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A Visual Content Analysis of Stigmatizing and Stigma-Challenging
Portrayals of Mental Patients in *Life* and *Look* Magazines

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ABSTRACT

A Visual Content Analysis of Stigmatizing and Stigma-Challenging Portrayals of Mental Patients in *Life* and *Look* Magazines

By

Madison Kaytlyn Tallant

Media portrayals of mental illness frequently contain stigmatizing images that support stereotypes about the mentally ill. While stigma-challenging portrayals of mental illness do exist they often fail to correct the misinformation provided by stigmatizing portrayals. The present study examined the extent to which contemporary stigmatizing and stigma-challenging themes were present in historical media portrayals of institutionalized mental patients. A visual content analysis was conducted on 40 articles containing 350 images featuring institutionalized mental patients from *Life* and *Look* magazines. I hypothesized that portrayals of mental patients would differ between magazines and over time (pre- vs. post-antipsychotic eras) and that individual identity would increase after the advent of antipsychotic medication. Overall photographic content appears to provide a more stigma-challenging depiction of the mentally ill following the advent of antipsychotic medications. Few differences were found in the narrative content over time and between magazines. This suggested that the way in which the mentally ill were described did not change over time, while the way in which they were visually depicted became more positive. However, the positive visual portrayals and presence of stigma-challenging language may not be enough to overcome the stigmatizing portrayals found in both magazines' visual and narrative content.

A Visual Content Analysis of Stigmatizing and Stigma-Challenging Portrayals of
Mental Patients in *Life* and *Look* Magazines

Stigma, a sign or mark of disgrace, sets an individual or group apart from others and can have a profound negative impact on physical and mental wellbeing. Mental illness is often viewed by members of the public more negatively than physical illnesses such as cancer and is widely stigmatized in almost all societies (Corrigan, River, Lundin, Wasowski, Campion, Mathisen, Goldstein, Bergman, & Gagnon, 2000; Ilic, Reinecke, Bohner, Röttgers, Beblo, Driessen, Frommberger, & Corrigan, 2013; Kermode, Bowen, Arole, Joag, & Jorm, 2009). The impact of stigma on mental illness is well documented; the mentally ill experience discrimination in educational and employment settings, which diminish available social opportunities (Corrigan, Markowitz, & Watson, 2004); some individuals with a mental illness may internalize societal stigmas resulting in lowered self-esteem and self-efficacy (Corrigan, Morris, Larson, Rafacz, Wassel, Michaels, Wilkniss, Batia, & Rüschi 2010; Link & Phelan, 2001); and stigma may also have a negative impact on treatment seeking behavior, internal mood and outlook, and social connections (Boyd, Katz, Link, & Phelan, 2010; Link & Phelan, 2006). Unfortunately, common stereotypes of the mentally ill as violent, incompetent, and blameworthy remain prevalent in contemporary media portrayals of mental illness (Corrigan et al., 2000).

Reviews of media research by Sieff (2003) and Wahl (2003) found that the majority of scholarly work on media portrayals of mental illness has analyzed

contemporary news media portrayals¹ published in newspapers, magazines, and television. While the historical stigmatization of mental illness has been studied, little inquiry has been made into the prevalence of contemporary stigmatizing portrayals of mental illness in historical media sources (Sieff, 2003). Investigation of how mental illness was depicted in historical news media is important for several reasons. It is well understood that stigmatizing portrayals of the mentally ill in contemporary news media are not only prevalent (Wahl, 1997) but that exposure to this type of content is linked to greater negative attitudes toward the mentally ill (Corrigan, Powell, & Michaels, 2013). Previous research has not examined how media depictions of mental illness have evolved over time, and to what extent previous generations of Americans were exposed to stigmatizing portrayals of the mentally ill in popular news media. By identifying similarities between portrayals of the mentally ill in historical and contemporary news media we may better understand the stability of mental illness stigma over time and the extent to which modern myths and misunderstandings about mental illness have been part of our cultural narrative. The present study sought to help fill this gap in the knowledge by examining how mental patients² were depicted in the popular American picture story magazines *Life* and *Look*. Both magazines were read by millions of Americans during the mid-20th century, when mental health care was undergoing substantial

¹ The majority of research examining media portrayals of mental illness has focused on content published between the late 1980s and present day. Therefore, the term “contemporary” news media portrayals should be understood as referring to content published during this era.

² Although the term “mental patient” is considered stigmatizing by modern standards it is used by contemporary historians who write about mid-20th century American mental health care because it reflects the parlance of that era. The use of the term throughout this paper does not infer a negative judgment of the mentally ill but denotes the historical term for individuals who received institutional care for a real or purported mental illness.

change. By examining published stories spanning more than 35 years in *Life* and *Look* it may be possible to identify similarities between historical and contemporary portrayals of the mentally ill and changes in the prevalence of stigmatizing portrayals over time. In this paper, I will explore the ways *Life* and *Look* magazines challenged or contributed to the stigma of mental illness through published photographs and article text featuring institutionalized mental patients.

Mental Illness, Stigma, and the Media. Epidemiological research indicates that nearly half of all Americans will meet criteria for a mental illness at some point in their life and approximately 14 million adults live with a serious mental illness such as schizophrenia, major depression, or bipolar disorder (Kessler, Chiu, Demler, & Walters, 2005a; Kessler, Chiu, Demler, & Walters, 2005b; Mental Illness Facts and Numbers, 2013). Given that nearly half of the nation will meet criteria for a mental illness during their lifetime, it is likely that every American will personally experience mental illness themselves or through intimate or professional relationships. Despite its prevalence, many Americans do not have a nuanced understanding of mental illness or its treatment. For example, less than 50% of individuals can identify the symptoms of depression, anxiety, or schizophrenia (Jorm, Christensen, & Griffiths, 2006). Previous research has found that most Americans' knowledge about mental illness comes from information provided by mass media (Stout, Villegas, & Jennings, 2004). As a result, societal views and reactions toward mental illness may be significantly shaped by mass media content.

Media portrayals (defined as television news, entertainment programming, films, and newspapers) of mental illness are both frequent and primarily negative

(Sieff, 2003). Some research has found that of all disabilities, mental illness is the most commonly portrayed in feature films and that mentally ill characters are frequently depicted as violent (Wahl, 1997). This pattern of stigmatizing media coverage, particularly that of print media, greatly impacts public opinion of mental illness and those who live with it on a daily basis (Nairn & Coverdale, 2005). The growing linkage of mental health information to both entertainment and news media portrayals is highly problematic as heavy exposure to stigmatizing media images of mental illness cultivates misinformation about crime, engenders intolerance toward the mentally ill, and negatively influences public evaluation of mental health issues (Stuart, 2006). Furthermore, a report on the nation's attitudes towards mental health found that many Americans believe that individuals with mental health problems are a threat to the general public (Pescosolido, Martin, Link, Kikuzawa, Burgos, Swindle, & Phelan, 1996).

Communication of stigmatizing messages can occur through both visual and verbal content of film and news stories and usually draws upon shared language resources such as vocabulary, images, and narrative fragments (Nairn, Coverdale, & Coverdale, 2011). Visually, the mentally ill have been filmed and photographed alone or in extreme close-up, which reinforces the idea that those with mental illness are isolated or disconnected from the rest of the community. News coverage has emphasized violent, delusional, and irrational behavior, as well as criminality and unpredictability, to the exclusion of personal accounts of recovery and input from mental health professionals (Stuart, 2006). This stereotype of the mentally ill as dangerous continues to persist despite research findings that the majority of

individuals with psychiatric disorders are not violent and demographic variables, such as gender, may be a better predictor of violent behavior than psychiatric diagnosis (Corrigan & Watson, 2005; Pulay, Dawson, Hasin, Goldstein, Ruan, Pickering, Huang, Chou, & Grant, 2008).

Media portrayals can challenge stigmatizing beliefs by emphasizing socially affirming themes such as self-determination, personal empowerment, recovery, and social inclusion. Arboleda, Florez, and Stuart (2012) identified six possible methods of reducing stigma: protest, contact-based education, legislative reform, advocacy, stigma self-management, and education, to replace myths and misinformation with accurate information. However, stigma-challenging media portrayals may not hold as much weight or influence on the public's attitude toward the mentally ill as their stigmatizing counterparts. A study on newspaper stories about mental illness by Dietrich, Heider, Matschinger, and Angermeyer (2006) found that adolescents who read socially affirming stories about the mentally ill experienced a decrease in their likelihood to use "violent" and "dangerous" to describe the mentally ill, but their desire for social distance from mentally ill individuals remained at a level similar to those who had read a stigmatizing story. This suggests that, at least in regards to print media, negative and stigmatizing stereotypes may change as a result of socially affirming information, but social distancing and out-grouping of the mentally ill may continue even after corrective or stigma-challenging information is provided to the public.

Stigmatization can have a profound impact on the daily existence of individuals with a mental illness as well as those who live and work closely with

them. Stigma usually consists of five main components: 1) the identification and labeling of differences, 2) stereotyping, 3) creation of “us” and “them” labels, 4) discrimination and loss of status, and 5) exercise of power (Link & Phelan, 2006). The implications of stigma, when attached to disease and other health issues, have far reaching effects both for those who are stigmatized as well as society as a whole. Individuals who are stigmatized as a result of their illness face possible chronic stress, a decrease in care seeking, and less access to effective treatment for their condition (Link & Phelan, 2006). Previous research has shown that the general public views mental illness significantly less favorably than physical illnesses and disabilities; largely due to a misperception that mental illness can be controlled (Corrigan & Penn, 1999). The impact of this stigmatization on individuals with mental illness is devastating. Stigma not only leads to external discrimination in housing, employment, and insurance coverage, but also can have internal effects such as the erosion of self-esteem, social withdrawal, and decreased trust in others (Boyd, Katz, Link, & Phelan, 2010).

