performed on children due to the accessibility of participants at residential schools. Prior to 1950, there were no formal studies done with deaf adult subjects (Levine, 1977).

Those deaf subjects who were unfortunate enough to be classified as "mentally retarded" or "severely disturbed" faced a dearth of treatment, language access, and education at institutions and asylums. They were essentially "warehoused" for the duration of their lives. This practice led to a woeful lack of research on how deafness influences psychological functioning, because "warehoused" people were virtually forgotten by the scientific community upon institutionalization (Leigh, 2017).

Impact of World War II

Once World War II veterans began to return home with hearing loss (Institute of Medicine, 2006), families, doctors, and clinicians who were previously unexposed to deafness were suddenly forced to negotiate it. Scientific interest in deaf persons, particularly in terms of social and psychological implications, also began to increase. Helmer Myklebust was among the first researchers to suggest that deaf children might interact with the world in functionally different, *but not deficient* ways – as compared to their hearing peers (Leigh, 2017). Edna Levine, a contemporary of Myklebust, took advantage of post-war research and rehabilitation funding to collect data on deaf children and adults. As a result, she played an influential role in the implementation of various political policies affecting the Deaf community (Levine, 1981).

Levine's specific research, and the larger body of work it inspired, was groundbreaking, because the findings set the stage for positive change in the ways psychology and medicine interacted with deaf clients. Two major findings emerged from this work: 1) When deaf patients with mental illness are placed

in general hospital populations with no interpreters or staff who can sign, their hospital stays are much longer than those of hearing patients (Levine, 1981); and 2) When cared for by mental health professionals who can sign, or when provided with 24-hour access to interpreting services, deaf patients spend no more time in the hospital than hearing patients (Leigh, 2017). This research demonstrated that with some accommodations, deaf people appear much more similar to hearing people than previously thought. Today, thanks in part to Levine's work, organizations with more than 15 employees are required by the Americans with Disabilities Act (ADA) to provide access to interpreters (U.S. Department of Justice, 1990).

The Cochlear Implant Debate

As technology continued to advance in the late 20th Century, the medical field's pathological perspective on deafness began to manifest through cochlear implantation. The cochlear implant debate continues to be extremely controversial, and centers around the contrasting views of deafness as either a culture or a disability – an embodiment of the pathologizing problem.

The medical field, which stands to (financially) gain the most from widespread cochlear implantation, sees deafness as a "disease" that should be eradicated (Crouch, 1997). As medicine advances, babies as young as twelve months old with sensorineural hearing loss can receive implants, leading to the question of choice. Some believe that when parents choose to have their children implanted, they are robbing their child of the chance to participate in the Deaf community. Many Deaf people feel that if a teenager wants to get implanted, their choice should be respected, but that babies do not have this opportunity and therefore should not undergo the procedure (Lane & Grodin, 1997). Some in the Deaf community have felt personally attacked by what they interpret as efforts to eliminate their kind from humanity (Crouch, 1997; NAD, 2006).

Though the ethical question of choice is a serious one, it must be noted that cochlear implant surgery is most likely to have optimal benefit when implantation occurs early in life (NIDCD, 2016a). Further, many children who get implanted at a young age do eventually have success with spoken language as their primary mode of communication (NAD, 2006).

Aside from the cultural debate, there are very real risks to cochlear implant surgery that must also be taken into account (Cohen & Hoffman, 1991; Lane, 1992 & 2005). First, the procedure requires many follow-up surgeries as the child grows. Second, it destroys any residual hearing the child might have had, because the insertion of the electrode wire damages all the hair cells in the cochlea irrespective of functioning (recall that many deaf people have some residual hearing) (House, 1976). Once implanted, children can neither engage in contact sports nor be submerged underwater while wearing the outer transmitter. The infection rate is alarmingly high (Cohen & Hoffman, 1991; House, 1976). Additionally, the surgery and the subsequent speech and language training it requires costs upwards of $100,000 total, and is often not covered by insurance (Lane, 1992; NIDCD, 2016a).

Children are not instantaneously able to speak and understand speech upon implantation (House, 1976). Once implanted, speech sounds very similar to background noise, and years of training are required to teach a "profoundly" deaf child to interpret the noises they hear and to learn to speak themselves (Lane, 1992). For many children and adolescents, particularly those who choose to communicate primarily through sign, the benefits of their implants are so minimal that they often remove the outer transmitter as soon as they are out of their parents' sight (Lane, 1992).

This is not to say that no one benefits from cochlear implant surgery. In truth, the children who benefit the most are those who have some residual hearing and have had previous access to spoken language (Crouch, 1997). It may also be a better choice for children whose families lack access to quality Deaf education or other Deaf individuals.

Perhaps the most troubling aspect of the popularity of infant cochlear implantation is that these children are often considered to be born "broken," and must be "fixed" in order for them to lead happy, successful lives (Crouch, 1997; Lane, 1992). This focus on pathology affects children into adulthood, as they internalize the message that something was wrong with them and it had to be fixed (Lane & Grodin, 1997.; NAD, 2006). According to Carver and Doe (1989), the crucial

question to consider before implanting a child is that of benefit. Will the child, or the adults in the child's life be the ones who benefit most? It may be easier for parents of deaf children (90% of whom are hearing) to opt for implantation rather than learning sign language and getting acclimated to Deaf culture. But, as some have argued, easier is not necessarily better (Carver & Doe, 1989; Crouch, 1997).