Mental illness stigma seems to vary depending on the perceived severity of the specific disorder. Gaebel, Zäske, and Baumann (2006) found that severe mental illnesses (e.g., schizophrenia) tend to have a higher level of stigmatization than more common mental disorders (e.g., depression and anxiety). This is because the layperson’s understanding of severity depends on the perceived level of social disability associated with the illness, likelihood of dangerous behavior, and the intensity of treatment required for cure. Additionally, more individuals desire greater social distance from those with schizophrenia than those with depression

but less blame is attributed to those with schizophrenia than to those with depression (Norman, Windell, & Manchanda, 2010). Research suggests that public perceptions about mental illness have changed over time, but those perceptions vary depending on the disorder being discussed. For example, attitudes toward depression have become more positive while attitudes toward disorders involving psychotic symptoms have become more negative over time (Phelan, Link, Stueve, & Pescosolido, 2000). Investigation of contemporary themes in historical media content may help to illuminate how media portrayals have evolved over time and possibly reflect public opinion. The picture story magazines of the mid-twentieth century, *Life* and *Look*, are particularly interesting to analyze due to their visual and narrative coverage of the many changes in American mental health care that took place during their publication. These changes include asylum reform, the introduction of antipsychotic medications, and the movement toward de-institutionalization of the severely mentally ill (Grob, 1994).

The Rise of the American Picture Story Magazine. Throughout the early to mid-twentieth century, magazines were an important and influential medium over public opinion due to their interactivity and accessibility. Unlike television and radio, magazines allowed for self-directed interactivity and repeated access, provided that a copy of the issue was available. American picture story magazines were enormously popular from their first appearance in the late 1930s through the early 1970s, long after television had established its dominance among visual media (Baughman, 2001). *Life*, perhaps the most well-known picture story magazine, had the highest “pass-along factor” of any mass-circulation magazine. This meant that a

single issue of *Life* was more likely to be seen by more individuals than any other periodical at the time (Baughman, 2001). *Life* was the brainchild of Henry Luce who had a desire to create a visual, rather than literary, magazine that would entertain, inform, and influence its readers (Doss, 2001). *Life's* photography based concept proved to be very popular. The magazine's first issue almost bankrupted Luce's company due to an underestimation of demand and a failure to acquire adequate advertising (Baughman, 2011). The spectacular interest in the magazine did not fade over the course of *Life's* publication. A market research study conducted in 1950 found that about half of all Americans ten and older had seen at least one issue of *Life* and it ran successfully as a weekly publication from 1936 to 1972 (Baughman, 2001; Doss, 2001). The magazine also managed to gain a certain authority on scientific and technological advancements of the time, for instance, the discovery of LSD and its effectiveness as a treatment for a variety of illnesses (Webb, 2010; Siff, 2008). The potential for economic gain through picture story magazine publishing, as demonstrated by *Life's* overwhelming popularity, likely accounted for *Life's* competition.

A similar picture-story magazine, *Look*, ran as a biweekly (twice-monthly) publication for a comparable length of time from 1937 to 1971. Although similar in style, *Look* had different goals than *Life*. From the very beginning, *Look* initially intended to be a monthly publication with feature articles on popular culture as the main component of the publication rather than current news stories (Cookman, 2009). Although *Look* eventually became a competitor with *Life*, it was unable to escape its early reputation for being an inferior magazine (Cowles, 1985). Unlike

newspapers, twentieth century periodicals found their circulations split according to educational and socioeconomic levels. Upper and middle class individuals, due to their greater income and better access to higher education, read magazines such as *Life* and *Time*, which were targeted toward a more refined upper-middle class reader. Lower-middle class individuals were more likely to read *Look*, which catered to the working middle class, and those in the lower working classes often did not have the disposable time and income necessary to read any magazines (Baughman, 2001).

Contemporary Stigmatizing and Stigma-Challenging Themes in Historical News Media Content. Mood and anxiety disorders (e.g., depression) are some of the most common mental disorders and are frequently studied in mental health research (Kessler et. al, 2005a). Schizophrenia, although rare, is commonly portrayed in media content and used in mental health research since it is usually the disorder most people think of when they think of mental illness, madness, or insanity (McGrath, Saha, Chant, & Welham, 2008; Wahl, 1997). Despite the fact that these disorders are both highly prevalent and commonly depicted in media representations, less than 50% of individuals can correctly identify the symptoms of depression, anxiety, or schizophrenia (Jorm, Christensen, & Griffiths, 2006). This is particularly troubling because individuals who are unfamiliar, or possess incomplete or incorrect knowledge of mental illness may be particularly susceptible to media misinformation about mental illness. Additionally, research suggests that public opinion about mental illness has changed over time, but that opinion varies depending on the severity of the illness. Contemporary public perceptions of

depression are more positive compared to the mid-1950s, whereas the association of frightening characteristics (e.g., violence and dangerousness) with psychosis has increased over time (Phelan, Link, Stueve, & Pescosolido, 2000). Previous research has shown that media content is influential on public opinion and modern media portrayals are primarily negative with recurring stigmatizing themes such as dangerousness and social incompetence (Nairn & Coverdale, 2005; Nairn, Coverdale, & Coverdale, 2011; Sieff, 2003). Research on newspaper portrayals of mental illness has found that beliefs in dangerousness are more likely to come from media exposure than from personally experiencing a violent act by a mentally ill individual (Jorm & Reavely, 2014). Furthermore, the effects of these stigmatizing portrayals may be resistant to correction (Dietrich et. al, 2006). A study by Corrigan, Powell, and Michaels (2013) assessed the effects of reading either stigmatizing or stigma challenging newspaper stories on positive and negative attitudes toward mental illness, including beliefs that the mentally ill are blameworthy, dangerous, should be forced into treatment (coercion), are less socially desirable, have potential for recovery, are self-determined, and have personal empowerment. They found that those who read the stigmatizing news article experienced an increase in negative attitudes toward mental illness (blame, dangerous, and coercion) and found mentally ill individuals less socially desirable. Those who read the socially affirming or stigma-challenging story demonstrated an increase in positive attributions about the mentally ill (recovery, empowerment, and self-determination) but interestingly, their negative beliefs about mental illness did not significantly decrease.

The purpose of the present study is to examine the frequency with which contemporary stigmatizing and stigma-challenging themes were present in historical news media and to what extent these messages evolved over time. Corrigan et. al (2013) identified three stigmatizing (i.e., blame, coercion, dangerousness) and three stigma-challenging themes (i.e., recovery, self-determination, empowerment) in media content to investigate how public perception of mental illness is impacted by news stories. These targeted attributions formed the foundation for the themes used in the present study as they are some of the major stigmas and challenges associated with mental illness. Review of additional stigma research confirmed blame (Arboleda, Florez, & Stuart, 2012; Corrigan & Watson, 2007; Kobau et. al, 2010) and dangerousness (Arboleda, Florez, & Stuart, 2012; Corrigan & Watson, 2007; Kobau et. al, 2010; Narin, Coverdale, & Coverdale, 2011; Stuart, 2006) as primary stigmatizing themes and introduced disconnection (Kobau et. al, 2010; Narin, Coverdale, & Coverdale, 2011; Stuart, 2006) and chronicity (Arboleda, Florez, & Stuart, 2012) as additional stigmatizing themes for investigation. Stigma-challenging themes of recovery (Kobau et. al, 2010) and education, conceptualized as direct challenges (Arboleda, Florez, & Stuart, 2010), were also supported by the literature. Coercion, ability (originally empowerment and self-determination), and connection (opposite of social distancing) came primarily from the work by Corrigan and colleagues (2013). Coercion was especially pertinent for the present study since I targeted institutionalized individuals that were frequently diagnosed with more severe disorders. Ability and connection were also important to include since they stand in

opposition to important stigmatizing conceptualizations and encourage attitudinal change toward the mentally ill: those with mental illness are without hope for cure or indefinitely dependent on others (chronicity) and that the general public should distance themselves from those with mental illness (social distance).

Hypotheses. Previous research suggests that individuals with severe mental illnesses (e.g., schizophrenia) tend to face higher levels of stigmatization compared to those with more common psychiatric disorders (e.g., depression or anxiety), and that severity is commonly associated with the stigmatizing themes most resistant to correction (e.g., dangerousness) (Corrigan, Powell, and Michaels, 2013; Gaebel, Zäske, and Baumann, 2006). Historically, individuals with severe mental illness were commonly treated in long-term inpatient or institutional care. Therefore, I chose to focus specifically on published photographs and article text depicting institutionalized mental patients, because these stories may be most likely to contain the most problematic stigmatizing content. Although significant research has been conducted on modern media portrayals of mental illness, it is unknown to what extent contemporary stigmatizing and stigma-challenging depictions of the mentally ill have been present in historical media. The present study sought to fill this gap in the knowledge by evaluating two 20th century American picture story magazines, *Life* and *Look*, and examining to what extent modern media themes regarding mental illness are present in historical media portrayals of institutionalized mental patients. Drawing upon the work of Corrigan and colleagues (2013), I hypothesized that the stigmatizing portrayals of the mentally ill most commonly found in contemporary media would also be present in historical articles

published in *Life* and *Look*. Additionally, I hypothesized that historical changes in treatment, such as the availability of antipsychotic medications in the mid-1950s, not only led to better treatment for the severely mentally ill but also changed the way in which they were depicted in media portrayals published during that era. More specifically, I hypothesized that: 1) compared to the pre-antipsychotic era, depictions of mental patients published in the post-antipsychotic era will have a greater emphasis on individual identity and ability (e.g., greater visibility of patient faces, more frequent use of patient names, and more images demonstrating patients interacting with others); 2) stigmatizing portrayals will be more frequent in both magazines during the pre-antipsychotic era (1936-1952) and 2) stigma-challenging portrayals will be more frequent in both magazines during the post-antipsychotic era (1953-1972).

Method

For the present study I chose to look at historical media portrayals of institutionalized mental patients. I examined articles published in *Life* and *Look* magazines as they were uniquely situated in the time period that American institutional care of the mentally ill underwent significant change, both as a result of general reform movements and the advent of antipsychotic medication.

Data Collection

Article Selection Procedures. Originally, *Life* magazine was published weekly from November 1936 until December 1972. It is now digitized and available in its entirety online through Google Books. All 1,352 issues of *Life* were searched using a list of 40 keywords to identify issues that contained articles about mental health.

Keywords consisted of the most common forms of mental illness, all common mental health professional types (psychologist, psychiatrist, social worker, therapist, counselor), general terminology used to talk about the mentally ill (e.g., “mentally ill”, “patient”, “client”), and pejorative terminology about mental illness (e.g., “crazy”, “lunatic”, “madman”). A total of 148 magazines had relevant stories (10.95% of all published issues). The Google Books online archive was of insufficient resolution to conduct photographic or textual analysis so target articles were purchased, scanned, and transformed into high-resolution, interactive, digital files. *Look* magazine ran as a biweekly publication from February 1937 until October 1971 and the entire publication is available only on microfilm. I searched the publication manually over a period of eight weeks, reading through each of the 912 issues and searching for relevant articles guided by the same list of 40 mental illness keywords. Potential articles were reviewed with my research team to determine if it met criteria for inclusion in the archive. A total of 147 magazines had relevant stories (16.12% of all published issues). Similar to the *Life* data set, target articles were purchased, scanned, and transformed into high-resolution, interactive digital files.

Because my project focused on institutionalized patients, only a subset of the larger data set was selected for my analysis. A total of 40 articles (25 from *Life* and 15 from *Look*) contained at least one image of a current or former institutionalized mental patient and were analyzed for this study. Target stories from both magazines featured a total of 309 published photographs of institutionalized patients (183 in *Life*, 126 in *Look*). Stories depicting juvenile delinquents, the intellectually disabled,

the criminally insane, or individuals receiving outpatient therapy were excluded (see Appendix A for complete description of article and photograph selection procedures). The distribution of articles over the approximately 35-year publication period of both magazines can be found in Figure 1.

Development of Coding Scheme

Visual Content Analysis. Visual content analysis is a systematic approach to coding and analyzing media content in order to determine what is present in the data set as a whole rather than on a text-by-text³ basis (Bell, 2001). This methodology is especially useful for comparative analyses, which made it an ideal method of analysis for the present study. Due to the volume of material two separate analyses were conducted. The first focused on the photographic content using the statistical software SPSS. The second on the main story text and photograph captions using MaxQDA text analysis software.

Patient Demographic and Thematic Variables. In accordance with procedures outlined by Bell (2001) I conducted the visual content analysis with a coding structure that consisted of a set of defined target “variables” to investigate along with subcategories, or “values”, for each variable. In order to maximize the number of variables that I could investigate, I created two unique coding schemes, one for the photographs and one for the article text (see Appendix B for complete guides for both photographs and text). This allowed me to investigate patient variables and subthemes that could only be communicated through the narrative article content (e.g. client labels, blame, chronicity, and direct challenges). A series of patient

³ “Text” in content analysis can be visual, verbal, graphic, or oral components of the material being studied.

demographic variables were coded for both the photograph and narrative content. For each photograph all of the following patient demographic variables were coded; total number of patients depicted in the image, gender, age, ethnicity, face visibility (patient face fully, partially, or not visible), clothing (patient dressed or naked), name (patient named or unnamed in caption), treatment (type of treatment administered to patient), behavior (what the patient was doing in the photograph), interaction (presence/absence of patient interaction with another individual), and activity/passivity (was patient behavior active or passive). Patient demographic variables coded in the narrative data included client labels (generic, diagnostic, and pejorative terminology used to identify a patient), patient voice (instances when a patient was quoted directly), name (patient named in article text), and treatment (treatments that were administered to, or described as appropriate for, mental patients).

My thematic variable coding scheme was informed by the work of Corrigan, Powell, and Michaels (2013) and their findings regarding common contemporary stigmatizing (e.g., blame, coercion, and dangerousness) and stigma-challenging themes (e.g., recovery) about mental illness that are perpetuated by media content. Based on previous research, I selected additional stigmatizing and stigma-challenging themes that have been repeatedly identified in the literature (Arboleda-Florez & Stuart 2012; Corrigan, Powell, & Michaels, 2013; Corrigan & Watson, 2007; Kobau, Dilorio, Chapman, & Delvecchio 2010; Narin, Coverdale & Coverdale, 2011; Stuart, 2006). Stigmatizing themes included blame (e.g., patient is responsible for illness), chronicity (e.g., recovery is unlikely or impossible), coercion (e.g., patient is

being physically restrained), dangerousness (e.g., patient is violent toward self or others), and disconnection (e.g., patient is withdrawn or isolated). Stigma-challenging themes included ability (e.g., patient demonstrates simple or advanced skills), connection (e.g., patient is actively engaged and interacting with another person), direct challenge (e.g., stigmatizing belief about mental illness is highlighted and disputed as incorrect, faulty, or irrational), and recovery (i.e., patient is depicted as partially or fully recovered). Most stigmatizing and stigma-challenging themes were coded for both photographic and narrative content, although a few themes were uniquely present in the article text and captions (i.e., blame, chronicity, and direct challenge). A complete list of thematic variables and their definitions can be found in Table 1.

Coding Process and Reliability

Image Coding and Reliability. All photographs were coded based on the number of unique patient groups within each individual image. For example, a photograph containing one white female patient and two nonwhite female patients would have two unique patient groups. Each group was coded independently for the presence/absence of patient demographic variables as well as stigmatizing and stigma-challenging themes. Image coding reliability was conducted in three phases, with two phases of coder training and a final reliability test. After each phase of coder training, the research team discussed coding discrepancies and recommended changes were made to the coding manual. Once training was completed, coders worked independently to code all photographs and kappa values were calculated to evaluate inter-rater agreement (see Appendix C for a complete report of reliability

procedures and results). After calculating kappa values, remaining disagreements in coding were discussed by the research team and consensus was reached for each item. The resulting codes were used for final analysis. Inter-rater reliability was found to be acceptable or better for all stigmatizing and stigma-challenging thematic variables (kappa values ranged from .77 to .96).

Text Coding and Standardization. Narrative content from all target articles was coded at the sentence level for the presence/absence of stigmatizing and stigma-challenging language. As mentioned previously, text coding included several variables that were not used in the coding of the photographs. These themes were blame, chronicity, and direct challenges. Article text coding was conducted in multiple steps. I began by following a modified version of the open coding procedure outlined by Esterberg (2002). Rather than creating a coding scheme entirely from scratch, I approached the article text with common stigmatizing and stigma-challenging themes found in modern media content in order to develop definitions of the thematic variables that would reflect how these contemporary themes were communicated in the historical text. Once these definitions were created, I read through the data again and refined the variable definitions as necessary. As soon as a finalized definition had been created for each variable, I read through the text and coded each article for the presence of stigmatizing and stigma-challenging thematic content that would be used for future reliability statistics.⁴

⁴I have trained four other members of my research team on how to code the narrative content and they are currently completing the second set of coding so that inter-rater reliability values can be calculated for the narrative themes. Complete reliability data for the narrative content will be reported once I revise and submit this project for publication.

Since my data were not distributed equally across magazine and time period, the raw counts of stigmatizing and stigma challenging material were converted into standardized values so that comparisons could be made. Standardized values for magazine were found by calculating the ratio of the total number of stigmatizing or stigma-challenging sentences to the total number of sentences (including titles, headings, and captions) from the magazine the content was found in. For example, 220 sentences were coded for stigmatizing content in *Life* magazine out of a total of 2,985 sentences yielding a ratio of 0.074 (or 7.4%). Standardized values for time period were found by calculating the ratio of the total number of stigmatizing or stigma-challenging sentences to the total number of sentences (including titles, headings, and captions) from the time period in which the content was found. For example, 203 stigma-challenging sentences were coded in the post-antipsychotic era out of a total of 2,639 sentences that yielded a ratio of 0.077 (or 7.70%).

Results

SPSS Statistical Software (Version 22) and MaxQDA Textual Analysis Software (Version 11) were used to analyze the photograph and narrative article content. For both the photograph and narrative data, I examined differences in the prevalence of stigmatizing and stigma-challenging portrayals of institutionalized patients in *Life* and *Look* magazines, as well as differences in coverage between articles published before (1936-1952) and after (1953-1972) antipsychotic medications were available. Descriptive data for the photographic and narrative content will be presented first. Subsequently, I will report on important findings regarding the demographic variables, followed by the presence of stigmatizing and

stigma-challenging themes present in the photograph and narrative content between magazines, and over time, respectively.

Descriptive Data

Photograph Content. A total of 309 published images from 40 *Life* and *Look* magazine articles depicting 350 unique patient groups were included in the photographic analysis (199 in *Life*; 151 in *Look*). Of those 350 depictions, the majority was of individual patients (n = 271). Over half were of male patients (n = 199). Just less than three quarters presented a white patient (n = 259). The majority of photographs depicted adult patients (n = 269). Just over two-thirds of the patients were shown with their face visible to the reader (n = 243) but less than a quarter of patients were named in a corresponding caption (n = 78). Most of the patients were involved in some kind of interaction with another patient, mental health professional, or another individual (n = 223). Interactions ranged from receiving treatment, participating in social exchanges, to receiving assistance for basic activities such as walking, getting dressed, or eating. More than half of the depictions showed patients engaged in an active behavior (n = 189), which ranged from fundamental actions (walking, running, eating, etc.) to more complex activities such as dancing, participating in treatment, or engaging in social interactions.

Narrative Content. A total of 40 articles (25 from *Life* and 15 from *Look*) containing 4,726 sentences (2,985 from *Life* and 1,741 from *Look*) were included in the final analysis of the narrative content. Generic patient labels were used in nearly 20% of the total sentences (n = 773) and the most common labels were “patient” (n = 638) and “mentally ill” (n = 29). Diagnostic terminology was used in just under 3%

of the total narrative content (n = 124) and the most common terms used were “schizophrenic” (n = 36) and “psychotic” (n = 35). Pejorative language occurred in about 1% of the total written content (n = 56) and the most common word was “victim” (n = 15). Treatments administered to the institutionalized mentally ill were written about less than 10% of the time (n = 335). The most common treatments described were medical treatments that included surgery, shock therapies, and drug therapy (n = 148). Table 3 provides a detailed list of the frequency of all patient variables.

Stigmatizing and Stigma-Challenging Content in *Life* and *Look* magazines

Photograph content by magazine. A series of two by two chi-square analyses were conducted using each of the demographic variables, and comparing the two magazines to determine if any significant differences existed in who appeared in the photographs and how they appeared between the magazines. All analysis was conducted using a two-sided significance test since I did not have specific hypotheses about which magazine would have more or less content for each variable. As mentioned above, both magazines featured photographs with one patient, usually a white male. *Look* photographed significantly more children ($X^2 (1) = 6.21, p < 0.05$) and photographed significantly more patients with their face visible to the reader ($X^2 (1) = 5.67, p < 0.05$) than *Life*. *Life* provided significantly more patient names in the photograph captions than *Look* ($X^2 (1) = 9.13, p < 0.01$).