Ethical Considerations for Psychologists Working with the Deaf Community

The American Psychological Association (APA) ethics code dictates in section 9.02 (Use of Assessments) that psychologists must "use assessment instruments whose validity and reliability have been established for use with members of the population tested," and "use assessment methods that are appropriate to an individual's language preference and competence" (APA, 2002). Unfortunately, there are very few standardized measures developed and normed for use with deaf subjects. Recall that the first deaf research subjects prior to the 1950s were administered measures which were either verbal or based on knowledge of spoken English, and often involved behavioral checklists that were biased against deaf people (particularly children, the easiest subjects to access). These tests led to widespread, inaccurate classification of most participants as having multiple pathologies (Leigh, 2017; Levine, 1977 & 1981).

Some psychologists, like William James, spent time corresponding with deaf people and understood that reasoning and abstract thinking were not dependent on spoken language (Leigh, 2017). Despite this, the pervasive pathological attitudes of the time prevailed, and invalid testing measures were promulgated. Two researchers, Pintner and Paterson (1915, 1916, 1917, & 1921), eventually recognized the unfairness of the linguistic requirement in assessing the IQs of deaf children. They realized that many individuals had been wrongly classified as mentally retarded due to the inadequacy of the testing materials. Pintner and Patterson went on to develop various performance-based psychological tests including the Pintner Non-language Test and the Pintner Drawing Completion Test, and recommended standardized measures for use with deaf participants (Pollard, 1994; Vernon, 2005).

Dr. Terrell Clark, an expert on the intersection between mental health and deafness and a frequent assessor of deaf children's functioning, writes that in the absence of reliable and valid measures, "the psychologist must make an informed selection from among assessment tools and exercise clinical judgment in applying them with children and adolescents who are deaf" (Clark, 2003, p. 120). Dr. Clark explains that she does, on occasion, use some verbal subtests of the Wechsler Scales for the purposes of qualitative analysis when assessing intelligence, but that scoring of modified measures "cannot be presumed valid." When the administering clinician is deeply familiar with the culture, cautious interpretations of this kind are admissible. Dr. Clark emphasizes the importance of five major issues when assessing deaf clients, as described by Pollard (2003):

> **Purpose:** What are the referral questions? What is the relevance of the content and construction of these tests to those questions and to what the test purports to measure?
> **Instructions:** What is the length and complexity of instructions? How will the instructions be conveyed?
> **Item or task content:** Might the content of items and nature of tasks introduce bias or error given the deaf child's life experiences? Sensory abilities? Cultural orientation?
> **Response modality:** Is the necessary response modality consonant with the deaf child's linguistic competencies? Physical capabilities? Communication modality?
> **Scoring:** Against what normative reference group will the deaf child's performance be compared? What does this measure contribute to assessing the child's relative competencies and capabilities? (2003, p. 121).

Challenges to Access

Today, deaf people face challenges to language and communication access in many areas of everyday life. The fight for access is ongoing, and in many cases, costly and contentious legal battles must be fought in order for deaf individuals to be awarded the accommodations that are required by the ADA (NAD, 2017c). The simple fact that federal law obliges

companies and cities to make such accommodations does very little without enforcement. In some cases, legal firms provide pro-bono services in which advocates and attorneys fight for such access on the community's behalf (Deaf Action Center, 2010).

Access is better in some places than in others. Many major cities have adopted electronic signs to accompany auditory signals in train stations, for example. Some cities now mandate that a sign language interpreter be broadcasted during emergency announcements (McKee, 2014). Just as access varies greatly on a state-by-state basis, so does the quality and availability of interpreters. In some areas, regulations which require that interpreters certified by the Registry of Interpreters for the Deaf (RID) be readily available are poorly enforced (RID, 2015; U.S. Department of Justice, 2001). When there are certified interpreters available, there are often too few of them to meet demand (Askar, 2013).

Deaf people often find themselves having to take legal action in order for their ADA rights to be actively and properly enforced. In 2016, a Maryland judge ruled in favor of Lauren Searls, a Deaf registered nurse whose job offer had been rescinded following her request for interpreter services (Cohn, 2016). In 2015, the NAD along with Deaf and Hard of Hearing individuals filed two class action suits against Harvard University and the Massachusetts Institute of Technology for discrimination due to their failure to provide captioning for their online content. A judge ruled in the plaintiff's favor in both cases (CREEC, 2016). Additionally, at least one Deaf prisoner at New York City's Rikers Island was included in a class action suit alleging widespread violence and misconduct by guards (Gonnerman, 2014; Ridgeway, 2009). Deaf individuals who get arrested have at times experienced a lack of due process from the moment of arrest, as they are not informed of their *Miranda* rights despite widely available video translations (Wood, 1984).