A series of two by two chi-square analyses were conducted using each of the categorical thematic variables, and comparing the two magazines to determine if any significant differences existed in the prevalence of stigmatizing and stigma-

challenging content between *Life* and *Look* magazines. There were no significant differences in the prevalence of total stigmatizing or total stigma-challenging photograph content between the two magazines (Stigmatizing: $X^2(1) = 0.06$, $p = 0.45$; Stigma Challenging: $X^2(1) = 9.4$, $p = 0.06$). However, of the stigma-challenging subthemes, *Look* had a significantly higher amount of depictions where patients were shown connecting with another individual (*Life* $n = 66$, 33.2%; *Look* $n = 72$, 47.7%: $X^2(2) = 10.92$, $p < 0.01$). See Table 3 for complete results of the photograph analysis between magazines.

Narrative content by magazine. A series of Wilcoxon-Mann Whitney tests were conducted using the categorical magazine variable and interval-level thematic narrative variables to determine whether the prevalence of stigmatizing and stigma challenging content differed between magazines. Although there were no significant differences in overall prevalence of stigmatizing content between the two magazines (*Life* $n = 220$, 7.4%; *Look* $n = 204$, 11.2%: $Z = -1.67$, $p = 0.10$) there was significantly more blame in *Look* magazine than *Life* (*Look* $n = 17$, 1.0%; *Life* $n = 16$, 0.5%: $Z = -2.29$, $p < 0.05$). *Look* published significantly more stigma challenging content than *Life* in its article and caption text over the course of its publication (*Look* $n = 180$, 10.3%; *Life* $n = 168$, 5.6%: $Z = -2.76$, $p < 0.05$). Of that stigma challenging content, *Look* published significantly more mentions of patient ability than *Life* magazine (*Look* $n = 33$, 1.1%; *Life* $n = 50$, 2.9%: $Z = -2.68$, $p < 0.01$) as well as significantly more direct challenges (*Look* $n = 57$, 3.3%; *Life* $n = 22$, 0.7%: $Z = -2.13$, $p < 0.05$). See Table 5 for complete results of the narrative analysis between magazines.

Stigmatizing and Stigma-Challenging Content in Pre- and Post-Antipsychotic Eras

Photograph content by time period. A series of two by two chi-square analyses were conducted using each of the demographic variables to determine if any significant changes occurred in the photograph content over time (pre v. post-antipsychotics). All analysis was conducted using a single-sided significance test since I predicted a change in direction for each variable, specifically that stigmatizing themes would decrease over time while stigma-challenging themes would increase. Additionally, I predicted that demographic variables that communicated patient identity such as face visibility and name would also increase in the post-antipsychotic era. Over time, there were more photographs of single patients ($X^2 (1) = 4.59, p < 0.05$) and more female patients ($X^2 (1) = 7.56, p < 0.01$). Significantly more children were photographed in the post-antipsychotic era ($X^2 (1) = 36.92, p < 0.01$). Additionally, there was an increase in face visibility over time ($X^2 (1) = 8.76, p < 0.01$). Significantly more patients were identified by name in the photograph captions in the post-antipsychotic era ($X^2 (1) = 60.8, p < 0.01$). Finally, there were significantly more photographs that showed a patient involved in an interaction with another individual following the advent of antipsychotic medication ($X^2 (1) = 12.25, p < 0.05$).

A series of two by two chi-square analyses were also conducted using each categorical time period to determine if any significant changes occurred in photograph content over time. Although there was not a significant difference in overall prevalence of stigmatizing content over time (pre $n = 58, 36.7\%$; post $n = 57,$

29.7%: $X^2(1) = 0.49, p = 0.28$) there was a significant decrease in the prevalence of coercion from the pre-antipsychotic era to the post-antipsychotic (pre $n = 17, 10.8\%$; post $n = 10, 5.2\%$: $X^2(1) = 3.75, p < 0.05$). There was not a significant difference in overall prevalence of stigma-challenging content over time (pre $n = 107, 67.7\%$; post $n = 155, 80.7\%$: $X^2(1) = 1.14, p = 0.17$) but there was a significant increase in the number of depictions of connection over time (pre $n = 54, 34.2\%$; post $n = 84, 43.8\%$: $X^2(2) = 9.26, p < 0.01$). See Table 4 for complete results of the photograph analysis between time periods.

Narrative thematic content by time period. A series of Wilcoxon-Mann Whitney tests were also conducted using the categorical time period (pre- and post-antipsychotic medications) and interval thematic narrative variables to determine if any significant differences existed in the prevalence of stigmatizing and stigma-challenging content over time. There was no significant difference in overall prevalence of stigmatizing content before the advent of antipsychotic medications than after (pre $n = 189, 9.1\%$; post $n = 235, 8.9\%$: $Z = -0.08, p = 0.95$). Although there was no significant difference in overall prevalence of stigma-challenging content between the two time periods (pre $n = 146, 7.0\%$; post $n = 203, 7.7\%$: $Z = -0.90, p = 0.38$), there was a significantly higher prevalence of direct challenges in the pre-antipsychotic era than in the post-antipsychotic (pre $n = 41, 2.0\%$; post $n = 47, 1.8\%$: $Z = -2.30, p < 0.05$). See Table 5 for complete results of the narrative analysis between time periods.

Discussion

My driving research question was whether stigmatizing portrayals of the mentally ill most commonly found in contemporary media were also present in the articles published in *Life* and *Look*. My findings support that many of the same stigmatizing themes we identify in modern media portrayals were present as early as the late 1930s. Just over 7% of the narrative content from *Life* and nearly 11% of the narrative content from *Look* was made up of stigmatizing content, primarily themes of coercion, dangerousness, and disconnection. Stigma-challenging themes were also present in the narrative with nearly 6% of the narrative content from *Life* and just over 10% of the narrative from *Look*. Stigmatizing themes were also present in the photographs. When looking at both magazines together, coercion was present in 8% of the photographs, dangerousness in nearly 3%, and disconnection in almost 40% of cases. This disparity in frequency may have occurred for a variety of reasons: 1) dangerousness has already been shown to be rare among the mentally ill, 2) coercion and dangerousness as I have defined them may have been difficult to capture on film, 3) disconnection encompassed more patient behaviors, including withdrawal and isolation, which led to the inclusion of more photographs under this subtheme. Stigma-challenging content was also prevalent in the photographs for both magazines with nearly 49% of the photographs from *Life* and almost 59% of the photographs from *Look* displaying themes of ability, recovery, and connection.

Previous research on media portrayals of mental illness has found that stigmatizing media coverage can reinforce beliefs that the mentally ill are violent, socially incompetent, blameworthy, and should be made to receive treatment

(Corrigan, Powell, & Michaels, 2013; Nairn, Coverdale, & Coverdale, 2011). Media coverage can also help promote stigma-challenging beliefs about mental illness by including unbiased and accurate information about mental illness and its symptoms, personal accounts of mental illness, and themes such as social inclusion, personal empowerment, and recovery (Nairn & Coverdale, 2005; Stout, Villegas, & Jennings, 2004). However, the mere presence of this information may not counteract or alleviate the damage done with stigmatizing portrayals (Corrigan, Powell, & Michaels, 2013; Dietrich et. al, 2006). While stigmatizing content was not highly prevalent in either magazine and did occur less frequently than most stigma-challenging content, its potential negative impact on the reader's perception of the mentally ill should not be underestimated.

Examining the Hypotheses

My first hypothesis was that depictions of mental patients in the post-antipsychotic era would have a greater emphasis on individual identity and ability. Over time, mental patients were photographed with their faces more clearly visible to the reader, were named in the accompanying photograph caption more often, and were more frequently shown involved in an interaction with another individual. The combination of these changes produces a more humanizing portrayal of the mentally ill which is not found in the pre-antipsychotic era. Before antipsychotics, patients were rarely referred to by name and were even less frequently quoted using their own words and many photographs depicted patients without any visible facial features. Additionally, some photographs depicted photographs of patients and mental health professionals together, clearly displaying the face of the

professional while obscuring the face of the patient. These trends could give a message that the mentally ill are nameless, faceless individuals who lack any importance to the reader outside of their illness, however it is possible that the lack of names and faces can be attributed to institutional confidentiality practices. After the advent of antipsychotic medication, we get a more humanizing portrait of the patients by being given their names, being able to clearly see their faces, and seeing them interacting with other people, all changes that possibly helped reduce the social distance between the reader and the patients in the photographs. In addition to the increase in patient identity, the image of who could be a mental patient also seemed to become more inclusive since over time more mentally ill women and children were photographed. The combination of this increase in patient identity and broadening of who was included in depictions of mental illness may have made the material more accessible to the reader.

Additionally, I hypothesized that stigmatizing content would be more prevalent *prior* to antipsychotic medication and stigma-challenging content more common *following* the advent of antipsychotics. When looking at the thematic content alone, the total amount of stigmatizing and stigma-challenging content seemed fairly consistent over time, with only a few subcomponents of each theme changing over time. Visual portrayals of coercion decreased significantly following the advent of antipsychotic medication and visual portrayals of connection increased significantly in the articles published after 1952. In the text, only direct challenges changed from one era to the other with more challenges being made in the post-antipsychotic era. Taken together, these findings may suggest that the

efficacy of antipsychotic medications may have also translated to important changes in the way in which institutionalized patients were depicted visually during the post-antipsychotic era but did not impact how they were written about. For example, visual coverage in *Life* and *Look* during the mid-1950s onward minimized the use of coercive treatments and emphasized patients' potential to connect with others, but in the article and caption text the stigmatizing content remained fairly consistent over time and at a greater frequency than the stigma-challenging content.

As mentioned previously, this humanization of the patient by emphasizing more social connection and identity and deemphasizing coercive forms of treatment was observed in the narrative content. However, a significant decrease in direct challenges did occur in the post-antipsychotic era. Upon review of the narrative content I coded for direct challenge, I noticed that many of the challenges made before the introduction of antipsychotics blamed the general public for the current plight of the mentally ill in institutional care and framed mental illness as a treatable disease. Challenges made in the post-antipsychotic era were more focused on reducing social distance between the mentally ill and the general public by emphasizing their humanity and similarities to other individuals experiencing illness. Additionally, these challenges corrected public misunderstanding of what mental illness entails for the ill individual. Perhaps challenges decreased over time since the emergence of antipsychotics and movement toward institutional care led to a decrease in reporting of themes which would require qualifying information (e.g., coercion, dangerousness).

Looking at Life and Look

During analysis, interesting differences emerged between the two magazines that could be reflective of their unique editorial missions. Previous work with the magazines suggests that *Look* did not share *Life's* goal for covering breaking news and did not have the same reputation for scientific coverage that *Life* enjoyed (Cookman, 2009; Webb, 2010). *Life* included more single page news stories that were generally more stigmatizing than the lengthier articles on mental illness. This could be because they typically focused on criminal or dangerous behavior and were accompanied by photographs with similar content. The magazine's propensity for breaking news would suggest that *Life* would have more stigmatizing coverage than *Look*, but they were not significantly different in stigmatizing photographic or narrative content. Furthermore, *Look* had more stigma-challenging content in both its photographic and narrative content than *Life*. One of the most interesting differences between the magazines was the prevalence of "direct challenges." I defined direct challenges as text that questions stigmatizing beliefs or ideas through education or pointing out misinformation or stereotypes about the mentally ill as incorrect, faulty, or irrational. *Look* frequently included educational material for its readers in a variety of subjects including health, politics, and domestic issues (such as filing taxes or raising children), so it is likely the magazine's editorial style influenced the inclusion of more of this type of stigma-challenging component. Since *Life* enjoys more notoriety than *Look*, it is possible that its content may have a more lasting impact. *Life* continues to be reprinted in specialized anniversary additions and is easily accessible online, whereas *Look* can only be found in its entirety in

select libraries on microfilm. During the time of their publication readers of *Life*, who tended to be of a higher socioeconomic status than *Look's* readers, may have not encountered the same educational material that *Look* provided. While there will never be a way of knowing for sure, it is possible that the differences in the magazines reflect a difference in the perception of the mentally ill between socioeconomic groups.

Implications

Previous research has suggested that some stigmatizing beliefs about the mentally ill, such as blame or dangerousness, are not greatly impacted or changed after exposure to correcting or socially affirming stories about mental illness (Corrigan, Powell, & Michaels, 2013). This suggests that the effects of reading stigmatizing media content may be resistant to change and that simply having stigma-challenging content in our news stories may not correct the misinformation about, and discrimination towards, those who are mentally ill. Those who face severe mental illness may be subject to higher levels of stigmatization than those with more common disorders, especially in terms of perceived dangerousness and as a result, the beliefs held about these individuals and their illnesses may be harder to combat (Gaebel, Zäske, and Baumann, 2006; Phelan, Link, Stueve, & Pescosolido, 2000). This is especially problematic as living with stigmatization can lead to external discrimination through housing, employment, and insurance coverage, as well as on a more individual level through chronic stress and a decrease in care seeking (Boyd et. al, 2010; Link & Phelan, 2006).

My findings suggest that some contemporary stigmatizing themes have been present in American media as early as the late 1930s, meaning that generations of individuals have been exposed to stigmatizing portrayals of the mentally ill. It is likely that these deeply rooted stereotypes, particularly those that the mentally ill are dangerous, are passed along by generations who grew up with these media depictions. Recent research has suggested that the stigma associated with some common mental disorders (e.g., depression and anxiety) has seen a decline in stigmatization since the mid-1950s, but that the stigma associated with severe mental illnesses (e.g., schizophrenia) has actually increased over time (Phelan, Link, Stueve, & Pescosolido, 2000). This is supported by my findings, as stigmatizing portrayals of the institutionalized mentally ill did not appear to significantly decrease after the advent of antipsychotic medication. Further study on different subsets of the mentally ill who may also face significant stigmatization, such as substance abusers, juvenile delinquents, or the intellectually disabled is needed.

Limitations and future directions.

Although this study is the first to examine both visual and narrative historical news media portrayals of institutionalized patients it is important to note several limitations of the project. First, it is possible that by excluding articles that did not contain photographic content I may have an incomplete understanding of the themes present in the narrative data to the extent that articles about institutionalized mental patients with and without photographs differed in the quality or type of content. Second, it is important to note that by calculating frequencies for stigmatizing and stigma-challenging content that there is an implicit

assumption that each individual instance carries equivalent value. Certain articles and photographs may have carried higher levels of influence on public opinion. For example, *Life* magazine published several single page articles detailing a breaking news story that often featured half- or full-page photographs with little accompanying text. Several of these images depicted patients attempting to commit suicide or trying to harm another person and may have carried more weight with the reader due to their prominence on the page, striking visual imagery, and intensity of content. In order to explore what kind of impression these stories may have made on the readers of *Life* and *Look* I plan on coding the published content in the “Letters to the Editor” sections of both magazines for the target articles in this study.

In addition to this, future work should investigate what kind of impact these historical portrayals may have on contemporary audiences. Lastly, the narrative data has not undergone reliability testing so my narrative findings should be interpreted with caution. My definitions for the stigma-challenging content were considerably broader than those for the stigmatizing content, which may have led to an inflation of stigma-challenging instances. Refining the coding scheme, establishing kappa values for the narrative themes, discussing discrepancies, and reaching consensus it will allow me to comment on some of the narrative findings that were trending toward significance with more confidence. Additionally, I plan to explore whether or not stigmatizing and stigma-challenging content can be further understood by analyzing a magazine by time interaction. However, when the data is split into the four categories for this analysis (i.e., *Life* pre-antipsychotic era, *Life*

post-antipsychotic era, *Look* pre-antipsychotic era, and *Look* post-antipsychotic era) several of the thematic variables for each cell are quite small ($n = 10$ or less). Once inter-rater reliability has been fully established and the remaining discrepancies in the coding have been resolved by consensus I will be able to examine the interaction between magazine and time period with greater confidence.

Conclusions

Readers of *Life* and *Look* magazine were exposed to hundreds of images and thousands of sentences about mental patients which included many of the stigmatizing elements we see in today's media portrayals. Even though stigma-challenging content occurred with more frequency in both magazines than stigmatizing content, we cannot say with certainty that the more positive portrayals and educational material mitigated the effects of the magazines' more negative content about the institutionalized mentally ill. Additionally, despite more positive changes in visual depictions of the mentally ill, the frequency of stigmatizing narrative portrayals present in the magazines did not significantly decrease following the advent of antipsychotic medications, suggesting that some negative beliefs about the mentally ill may have been relatively stable over time. These magazines, especially *Life*, have become a recognizable component of our popular culture and are collected by enthusiasts, partially republished for anniversary or commemorative items, and are still easily accessible to modern audiences. While at times unsettling, it is important to understand what messages these publications contain about mental illness and how their influence contributed to, and perhaps

continues to inform, our understanding of those who suffer from mental illness today.

Figure 1. *Number of Life and Look magazine articles by publication year*

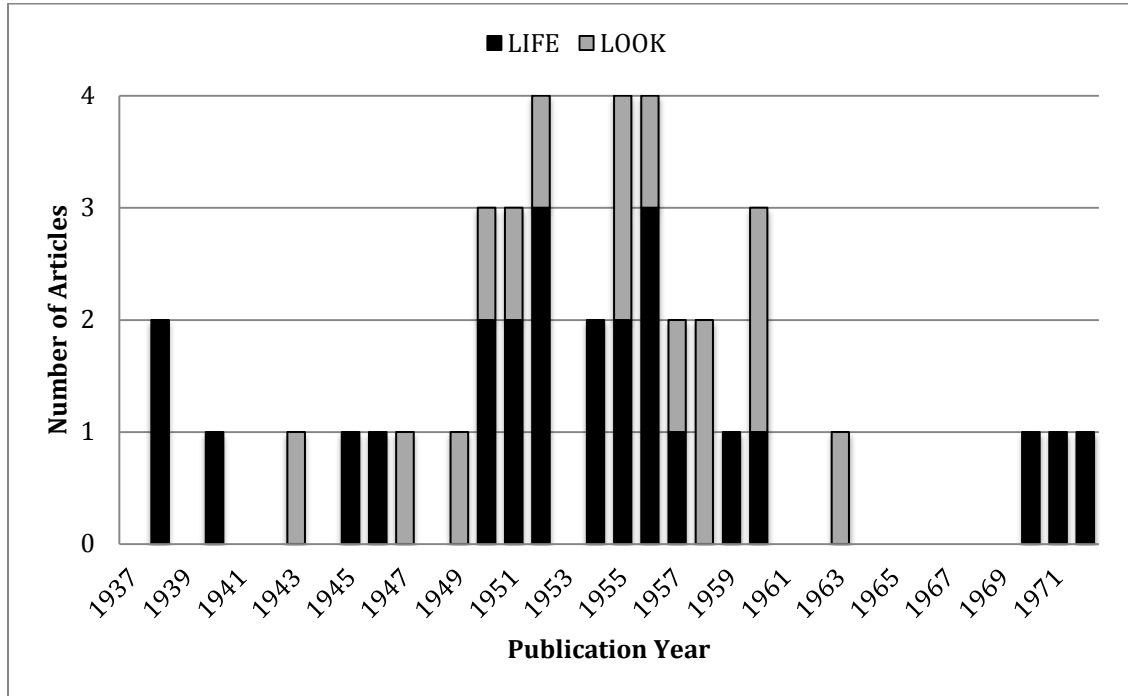


Table 1. *Definitions of stigmatizing and stigma-challenging thematic variables*

Variable	Brief Definition	Source
<i>Stigmatizing</i>		
Blame ^{A, D, E}	Mental patients are personally responsible for their illness, have control over the course of their illness, or that they are faking their illness or symptoms.	Text Only
Chronicity ^D	Duration of illness is extremely long or that recovery is unlikely or impossible.	Text Only
Coercion ^B	A photograph that shows a mental patient being physically restrained. - OR - Text that states mental patients should be or have been forced into treatment.	Both
Dangerousness ^{A, B, C, D, E, F}	Photographs that depict a mental patient engaged in a criminal or potentially harmful behavior. - OR - Text that indicates mental patients are violent, dangerous, or engage in criminal behavior.	Both
Disconnection ^{C, E, F}	Photographs that depict a mental patient socially withdrawing or isolating himself or herself. - OR - Text that indicates mental patients are separate or different from the rest of the world either forcibly, voluntarily, or by means of their illness.	Both
<i>Stigma Challenging</i>		
Ability ^B	Photographs that depict a mental patient performing simple tasks, specialized activities, or mastery of an advanced skill. - OR - Text that indicates mental patients are self-sufficient, independent, or have agency.	Both
Connection ^B	Photographs that depict a mental patient actively engaged and participating in an interaction with another individual. - OR - Text that indicates mental patients are able to create or sustain social and emotional connections and relationships with others.	Both