The aforementioned injustices stem from system-wide flaws in how organizations and institutions small and large interact with D/deaf people on a daily basis. Technological advances stand to improve access greatly, the best examples being high definition video relay services (VRS) and video remote interpreting (VRI). VRS and VRI technology provides interpreters on demand at any hour of the day and replaces outdated teletypewriter ("TTY") machines, which are tedious to use and require reading and writing skills (FCC, 2017). Some of these services can be utilized in various medical, legal, and clinical settings, as long as they are encrypted (RIT Libraries, 2017). It is hopeful that with advances in technology, communication access will increase, but technology alone cannot ameliorate negligence like that depicted in the above examples.

Implications for Mental Health Professionals Working with the Deaf Community

Psychologists and other mental health professionals who work in hospitals and community health centers or consult with legal firms are likely to encounter a deaf person at one time or another. Those who work in major cities like New York, Boston, Minneapolis, or San Diego (hubs for Deaf culture) are even more likely (Gallaudet University Library, 2014). Some implications for clinical work with Deaf and Hard of Hearing people are detailed below.

Clinicians must merge knowledge about the Deaf community with culturally competent actions in order to provide appropriate and effective care to d/Deaf clients. First, psychologists and allied mental health professionals must recognize signed languages as fully developed, legitimate systems that are equal to spoken languages in complexity and depth (Lane, 1992 & 1998; NAD 2017a). To believe otherwise would be to accept an "*audist*" viewpoint, a form of bias which promulgates the belief that deaf individuals are inherently disabled and therefore flawed (Lane, 1992). Clinicians should always make use of certified interpreters, and should insist that there be an interpreter present even when doctors, lawyers, or judges do not agree. Further, clinicians should be open to learning how to most effectively interact through an interpreter (talk directly to the client, sit in a formation that gives unobstructed visual access to all parties, etc.). In some cases, the use of a Certified Deaf Interpreter (CDI), who provides interpreting services in tandem with sign language interpreters, is necessary (RID, 2015).

Second, clinicians must work to understand the effects of an inaccessible environment on the client's psychological health. Deaf individuals who experience

oppression may be affected by feelings of isolation, shame, and self-doubt. On the other hand, they may develop pride, resilience, and independence in spite of oppression. Mental health professionals should consider how these phenomena might influence aspects of the individual such as identity formation, attachments, worldview, and overall success. It is also important for clinicians to understand the societal expectations of failure experienced by D/deaf individuals, and to consider the psychosocial effects (Babad, Inbar, & Rosenthal, 1982; Rosenthal & Jacobson, 1968). A given person's depression and anxiety might be better explained by their life experience as a member of a disadvantaged group than their current relationship, or genetics. This is particularly important when developing formulations and diagnostic impressions. Clinicians should carefully consider the impact of cultural norms on certain behaviors, feelings, and perceptions. However, they must also be wary of inappropriate overgeneralization.

Third, as with any group of people, cultures exist within the community itself, as does discrimination amongst members. Some such subcultures include, but are not limited to: Deafblind people, LGBTQ people, women, people of color, impoverished people, and those with chronic illnesses or physical disabilities (Doe, 1989). Additionally, language use and family history can be a dividing line within the community, and discrimination comes not only from the hearing world, but from within the community itself (Padden, 1980). Deaf women of color and Deaf people with physical limitations tend to experience the brunt of in-group and out-group discrimination (Doe, 1989). Clinicians must understand that Deaf people have varied experiences within their community and may identify with some aspects of their identity more than others.

Fourth, as the APA Ethics Code dictates, clinicians employing assessments or evidence-based practices (EBPs) and treatments must use tools and measures developed and normed for use with the specific culture of interest (APA, 2002). We know that EBPs are largely applicable to WEIRD (western, educated, industrialized, rich, democratic) clients (Sue et al., 2012), and can have very different results when applied to specific cultural groups. Clinicians must carefully consider any and all possible limitations of EBPs when forming treatment

plans, and should actively seek out research that is applicable to deaf populations (APA, 2002; Clark, 2003). Those interested in learning more about proper psychological assessment of d/Deaf and h/Hard of hearing individuals should refer to Glickman and Gulati's *Mental health care of deaf people: A culturally affirmative approach* (2003).

Fifth, a bilingual and bicultural ("Bi-Bi") curriculum is now considered the gold standard in the field of Deaf education (Johnson, Liddell, & Erting, 1989), at least in the United States. Deaf and Hard of Hearing children who attend such programs gain native fluency in ASL and near-fluency (if not native) in English. Students reconcile their Deaf identity with their American identity, and learn how to walk in both worlds. Graduates of these programs often become successful members of society with deep community roots (Grosjean, 2001). The growing popularity of the Bi-Bi education model is a promising sign that Deaf education may continue to improve. Clinicians who encounter d/Deaf children may be able to support the family's efforts to advocate for Bi-Bi education where possible.

Sixth, understanding cultural norms and values is paramount if one is to gain some level of cultural awareness and competency. Some American Deaf cultural values are reviewed below.