Direct Challenge D	Text that directly challenges or questions a stigmatizing belief by education or claiming it to be incorrect, faulty, or irrational.	Text Only
Recovery ^{B, E}	Photographs that depict a mental patient who is recovered at the time of the photograph. - OR - Text that indicates mental patients have recovered, can recover, or have made improvement.	Both

A- Corrigan & Watson (2007)

D - Arboleda-Florez, & Stuart (2012)

B - Corrigan, Powell, & Michaels (2013)

E - Kobau et al. (2010)

C - Stuart (2006)

F - Nairn, Coverdale, & Coverdale (2011)

Table 2. Descriptive data of institutionalized patients written about in *Life* and *Look* magazines

Demographic Patient Variables	<u>Percentage</u>	<u>(N = 4,726)</u>
<u>General label</u>	16.4%	(n = 773)
Patient	13.5%	(n = 638)
Mentally ill	0.6%	(n = 29)
Insane	0.6%	(n = 29)
Inmate	0.4%	(n = 20)
Case	0.3%	(n = 14)
Disturbed	0.3%	(n = 14)
<u>Diagnostic label</u>	2.6%	(n = 124)
Schizophrenic	0.8%	(n = 36)
Psychotic	0.7%	(n = 35)
Neurotic	0.4%	(n = 20)
Catatonic	0.2%	(n = 8)
Manic-depressive	0.2%	(n = 9)
<u>Pejorative label</u>	1.2%	(n = 56)
Victim	0.3%	(n = 15)
Lunatic	0.1%	(n = 7)
Crazy	0.1%	(n = 5)
Mad	0.1%	(n = 6)
<u>Patient voice</u>	1.3%	(n = 63)
<u>Name</u>	2.9%	(n = 136)
<u>Treatment Received</u>	7.1%	(n = 335)
Restraint	1.0%	(n = 47)
Occupational	0.3%	(n = 14)
Medical	3.1%	(n = 148)
Talk therapy	0.7%	(n = 33)
Assessment	0.4%	(n = 17)
Other	1.0%	(n = 46)

Table 3. Analysis of demographic and thematic variables by magazine for photograph content

	<i>Life Magazine</i> (N=199)	<i>Look Magazine</i> (N=151)	<u>X² Value</u>
Demographic			
<u>Number</u>			
1	81.4% (n = 162)	72.2% (n = 109)	X ² (1) = 4.18 (p = 0.052)
2+	18.6% (n = 37)	27.8% (n = 42)	
<u>Gender</u>			
Male	53.3% (n = 106)	74.4% (n = 113)	X ² (1) = 1.52 (p = 0.25)
Female	36.7% (n = 73)	11.3% (n = 17)	
<u>Race</u>			
White	73.4% (n = 146)	74.8% (n = 113)	X ² (1) = 2.98 (p = 0.11)
Nonwhite	5.5% (n = 11)	11.3% (n = 17)	
<u>Age</u>			
Adult	80.4% (n = 160)	72.2% (n = 109)	X² (1) = 6.21 (p < 0.05)
Child	16.1% (n = 32)	27.8% (n = 42)	
<u>Face</u>			
Visible	64.3% (n = 128)	76.2% (n = 115)	X² (1) = 5.67 (p < 0.05)
Not Visible	35.7% (n = 71)	23.8% (n = 36)	
<u>Named</u>	28.1% (n = 56)	14.6% (n = 22)	X² (1) = 9.13 (p < 0.01)
<u>Interaction</u>	60.8% (n = 121)	67.5% (n = 102)	X ² (1) = 1.69 (p = 0.22)
<u>Active</u>	56.8% (n = 113)	50.3% (n = 76)	X ² (1) = 1.44 (p = 0.24)
Thematic			
<u>Stigmatizing</u>	28.6% (n = 57)	29.8% (n = 45)	X ² (1) = 0.06 (p = 0.81)
Coercion	7.0% (n = 14)	8.6% (n = 13)	X ² (1) = 0.30 (p = 0.36)
Dangerousness	4.0% (n = 8)	1.3% (n = 2)	X ² (1) = 2.25 (p = 0.12)
Disconnection	20.6% (n = 41)	24.5% (n = 37)	X ² (1) = 0.75 (p = 0.23)
<u>Challenging</u>	48.7% (n = 97)	58.9% (n = 89)	X ² (1) = 3.59 (p = 0.06)
Ability	27.1% (n = 54)	25.8% (n = 39)	X ² (1) = 0.08 (p = 0.44)
Recovery	10.6% (n = 21)	6.6% (n = 10)	X ² (1) = 1.64 (p = 0.14)
Connection	33.2% (n = 66)	47.7% (n = 72)	X² (2) = 10.92 (p < 0.01)

Table 4. Analysis of demographic and thematic variables by time period for photograph content

	<u>1936-1952</u> (N=158)	<u>1953-1972</u> (N=192)	<u>X² Value</u>
Demographic			
<u>Number</u>			
1	72.2% (n = 114)	81.8% (n = 157)	X² (1) = 4.59 (p < 0.05)
2+	27.8% (n = 44)	18.2% (n = 35)	
<u>Gender</u>			
Male	61.4% (n = 97)	53.1% (n = 102)	X² (1) = 7.56 (p < 0.01)
Female	25.3% (n = 40)	42.2% (n = 81)	
<u>Race</u>			
White	68.4% (n = 108)	78.6% (n = 151)	X ² (1) = 0.01 (p = 0.53)
Nonwhite	7.6% (n = 12)	8.3% (n = 16)	
<u>Age</u>			
Adult	90.5% (n = 143)	65.6% (n = 126)	X² (1) = 36.92 (p < 0.01)
Child	6.3% (n = 10)	33.3% (n = 64)	
<u>Face</u>			
Visible	61.4% (n = 97)	76.0% (n = 146)	X² (1) = 8.76 (p < 0.01)
Not Visible	38.6% (n = 61)	23.9% (n = 46)	
<u>Named</u>	3.2% (n = 5)	38.0% (n = 73)	X² (1) = 60.8 (p < 0.01)
<u>Interaction</u>	53.8% (n = 85)	71.9% (n = 138)	X² (1) = 12.25 (p < 0.01)
<u>Active</u>	49.4% (n = 78)	57.8% (n = 111)	X ² (1) = 2.49 (p = 0.07)
Thematic			
<u>Stigmatizing</u>	36.7% (n = 58)	29.7% (n = 57)	X ² (1) = 0.49 (p = 0.28)
Coercion	10.8% (n = 17)	5.2% (n = 10)	X² (1) = 3.75 (p < 0.05)
Dangerousness	1.9% (n = 3)	3.6% (n = 7)	X ² (1) = 0.95 (p = 0.26)
Disconnection	24.1% (n = 38)	20.8% (n = 40)	X ² (1) = 0.52 (p = 0.28)
<u>Challenging</u>	67.7% (n = 107)	80.7% (n = 155)	X ² (1) = 1.14 (p = 0.17)
Ability	26.6% (n = 42)	26.6% (n = 51)	X ² (1) = 0.00 (p = 0.55)
Recovery	7.0% (n = 11)	10.4% (n = 20)	X ² (1) = 1.28 (p = 0.17)
Connection	34.2% (n = 54)	43.8% (n = 84)	X² (2) = 9.62 (p < 0.01)

Table 5. Analysis of thematic text and caption content by magazine and by time period

	<u>Life Magazine</u> (2,985 Sentences)	<u>Look Magazine</u> (1,741 Sentences)	<u>Value</u>
<u>Stigmatizing</u>	7.4% (n = 220)	11.2% (n = 204)	Z = -1.67 (p = 0.10)
Blame	0.5% (n = 16)	1.0% (n = 17)	Z = -2.29 (p < 0.05)
Chronicity	0.7% (n = 20)	1.4% (n = 25)	Z = -0.92 (p = 0.36)
Coercion	1.6% (n = 48)	2.9% (n = 50)	Z = -0.73 (p = 0.47)
Dangerousness	1.5% (n = 45)	3.7% (n = 65)	Z = -1.63 (p = 0.33)
Disconnection	3.0% (n = 91)	2.7% (n = 47)	Z = -2.76 (p = 0.10)
 <u>Challenging</u>	 5.6% (n = 168)	 10.3% (n = 180)	 Z = -2.76 (p < 0.05)
Ability	1.1% (n = 33)	2.9% (n = 50)	Z = -2.68 (p < 0.01)
Recovery	2.0% (n = 61)	1.6% (n = 27)	Z = -1.57 (p = 0.12)
Connection	1.7% (n = 52)	2.6% (n = 46)	Z = -1.88 (p = 0.06)
Direct	0.7% (n = 22)	3.3% (n = 57)	Z = -2.13 (p < 0.05)
	 <u>1936-1952</u> (2,087 Sentences)	 <u>1953-1972</u> (2,639 Sentences)	 <u>Value</u>
<u>Stigmatizing</u>	9.1% (n = 189)	8.9% (n = 235)	Z = -0.08 (p = 0.95)
Blame	0.7% (n = 14)	0.7% (n = 19)	Z = -0.31 (p = 0.80)
Chronicity	0.8% (n = 17)	1.1% (n = 28)	Z = -0.22 (p = 0.86)
Coercion	3.0% (n = 62)	1.4% (n = 36)	Z = -0.80 (p = 0.44)
Dangerousness	2.6% (n = 55)	2.1% (n = 55)	Z = -0.14 (p = 0.90)
Disconnection	2.0% (n = 41)	3.7% (n = 97)	Z = -0.97 (p = 0.35)
 <u>Challenging</u>	 7.0% (n = 146)	 7.7% (n = 203)	 Z = -0.90 (p = 0.38)
Ability	1.5% (n = 31)	2.0% (n = 52)	Z = -0.69 (p = 0.53)
Recovery	1.2% (n = 26)	2.7% (n = 72)	Z = -0.89 (p = 0.41)
Connection	2.3% (n = 48)	1.2% (n = 31)	Z = -1.09 (p = 0.31)
Direct Challenge	2.0% (n = 41)	1.8% (n = 47)	Z = -2.30 (p < 0.05)

APPENDIX A

ARTICLE AND IMAGE SELECTION PROCEDURES

Article Selection Criteria

A total of 295 issues of *Life* and *Look* magazine, which had been previously identified as containing an article or photograph featuring mental illness or its treatment, were examined. Articles that contained at least one image of a mental patient receiving treatment in a long-term inpatient or institutional treatment setting (by either the article text or photograph caption) were included in the final data set for the current project. Mental patients could be either adults or children receiving inpatient care for their illness or patients who had recently escaped from institutional care. Images and articles featuring the institutional care of juvenile delinquents, the intellectually disabled, and the criminally insane, were not included in the final data set since these groups require (or have access to) more specialized treatment than the average institutionalized mental patient would receive. Images and articles showing individuals being treated for addiction or substance abuse in an institutionalized setting were excluded for the same reasons listed above. Articles that featured a prominent professional being treated for a mental illness were also excluded from analysis as they represented a subset of “mentally ill professionals” rather than general institutionalized mental patients. 25 articles from *Life* magazine and 15 articles from *Look* magazine were included for a total of 40 articles ranging in date from 1938 to 1972.

Photograph Inclusion Criteria

The current project focused on the portrayal and stigmatization of institutionalized patients so all photographs present in the articles that did not include an institutionalized patient were excluded from the final data set. This also included all photographs featuring only mental health professionals and institutional staff, building exteriors, and illustrations. Of all images from the 40 selected articles, a total of 309 images were included for analysis. 183 images were from *Life* magazine and 126 images were from *Look* magazine.

APPENDIX B
Coding Guides

Image Coding Guide

General

Name: *MAGAZINE*

Label: Magazine Title

Value: 1 = LIFE; 2 = LOOK

Missing: There should be no missing values for this variable.

Name: *NUMBER*

Label: Number of *patients* depicted

Value: Numerical value.

Note: Each type of individual should be coded separately based on gender, ethnicity, age, and name. If there were 5 male patients, 3 white female patients, and 2 nonwhite female patients they should be coded in groups based on gender and ethnicity with one line for male patients, one line for white female patients, and one line for nonwhite female patients. If one of the patients is named and the others are not, then the named patient also receives their own line.

Missing: There should be no missing value for this variable.

Name: *GENDER*

Label: Gender of individuals depicted

Value: 1 = Male; 2 = Female; 3 = Unidentifiable

Missing: There should be no missing value for this variable.

Name: *ETHNICITY*

Label: Race/ethnicity of *patients* depicted

Value: 1 = White; 2 = Nonwhite; 3 = Unidentifiable

Missing: There should be no missing value for this variable.

Name: *FACE*

Label: Face of individual visible

Value: 1 = Fully; 2 = Partially; 3 = Not at all

Note: Fully visible is when you can clearly see the both eyes and mouth of the individual. Partially visible is when you see any less than both eyes and mouth but more than a single ear. Not at all visible is when you see only the individual's ear or less.

Missing: There should be no missing value for this variable.

Name: *CLOTHED*

Label: Individuals clothed

Value: 1 = Formal; 2 = Casual; 3 = No; 4 = Unidentifiable

Note: Formal dress would be a suit or sophisticated dress.

Missing: There should be no missing value for this variable.

Name: *NAMED*

Label: Individuals named in caption

Value: 1 = Yes; 2 = No

NOTE: Named means the mention of a *patient's* specific name – first name (Bob) or last name (Jones) are examples of being named. General terms (man, schizophrenic) are not examples of being named.

Missing: There should be no missing value for this variable.

Name: *BEHAVIOR*

Label: What is (are) the *patient(s)* doing in the photograph?

Value: A simple description of what the *patient* is doing. This should be taken primarily from the caption information but can also be coded based solely on visual information. When you code this variable based solely on visual information and not on caption information you should write, “looks like...”.

Missing: There should be no missing value for this variable.

Name: *INTERACT*

Label: Interaction between patient and others in the photograph

Value: 1 = Yes; 2 = No.

Note: An interaction is defined as any type of connection between subjects in a photograph – it can be physical (touching, hugging, hitting, etc.) or nonphysical (looking at one another, laughing together, talking, gesturing at one another). “No” should be coded for all photographs consisting of a patient alone or for photographs where there are multiple individuals in the photograph and the caption/visual content makes it apparent that no interaction is occurring (subjects looking in completely opposite directions or one is asleep).

Missing: There should be no missing value for this variable.

Name: *ACTPASS*

Label: Active or passive behavior

Value: 1 = Active; 2 = Passive.

Note: “Active” should be coded when the subject in the photograph is visually depicted engaging in any active behavior: walking, talking, running, shaking hands, eating, opening gifts, playing, yelling, or laughing with someone, among others. “Passive” should be coded when the subject in the photograph is visually depicted or the caption describes any of the following: looking, listening, laying down, sleeping, smiling in a portrait, or any other passive behavior. *Caption information can be used to inform your understanding of the photograph but coding Active/Passive behavior should be based solely on the visual and not the caption content.*

Missing: There should be no missing value for this variable.

Name: *TREATTYPE*

Label: Type of treatment being received.

Value: Write in any description of the treatment being received. If a treatment is not described then write, “looks like...” based on visual information in the photograph (Ex. Electroshock, restraints, injection, basic care). *Caption information can be used to inform your understanding of the photograph but coding treatment type should be based solely on visual data and not caption content.*

Missing: “No treatment”. A missing value should be coded when the photograph shows no treatment being received.

Name: AGE

Label: Age of patients depicted

Value: 1 = Adult; 2 = Adolescent; 3 = Child.

NOTE: Child should be used as the default code for all non-adult patients unless the caption/photograph makes it explicitly clear that the subject is an adolescent/teenager.

Missing: There should be no missing value for this variable.

Stigmatizing

Name: COERCION

Label: Is patient being restrained?

Value: 1 = Yes; 2 = No.

Note: Restraints are any kind of restraining device that is physically preventing a patient from moving or leaving a certain location (shackles, straitjacket/“camisole”, chains, sheets, cages, etc.). Images showing attendants holding down/holding back patients should also be counted as restraint. This includes treatments where the patient has to be held down for the treatment to be administered (ex. Electroshock). Other treatments should only be coded as coercion when the caption makes it clear that the patient is receiving treatment against their will.

Missing: There should be no missing value for this variable.

Name: DANGEROUS

Label: Is the patient exhibiting dangerous or criminal behavior?

Value: 1 = Yes; 2 = No.

Note: “Yes” should be coded any time the patient is shown engaging in a behavior that could be considered to be dangerous (potential of harm for either the patient or other individuals as a result of this action) or criminal (could be considered unlawful from public perspective). *Caption information can be used to inform your understanding of the photograph but coding dangerous or criminal behavior should be based solely on visual data and not caption content.*

Missing: There should be no missing value for this variable.

Name: DISCONNECTION

Label: Is the patient disconnected from others?

Value: 1 = Yes; 2 = No.

Note: Code “yes” anytime the patient appears to be withdrawing from the interactions or world around them. Examples of disconnection could include patients who are not returning the interest someone else is showing in them, lack of eye contact with the other individual in the interaction, or patient’s body posture. “No” should be coded when disconnection is not taking place and the image does not meet the criteria for a missing value. Disconnection should only be coded based on the behavior of the patient(s). *Caption information can be used to inform your understanding of the photograph but coding isolation or avoidance should be **based solely on visual data** and not caption content.*

Missing: -9 A missing value should be coded only for portraits (individual or group) or when there is not enough of the patient’s body visible to determine if they are disconnecting from other individuals in the photograph.

Stigma-Challenging:

Name: *ABILITY*

Label: Is the patient demonstrating ability?

Value: 1 = Yes: Skilled; 2 = Yes: Basic; 3 = No

Note: Basic activities include activities that are relatively easy to execute and require little special learning in order to be able to perform them (ex. sweeping, peeling, cleaning, etc.). Activities such as walking, talking, or standing would not be counted as a demonstration of ability. Skilled abilities include more specialized activities that would require some level of mastery of more advanced skills to be able to perform them (ex. painting, weaving, playing sports or instruments, dancing, etc.).

Missing: There should be no missing value for this variable.

Name: *CONNECTION*

Label: Is the patient shown connecting with others?

Value: 1 = Yes: Therapeutic; 2 = Yes: Social – Patient/Professional; 3 = Yes: Social – Patient/Patient; 4 = Yes: Social – Patient/Other; 5 = Yes: Social – Multiple; 6 = Yes: Social – Undefined; 7 = No.

Note: Code all interactions between patients and others in which the patient is actively engaging in the interaction. “Therapeutic” interactions are those in which the patient is engaging with a professional or staff person in a treatment setting. “No” should be coded for those treatments in which the patient is simply following instructions and does not appear to be actively engaged with the professional administering the treatment (could be signaled by lack of eye contact or body posture). “Others” are defined as anyone who is not part of the day-to-day operations of the institution (ex. volunteers, visitors, community members). When multiple individuals are present, use the caption information to inform your understanding of which individual the patient is interacting with. Connection should be coded solely based on the behavior of the patient(s) in the interaction. *Caption information can be used to inform your understanding of the photograph but coding connection should be **based solely on the visual data** and not caption content.*

Name: *RECOVERY*

Label: Is the patient recovered?

Value: 1 = Yes; 2 = No.

Note: "Yes" should be coded anytime that a patient is currently (at the time the photograph was taken) recovered. This can include images where patients are prepping to leave the institution or images of ex-patients who have already left the institution. Photographs that show a patient in an institution with a caption that states, "The patient later recovered" should be coded as "no". *Caption information can be used to inform your understanding of the photograph but coding recovery should be **based solely on visual data** and not caption content.*

Missing: There should be no missing value for this variable.