Tendency Toward Directness

The Deaf community values honest and often blunt descriptions, which tends to be inappropriate in majority American Culture. For example, strong Deaf individuals tend not to have any qualms telling someone that they don't like their new haircut or that they look sick. This is partially due to the high premium placed on clarity in communication, and comes from a place of caring, conveying solidarity and intimacy (Lane, Hoffmeister, & Bahan, 1996; Padden, 1980).

Punctuality

Similar to some European cultures, some Deaf people place little value on punctuality relative to hearing Americans. The "Deaf goodbye" often becomes an entire conversation in its own right. This stems from the fact that Deaf people often did not

have the luxury of signing with others whenever they wanted to, so conversations and social gatherings became long, drawn-out events (Padden, 1980). This is likely to change with text messaging and FaceTime, as Deaf people are increasingly able to communicate on demand (Leib, n.d.).

Storytelling and Visual Imagery

Stories and folklore are major education tools for Deaf educators, as they serve not only to convey culturally important historical events and values, but also to teach and promote sign language (Padden, 1980). Deaf art tends to focus on themes of oppression and language, acting as a powerful outlet to describe the Deaf experience (DeafArt.org, 1989).

Difference vs. Disability

The Deaf community rejects the label "disabled" that is used in legislation and colloquial talk, because many Deaf people do not view themselves as disabled simply due to their audiological status (Lane, 2005). As the saying goes, Deaf people "can do everything except hear" (Hannum, 1989), and many prefer to describe themselves as simply "different" from hearing people (Bienvenu, 1989 & 1992). This issue is complicated by the logistical need to cite ADA law when acquiring accommodations (Lane, 1998).

Deafnicity

This is the idea that through participation in the Deaf community, one has a "Deafnicity" that encompasses shared values, history, experiences, and norms. Deafnicity exists on a spectrum that expresses "how deaf" someone is, indicating proximity to the community or the DEAF-WORLD (gloss for the ASL phrase used to describe the rich visual and linguistic world that Deaf people live within (Lane, Hoffmeister, & Bahan, 1996)). Some people describe themselves as "strong Deaf," to indicate that they come from a family which strongly values Deaf culture (Lane, Hoffmeister, & Bahan, 1996).

Preferred terms

The terms most preferred by the community today are D/deaf, H/hard of hearing, and deafblind.

The terms "deaf and dumb," "deaf-mute," and "hearing impaired" are considered offensive despite their continued use by the majority (NAD, 2017a).

These are only some of the many values and norms that the American Deaf community lives by, but they are a good foundation and starting point for clinicians who might work with deaf clients in the future. Deaf people are often happy to explain their values and norms if asked respectfully. It is important to remember that American Deaf culture by nature differs to some extent from those elsewhere in the world as a given nation's majority culture will always influence minority groups to some degree (McIlroy & Storbeck, 2011).

Ally-ship and Advocacy

It is important for mental health professionals to consider how to support disadvantaged groups as outsiders. Ally-ship requires an ongoing commitment to learning and humility, and the willingness to challenge one's inherent beliefs and biases (Axner, 2017). In their comprehensive review of feminist and multicultural theories, Goodman et al. (2004) detail six themes common to good ally-ship: "(a) ongoing self-examination, (b) sharing power, (c) giving voice, (d) facilitating consciousness raising, (e) building on strengths, and (f) leaving clients with the tools for social change" (p. 798). Though Goodman et al. focus on therapies that deal directly with social injustice, the concepts are widely applicable to clinical work with members of disenfranchised groups.

Clinicians must be willing to continuously assess how their various roles, beliefs, and experiences may interact within the therapeutic relationship. Mental health providers should be mindful of the numerous roles they fill (e.g., parent, child, researcher, practitioner, woman, etc.), and should remain curious about how each role affects their perceptions and clinical judgments (Goodman, et al., 2004). In any of their various roles, clinicians and clients alike may feel privileged or oppressed to some extent (Mizock & Page, 2016; Crenshaw, 1993). This "intersectionality" (Crenshaw, 1993) is important to consider throughout the course of treatment, and may become a topic of explicit discussion.

Keeping tabs on the power dynamic is always advisable in clinical practice, and power tends to

be distinctly salient for members of disadvantaged groups. Clinicians can manage the power balance by offering their expertise or advice as "another source of information" (Brabeck & Brown, 1997, p. 26) instead of the "right" or the "best" information. In assessing the power differential within a therapeutic relationship, clinicians must be wary of "benevolent paternalism," a phrase coined by Palumbo (1982) and explained by Malzkuhn in her chapter in The Deaf Way (1989). This is the practice of majority groups "'protect[ing]' those it deems unable to fend for themselves," often without adequately including or consulting the affected minority (p. 781).

The concept of *voice* has been neatly summarized by Reinharz (1994) as "a kind of megametaphor representing presence, power, participation, protest, and identity" (p. 183). Clinician-guided amplifications of a client's "voice" within therapy can translate to their everyday life (Goodman, et al. 2004). Deaf clients are very likely to have experienced limited access to presence, power, participation and protest, and may have grappled with issues of identity (Leigh, 2017). As allies, clinicians can give voice to a community by representing its members in academic research, and including group members in the conceptualization and administration of the research itself. In this way, mental health providers can use their relative power to speak *on behalf of* the group, and not *for* it.