Text Coding Guide

General Variables*Coded at Document level rather than sentence level***Name:** Magazine**Value:** LIFE or LOOK**Name:** Antipsychotics**Value:** Pre-Antipsychotics, Post-Antipsychotics**Description:** All documents published from 1937 to 1955 will be labeled as “Pre-Antipsychotics” and all documents published in 1956 or later will be labeled as “Post-Antipsychotics”.**Patient Variables***Coded at sentence level***Name:** Label**Value:** General, Diagnostic, Pejorative**Description:**

1. General – all terms that refer broadly to the mentally ill or hospitalized individuals.
2. Diagnostic – terms that refer to clients with specific clinical diagnostic terminology.
3. Pejorative – slang terminology that references the mentally ill or their state of mind.

Example:

1. General – “mentally ill”, “mental illness”, “patient”
2. Diagnostic – “neurotic”, “psychotic”, “schizophrenic”
3. Pejorative – “insane”, “madman”, “victim”

Name: Patient Name**Description:** Code any time that a patient is named in either the article text or the captions.**Name:** Quote**Description:** Code any direct quotes from current or former mental patients.**Name:** Treatment Type**Description:** Code all named treatments.**Example:** “hydrotherapy”, “shock therapy”, “lobotomy”, “occupational therapy”, “art therapy”

Thematic Variables

Stigmatizing

This category is composed of five subareas. Comments must be *stigmatizing references about the mentally ill/patients*. You should code for the presence of any of the following. Some sentences may be coded for multiple themes.

1. **Blame:** Any text that indicates that mental patients are personally responsible for their illness, have control over the course of their illness, or that they are faking their illness or symptoms.
 - a. EXAMPLE #1: Text highlights that the illness/symptoms are staged, imaginary, that the patient's behavior or habits were the cause of the illness, or that the patient became ill/symptoms worsened due to a refusal to seek treatment.
 - b. Example #2: Text implies the patient/mentally ill is somehow deficient and their illness is a result of that deficiency. This could include stated weaknesses about the patient, that patients are bad or immoral people, that the patient wasn't "strong enough", lacked enough confidence in themselves to avoid illness, or failed to adjust themselves.
2. **Chronicity:** Any text that indicates duration of illness is extremely long or that recovery is unlikely or impossible for mental patients.
 - a. EXAMPLE #1: Text highlights possibility that recovery will never be reached or that treatment is ineffective/cannot cure the illness. Also includes references that patients are unaffected by treatment, are incurable, hopeless, or have incredible odds stacked against their cure/discharge.
 - b. EXAMPLE #2: Text mentions repeated hospitalizations or readmissions to treatment facilities.
3. **Coercion:** Any text that states that institutionalized patients should be or have been forced into treatment.
 - a. EXAMPLE #1: Text highlights escape/capture/runaways, restraint/confinement as necessary treatments, involuntary commitment to an institution, or that a patient refused to enter or adhere to treatment. Also includes text that implies a patient should not have been released.
 - b. EXAMPLE #2: Text highlights that patients are unable to care for themselves, are dependent on another person, or require help to perform simple activities (such as feeding/dressing oneself).
4. **Dangerous:** Any text indicating that mental patients/the mentally ill perform violent, dangerous, or criminal behavior.
 - a. EXAMPLE #1: Any explicitly stated dangerous or threatening behavior toward self or others (including self-harm), potential for violent behavior or unpredictability (could "go off" at any time).

- b. EXAMPLE #2: Any implication that a patient/the mentally ill have the *potential* for becoming violent if released or if they escape back into society.
 - c. EXAMPLE #3: Any text that illustrates an aggressive/harmful demeanor or aggressive behavior. This could include screaming, biting, hitting, or assault.
5. **Disconnection**: Any text that indicates that institutionalized mental patients are separate/different from the rest of the world – forcibly, voluntarily, or by means of their illness.
- a. EXAMPLE #1: Any text that mentions isolation (forced or voluntary), segregation from society, or an inability/lack of desire to participate socially.
 - b. EXAMPLE #2: Any text that mentions neglect, withdrawal, or that the mentally ill inhabit their own world or are out of touch with reality.
 - c. EXAMPLE #3: Text that indicates patients take part in socially deviant/strange behavior or are shunned by “normal” members of society.

Stigma-Challenging

This category is composed of four subareas. Comments must be *stigma-challenging references about the mentally ill/patients*. You should code for the presence of any of the following. Some sentences may be coded for multiple themes.

1. **Ability**: Any text that indicates the self-sufficiency, independence, or agency of a patient.
 - a. EXAMPLE #1: Any text that mentions voluntarily seeking treatment/hospitalization, recognition/protection of a patient’s legal rights, or a patient acquiring responsibility or privileges.
 - b. EXAMPLE #2: Text that mentions a patient who could/is allowed to function outside of the institution either by holding a job, attending school, or living alone.
 - c. EXAMPLE #3: Text that mentions a patient has a special skill or an inner strength to resist/avoid regression or relapse.
2. **Connection**: Text that indicates that a patient/the mentally ill are able to create or sustain social or emotional connections and relationships with others.
 - a. EXAMPLE #1: Text that mentions the return of a patient’s social interest or ability, professionals/others speaking to/socially interacting with patients, or patients speaking to/social interacting with professionals/others (could include playing games or sharing an activity such as dancing). Also includes expressions of affection such as hugs or touching, stated changes in social behavior, or an improvement in communication.

- b. EXAMPLE #2: Text that indicates a patient has a personal connection to the community either through making visits home, taking trips outside of the institution, or receiving visitors.
3. **Direct Challenge**: Any text that directly challenges or questions a stigmatizing belief or idea either through education, pointing out misinformation, stigmatizing beliefs, or stereotypes about the mentally ill as incorrect, faulty, or irrational.
 - a. EXAMPLE #1: Text that places the blame for institutional conditions, mental illness, or inadequate treatment on the general public rather than on the patient. Statements that normalize mental illness, directly refer to stigma, or emphasize nonviolence.
 - b. EXAMPLE #2: Text that directly appeals to the public to volunteer, get personally involved in reform campaigns, or to help spread awareness.
 - c. EXAMPLE #3: Text that defies labeling the mentally ill as an “other”, acknowledges rarity or that one case cannot generalize to all patients.
4. **Recovery**: Any text that indicates mental patients have recovered, have a potential for recovery, or have made improvement.
 - a. EXAMPLE #1: Text that mentions a patient’s response to treatment, efficacy of treatment, identifications of patients as “recovered” or “improved”, and discharge from the hospital or treatment program.
 - b. EXAMPLE #2: Text that indicates a patient is now capable of things they were not capable of previously, has overcome certain symptoms, or is likely to experience a full recovery.

APPENDIX C

IMAGE CODING RELIABILITY REPORT

- I. **[Phase One] Coder Training:** Preliminary coding of a subset of the images to identify weaknesses in the image coding guide definitions. Debriefing sessions occurred in small groups following this coding to discuss issues and questions. The image-coding guide was edited to reflect these changes and clarify definitions of target variables.
- a. Images Coded: Group 1 – First half of LIFE image set. Group 2 – Second half of LIFE image set.
 - b. We were coding to establish accurate and understandable coding definitions and to identify any additional target themes that may not have been included in the coding guide.
 - c. All questions logged by each lab member were discussed as a team and decisions regarding coding were made by consensus.
 - i. As a result of this preliminary coding the following changes were made to the coding guide:
 1. “Isolation” redefined as “Disconnection”
 2. “Disabled” was removed from the coding guide
 3. “Dependent” was removed from the coding guide
 4. “Recovery” was redefined
 5. “Empowered” was redefined as “Ability”
 6. “Inclusion” redefined as “Connection”
- II. **[Phase Two] Coder Training:** All coders were met with individually to discuss the finalized coding guide and to answer any remaining questions regarding coding definitions or protocol. All coders recorded their coding decisions in an independent SPSS file. A Kappa Statistic was calculated to gauge inter-rater reliability.
- a. Images Coded: Randomly selected subset of 15 images from LIFE Magazine and 15 images from LOOK magazine.
 - i. See Section 1 for Reliability Image Set
 - b. Kappa Statistics
 - i. Patient Variables
 1. Interaction: K= 0.90
 2. Active/Passive: K= 0.78
 - ii. Stigmatizing
 1. Coercion: K= 0.90
 2. Dangerous: K= 0.97
 3. Disconnection: K= 0.76
 - iii. Stigma-Challenging
 1. Ability/Impairment: K= 0.95
 2. Connection: K= 0.76
 3. Recovery: K= 0.90

- c. As a result of this reliability test further editing was conducted on the coding manual to clarify the target variable definitions.

III. **Final Reliability Test:** All coders were met with individually to review and discuss the finalized coding guide and to answer any remaining questions regarding coding definitions or protocol. All coders recorded their coding decisions in an independent SPSS file. A Kappa Statistic was calculated to gauge inter-rater reliability on each thematic variable.

- a. Images Coded: All images except for those included in Phase Two of Coder Training.
- b. Results:
 - i. Patient Variables
 - 1. Interaction: $K= 0.77$
 - 2. Active/Passive: $K= 0.84$
 - ii. Stigmatizing
 - 1. Coercion: $K= 0.94$
 - 2. Dangerous: $K= 0.96$
 - 3. Disconnection: $K= 0.86$
 - iii. Stigma-Challenging
 - 1. Ability/Impairment: $K= 0.80$
 - 2. Connection: $K= 0.84$
 - 3. Recovery: $K= 0.95$
- c. All discrepancies in coding were reviewed by the research team and consensus was reached on what value to give each discrepant variable value.

Section 1 – Image Reliability Practice Test Set

LIFE:

1. SPSS #005
2. SPSS #024
3. SPSS #094
4. SPSS #095
5. SPSS #096
6. SPSS #142
7. SPSS #245
8. SPSS #249
9. SPSS #334
10. SPSS #392
11. SPSS #408
12. SPSS #438
13. SPSS #860
14. SPSS #861
15. SPSS #866

LOOK:

1. LOOK9008
2. LOOK9010
3. LOOK9011
4. LOOK9016
5. LOOK9022
6. LOOK 9024
7. LOOK 9028
8. LOOK 9045
9. LOOK 9047
10. LOOK9061
11. LOOK9065
12. LOOK9075
13. LOOK9086
14. LOOK9100
15. LOOK9115

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