According to Goodman, et al. (2004), raising consciousness involves "helping clients understand the extent to which individual and private difficulties are rooted in larger historical, social, and political forces" (p. 804). Understanding the depth of these roots may inform the clinician's approach to treatment. Further, these kinds of discussions may facilitate initial steps toward a change process within the client (Prilleltensky, 1989).

Clinicians as allies may find themselves in a unique position to "access and mobilize external resources" for their clients (Mizock & Page, 2016). Depending on the client, acquiring services and resources could be a major aspect of the treatment plan. However, therapists should avoid the "hero-victim narrative," which "generates pity rather than indignation, with the latter being more motivating of action" (p. 24). Mental health professionals acting as allies and/or advocates of any disenfranchised group

should remember that, to the greatest possible extent, they should help their client to develop the skills required to help themselves. Ideally, the client will build up a repertoire of skills, eventually rendering the clinician's presence unnecessary (Goodman, et al. 2004).

Recommendations for the Future

Despite continued oppression in many domains, there is hope that the future will be brighter for members of disadvantaged groups. In the world of psychology, there is a growing trend toward strength-based assessment and treatment, particularly when working with children (Snyder & Lopez, 2002). Models based on assets rather than deficits help clients to build self-esteem and self-efficacy, two critical qualities for positive development (Carver & Doe, 1989). If these models continue to gain traction, it is hopeful that d/Deaf clients will benefit directly.

In terms of assessment, extensive psychometric research and test development is necessary if we are to establish measures and norms that are valid and reliable for d/Deaf populations. It is certainly worthwhile to investigate the use of preexisting measures designed for hearing subjects for use with d/Deaf individuals. However, it is pertinent that assessment tools be developed specifically for this population in order to achieve optimal levels of construct validity (Marschark & Spencer, 2011). Those who wish to engage in such work should consult leaders in the field of deaf assessment, such as the psychologists at the Boston Children's Hospital Deaf and Hard of Hearing Program and the Deaf Services unit at Worcester Recovery Center and Hospital, to name a few. Gallaudet University, the world's only university specifically catering to d/Deaf students, would undoubtedly be a rich resource as well.

Finally, despite an increasing focus on cultural awareness and competence in graduate-level training (Christopher, Wendt, Marecek & Goodman, 2014; Clay, n.d.; Roysircar, 2004), many psychology students (and hearing people in general) have minimal knowledge of Deaf culture (Boness, 2016). Students would benefit greatly from classroom learning about d/Deaf individuals in mental health contexts. Not only would this type of instruction provide knowledge specific to the d/Deaf population, but learning about this minority

group would be an opportunity for students to become aware of, confront, and adjust their own biases about people and cultures of all kinds. Similarly, graduate-level trainees would benefit from instruction around working with language interpreters effectively and efficiently. Though sign language interpreting presents unique areas for consideration, the ability to efficiently utilize an interpreter is a valuable skill that is likely to be useful in a variety of settings.

Conclusion

Deaf history offers many lessons for psychologists, educators, doctors, and more about the dangers of imposing majority values on a misunderstood community. In understanding the many challenges that deaf people continue to face, we can learn how to move forward with positive change. By examining some cultural considerations for working in clinical capacities with members of the Deaf community, we can extrapolate and expand those implications to clinical work with other marginalized groups. If we are cautious and conscientious, we can avoid the pitfalls of both subtle and overt forms of oppression.

Psychologists and allied mental health professionals should expect to work with clients of many backgrounds and cultures. It is not practical to expect that psychologists will be fully prepared for work with all the cultures they are likely to encounter, but keeping an open mind and a commitment to lifelong learning is necessary for successful clinical work to take place. By increasing our cultural awareness, we increase cultural competency, and we can therefore increase the efficacy of psychological treatment at large.

References

American Psychological Association. (2002). *Ethical principles of psychologists and code of conduct*. Retrieved July 3, 2017 from http://www.apa.org/ethics/code/

Askar, Y. (2013). *Assessing the growing demand for sign language interpreters*. UANews. Retrieved July 23, 2017 from https://uanews.arizona.edu/story/addressing-the-growing-demand-for-sign-language-interpreters

Atherton, M., Russell, D., & Turner, G. H. (2001). Looking to the past: The role of oral history research in recording the visual history of Britain's deaf community. *Oral History, 29*, 35-47.

Axner, M. (2017). *Section 5: Learning to be an ally for people from diverse groups and backgrounds*. Retrieved July 15, 2017 from http://ctb.ku.edu/en/table-of-contents/culture/cultural-competence/be-an-ally/main

Babad, E. Y., Inbar, J., & Rosenthal, R. (1982). Pygmalion, galatea, and the golem: Investigations of biased and unbiased teachers. Journal of *Educational Psychology, 74*(4), 459-474.

Bienvenu, M. J. (1989). Disabled: Who? *TBC News, 13*, 47.

Bienvenu, M. J. (1992). The "well-adjusted" deaf person. *TBC News, 43*, 51-52.

Boness, C. L. (2016). Treatment of deaf clients: Ethical considerations for professionals in psychology. *Ethics & Behavior, 26*(7), 562-585.

Boston Children's Hospital Deaf and Hard of Hearing Program (BCH DHHP). (2005-2017). *Deaf and hard of hearing program: Overview*. Retrieved October 25, 2016 from http://www.childrenshospital.org/centers-and-services/deaf-and-hard-of-hearing-program

Brabeck, M., & Brown, L. (1997). Feminist theory and psychological practice. In J. Worell & N.G. Johnson (Eds.), *Shaping the future of feminist psychology: Education, research, and practice* (pp. 15-35). Washington, DC: American Psychological Association Press.

Bradford, B. B. (1990). Peer groups and peer cultures. In S. S. Feldman & G. R. Elliott (Eds.), *At the threshold: The developing adolescent*. (pp. 171-196). Cambridge, MA: Harvard University Press.

Carver, R. J. & Doe, T. (1989). Rehabilitation or oppression? Options for the humanization of the deaf. In C. J. Erting (Ed.), *The deaf way*, (pp. 846-853). Washington, DC: Gallaudet University Press.

Christopher, J. C., Wendt, D. C., Marecek, J., & Goodman, D. M. (2014). Critical Cultural Awareness: Contributions to a globalizing psychology. *American Psychology, 69*(7), 645-655.

Clark, T. (2003). Psychological evaluation of deaf children. In N. S. Glickman & S. Gulati (Eds.), *Mental health care of deaf people: A culturally*

affirmative approach. (pp. 109-144). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Clay, R. (n.d.). *How do I become culturally competent?* Retrieved January 3, 2018 from http://www.apa.org/gradpsych/2010/09/culturally-competent.aspx

Cohen, N. L. & Hoffman, R. A. (1991). Complications of cochlear implant surgery in adults and children. *Annals of Otology, Rhinology and Laryngology, 100*(9), 708-711.

Cohn, M. (2016, January 25). Court rules Hopkins wrongfully rescinded job offer to deaf nurse. *The Baltimore Sun*. Retrieved August 1, 2017 from http://www.baltimoresun.com/health/bs-hs-deaf-nurse-20160121-story.html

Cornett, R. O. (1967). Cued speech. *American Annals of the Deaf, 112*(1), 3-13.

CREEC Law. (2016). The national association of the deaf et al. v. Harvard, MIT. *CREECblog*. Retrieved August 1, 2017 from https://creeclaw.org/online-content-lawsuit-harvard-mit/

Crenshaw, K. (1993). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. In D. K. Weisberg (Ed.), *Feminist Legal Theory* (pp. 383–395). Philadelphia: Temple University Press.

Crouch, R. A. (1997). Letting the deaf be deaf: Reconsidering the use of cochlear implants in prelingually deaf children. *Hastings Center Report, 27*, 14-21.

Deaf Action Center. (2010). *Legal services*. Retrieved October 14, 2016 from http://www.deafactioncenter.org/index.php?option=com_content&view=article&id=59:legal-services&catid=41:services&Itemid=57

DeafArt.org. (1989). *What is deaf art?* Retrieved October 14, 2016 from http://www.deafart.org/Deaf_Art_/deaf_art_.html

Doe, T. (1989). Multiple minorities: Communities within the deaf community. In C. J. Erting (Ed.), *The deaf way*, (pp. 464-469). Washington, DC: Gallaudet University Press.

Federal Communications Commission (FCC). (2017). *Video relay services*. Retrieved January 3, 2018 from https://www.fcc.gov/consumers/guides/video-relay-services

Gallaudet University Library. (2014). *Local and regional deaf populations*. Retrieved August 1, 2017 from http://libguides.gallaudet.edu/content.php?pid=119476&sid=1029190

Glickman, N. S. & Gulati, S. (Eds.). (2003) *Mental health care of deaf people: A culturally affirmative approach*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Goodman, L. A., Liang, B., Helms, J. E., Latta, R. E., Sparks, E., & Weintraub, S. R. (2004). Training counseling psychologists as social justice agents: Feminist and multicultural principles in action. *The Counseling Psychologist, 32*(6), 793-837.

Gonnerman, J. (2014, December 19). A lawsuit to end abuse at Rikers. *The New Yorker*. Retrieved August 1, 2017 from http://www.newyorker.com/news/daily-comment/lawsuit-end-abuse-rikers

Grosjean, F. (2001). The right of the deaf child to grow up bilingual. *Sign Language Studies, 1*(2), 110-114.

Hamilton, J. (2010). *Singing, signing, speaking: How language evolved*. Retrieved January 3, 2018 from https://www.npr.org/templates/story/story.php?storyId=129155123

Hannum, H. (1989). Human rights and the deaf. In C. J. Erting (Ed.), *The deaf way,* (pp. 776-789). Washington, DC: Gallaudet University Press.

House, W. F. (1976). Cochlear implants. *Annals of Otology, Rhinology and Laryngology, 85*(3).

Institute of Medicine. (2008). *Noise and military service: Implications for hearing loss and tinnitus*. Washington, DC: The National Academies Press.

Johnson, R. E., Liddell, S. K., & Erting, C. J. (1989). A brief overview of "unlocking the curriculum". In C. J. Erting (Ed.), *The deaf way,* (pp. 593-598). Washington, DC: Gallaudet University Press.

Kentucky Commission on the Deaf and Hard of Hearing (KCDHH). (2017). *Sign language history*. Retrieved October 15, 2016 from https://www.kcdhh.ky.gov/ois/signhist.html

Lane, H. (1992). *The mask of benevolence: Disabling the deaf community*. New York, NY: DawnSign Press.

Lane, H. (1998). Do deaf people have a disability? *Sign Language Studies, 2*(4), 356-379.

Lane, H. (2005). Ethnicity, ethics, and the deaf-world. *Journal of Deaf Studies and Deaf Education, 10*(3), 291-310.

Lane, H. & Grodin M. (1997). Ethical issues in cochlear implant surgery. *Kennedy Institute of Ethics Journal,* 231-251

Lane, H., Hoffmeister, R., Bahan, B. (1996). *A journey into the deaf-world.* San Diego, CA: DawnSign Press.

Leib, A. (n.d.). *Five technologies deaf and hard of hearing persons use to communicate*. Retrieved January 3, 2018 from https://www.westernu.edu/bin/cdihp/Five-Technologies-Deaf-Communication.pdf

Leigh, I. W. (2017). *Deaf people and society: Psychological, sociological, and educational perspectives.* New York, NY: Taylor & Francis.

Levine, E. S. (1977). *The preparation of psychological service providers to the deaf.* A report of the Spartanburg Conference on the Functions, Competencies, and Training of Psychological Service Providers to the Deaf. Monograph No. 4.

Levine, E. S. (1981). *The ecology of early deafness: Guides to fashioning environments and psychological assessments.* New York, NY: Columbia University Press.

Lin, F., Niparko, J., & Ferrucci, L. (2011). Hearing loss prevalence in the United States. *Archives of Internal Medicine, 171*(20), 1851.

Malzkuhn, M. C. (1989). The human rights of the deaf. In C. J. Erting (Ed.), *The deaf way,* (pp. 780-785). Washington, DC: Gallaudet University Press.

Marschark, M. & Spencer, P. E. (2011). *The Oxford handbook of deaf studies, language and education, volume 1* (2nd Ed.). New York, NY: Oxford University Press.

McKee, R. (2014). Breaking news: Sign language interpreters on television during natural disasters. *Interpreting, 16*(1), 107-130.

McIlroy, G. W. & Storbeck, C. (2011). Development of deaf identity: An ethnographic study. *Journal of Deaf Studies and Deaf Education, 6,* 494-511.

Mizock, L. & Page, K.V. (2016). Evaluating the ally role: Contributions, limitations, and the activist position in counseling and psychology. *Journal for Social Action in Counseling and Psychology, 8*(1), 17-33.

Moore, B. N. & Bruder, K. (1999). *Philosophy: The power of ideas.* New York, NY: McGraw-Hill Higher Education.

Moore, M. S. & Levitan, L. (2003). *For hearing people only: Answers to some of the most commonly asked questions about the deaf community, its culture, and the "deaf reality".* Silver Spring, MD: Deaf Life Press.

Moores, D. F. (1987). *Educating the deaf: Psychology, principles, and practices*. Boston, MA: Houghton.

National Association of the Deaf (NAD). (2017a). *Community and culture: Frequently asked questions.* Retrieved October 15, 2016 from https://www.nad.org/resources/american-sign-language/community-and-culture-frequently-asked-questions/

National Association of the Deaf (NAD). (2017c). *Lawyers and legal services*. Retrieved October 14, 2017 from https://www.nad.org/resources/justice/lawyers-and-legal-services/

National Association of the Deaf (NAD). (2006). *Position statement on cochlear implants.* Retrieved October 14, 2016 from https://www.nad.org/about-us/position-statements/position-statement-on-cochlear-implants/

National Cued Speech Association (NCSA). (n.d.). *Definition of cued speech*. Retrieved January 3, 2018 from http://www.cuedspeech.org/cued-speech-definition

National Institute on Deafness and Other Communication Disorders (NIDCD). (2016a). *Cochlear implants.* Retrieved October 21, 2016 from https://www.nidcd.nih.gov/health/cochlear-implants

National Institute on Deafness and Other Communication Disorders (NIDCD). (2016b). *Quick statistics about hearing.* Retrieved October 21, 2016 from https://www.nidcd.nih.gov/health/statistics/quick-statistics-hearing

Nielsen, K.E. (2012). *A disability history of the United States.* Boston, MA: Beacon Press.

Obasi, C. (2008). Seeing the deaf in "deafness". *Journal of Deaf Studies and Deaf Education,*

13(4), 455-465. Retrieved January 3, 2018 from https://academic.oup.com/jdsde/article/13/4/455/497051.

Padden, C. (1980). The deaf community and the culture of deaf people. In C. Baker-Shenk & R. Battison (Eds.), *Sign language and deaf community: Essays in honor of William C. Stokoe,* (pp. 1-16). Silver Spring, MD: National Association of the Deaf.

Padden, C. & Humphries, T. (1988). *Deaf in America: Voices from a culture.* Cambridge, MA: Harvard University Press.

Palumbo, M. (1982). *Human rights, meaning and history*. Malabar, FL: Krieger Publishing Company.

Pintner, R. & Patterson, D. G. (1915). The Binet scale and the deaf child. *Journal of Educational Psychology, 6*, 201-210.

Pintner, R. & Patterson, D. G. (1916). A measurement of the language of deaf children. *Psychological Review, 23*, 413-436.

Pintner, R. & Patterson, D. G. (1917). Psychological tests for deaf children. *Volta Review, 19*, 661-667.

Pintner, R. & Patterson, D. G. (1921). Learning tasks for deaf children. *Psychological Monographs, 29*(132).

Pollard, R. Q. (1994). Public mental health service and diagnostic trends regarding individuals who are deaf or hard of hearing. *Rehabilitation Psychology, 39*, 147-160.

Pollard, R. Q. (1996). Professional psychology and deaf people: The emergence of a discipline. *American Psychologist, 51*(4), 389-396.

Prilleltensky, I. (1989). Psychology and the status quo. *American Psychologist, 44*(5), 795-802.

Registry of Interpreters for the Deaf (RID). (2015). *Certification overview*. Retrieved June 2, 2017 from http://rid.org/rid-certification-overview/

Reinharz, S. (1994). Toward an ethnography of "voice" and "silence." In E. J. Trickett, R. J. Watts, & D. Birman (Eds.), *Human diversity: Perspectives on people in context* (pp. 178-200). San Francisco: Jossey-Bass.

Ridgeway, J. (2009, October 2). The secret world of deaf prisoners. *Mother Jones.* Retrieved August 1, 2017 from https://owl.english.purdue.edu/owl/resource/560/10/

RIT Libraries. (2017). *Interpreter resources: Video relay & video remote interpreters*. Retrieved January 3, 2018 from http://infoguides.rit.edu/c.php?g=441626&p=3013020

Rose, M. L. (2006). Deaf and dumb in Ancient Greece. In L. Davis (Ed.), *The Disability Studies Reader* (2nd Ed). New York, NY: Routledge.

Rosenthal, R., & Jacobson, L. (1968). *Pygmalion in the classroom: Teacher expectation and pupils' intellectual development.* New York, NY: Holt, Rinehart & Winston.

Roysircar, G. (2004). Cultural self-awareness assessment: Practice examples from psychology training. *Professional Psychology: Research and Practice, 35*, 658-666.

Schein, J. D. & Mark, M. (1984). *Speaking the language of sign: The art and science of signing.* Garden City, NJ: Doubleday.

Smith, R. et al. (1999). Deafness and hereditary hearing loss overview. *GeneReviews.* Retrieved October 12, 2016 from https://www.ncbi.nlm.nih.gov/books/NBK1434/

Snyder, C. R. & Lopez, S. J. (2002). *Handbook of positive psychology.* New York, NY: Oxford University Press.

Starr, C. D. (1994). Deaf students in the mainstream: A school counselor's journal. *Deaf Life,* 180-188.

Stinson, M. S. & Antia, S. D. (1999). Considerations in educating deaf and hard-of-hearing students in inclusive settings. *Journal of Deaf Studies and Deaf Education, 4*(3), 163-175.

Sue, S., Ka, J., Cheng, Y., Saad, C.S., & Chu, J.P. (2012). Asian American mental health: A call to action. *American Psychologist, 67*, 532-544.

Supalla, S. (1989). Equality in educational opportunities: The deaf version. In C. J. Erting (Ed.), *The deaf way,* (pp. 553-555). Washington, DC: Gallaudet University Press.

Thomas, R. (1989). Bringing up our children to be bilingual and bicultural: A three-part presentation. In C. J. Erting (Ed.), *The deaf way*, (pp. 584-592). Washington, DC: Gallaudet University Press.

U.S. Department of Education. (1994). *The individuals with disabilities education act*. (P.L.101-476). Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Justice. (1990). *ADA standards*

for accessible design. (CFR 28-36). Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Justice. (2001). *Enforcing the ADA: A status report from the department of justice*. Retrieved October 12, 2016 from https://www.ada.gov/octdec01.htm

Vernon, M. (2005). Fifty years of research on the intelligence of deaf and hard-of-hearing children: A review of literature and discussion of implications. *Journal of Deaf Studies and Deaf Education, 10*(3), 225-231.

Wood, J. B. (1984). Protecting deaf suspects' right to understand criminal proceedings. *Journal of Criminal Law and Criminology, 75*(1), 166-197.

World Health Organization. (2014). *Deafness and hearing loss*. Retrieved October 12, 2016 from www.who.int/mediacentre/factsheets/fs300/en/

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