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Chinese and American Employers' Perspectives Regarding Hiring People with Behaviorally Driven Health Conditions: The Role of Stigma

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Abstract

Work opportunities for people with behaviorally driven health conditions such as HIV/AIDS, drug abuse, alcohol abuse, and psychosis are directly impacted by employer perspectives. To investigate this issue, we report findings from a mixed method design involving qualitative interviews followed by a quantitative survey of employers from Chicago (U.S.), Beijing (China), and Hong Kong (China). Findings from qualitative interviews of 100 employers were used to create 27 items measuring employer perspectives (the Employer Perspective Scale: EPS) about hiring people with health conditions. These perspectives reflect reasons for or against discrimination. In the quantitative phase of the study, representative samples of approximately 300 employers per city were administered the EPS in addition to measures of stigma, including attributions about disease onset and offset. The EPS and stigma scales were completed in the context of one of five randomly assigned health conditions. We weighted data with ratios of key demographics between the sample and the corresponding employer population data. Analyses showed that both onset and offset responsibility varied by behaviorally driven condition. Analyses also showed that employer perspectives were more negative for health conditions that are seen as more behaviorally driven, e.g., drug and alcohol abuse. Chicago employers endorsed onset and offset attributions less strongly compared to those in Hong Kong and Beijing. Chicago employers also recognized more benefits of hiring people with various health conditions. The implications of these findings for better understanding stigma and stigma change among employers are considered.

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Keywords

responsibility; employers; employment; stigma; China; USA; discrimination; culture

Many people with a variety of health conditions are not able to get and/or keep good jobs, partly because of the disabilities associated with these conditions and partly because of employer concerns about hiring people from these groups, which are often based on stigma and prejudice. The stigma of health conditions is worsened when employers view the disorder as behaviorally driven; i.e., when the sufferer seems responsible for his or her illness because it was contracted as a result of actions under his or her control. We examined this situation through employers' reports of their opinions about hiring people with five health conditions: bone cancer, HIV/AIDS, mental illness (psychosis), alcohol abuse and drug abuse. Stigmatizing attitudes are likely to vary by culture, and we focused on differences between Chinese and American hiring perspectives. We used a mixed methods design in which the qualitative arm involved collecting Chinese and American employers' perspectives on the five health conditions, especially in terms of hiring people with these conditions. The subsequent quantitative survey examined perspectives as well as attributions across the five health conditions.

The constructs used here build on past research by our group (Corrigan, 2005) and others (Link & Phelan, 2001; Link, Yang, Phelan, & Collins, 2004). We focus on a form of stigma that affects stigmatized people directly, namely how stigma is reflected in employers' hiring decisions. Specifically, we use the term "hiring perspective" or simply "perspective" to refer to the multifaceted perception and interpretation of an event (here, hiring an employee) from the point of view of those in a specific role or position of power (employers). Stigma here refers to stereotypes or beliefs and attitudes that discredit those from a social group (here, those with certain health conditions). Discrimination is any behavior demonstrating unfair treatment, often arising from stigma.

The hiring perspectives of employers are especially important as employers are gatekeepers to work and its corresponding income, benefits, and inherent social network. Survey research suggests that some employers endorse stereotypes, including the idea that people with specific health conditions are dangerous, infectious, lazy, or childlike (Corrigan, Thompson, Lambert, Sangster, Noel, & Campbell, 2003; Dickerson, Sommerville, & Origoni, 2002). These stereotypes seem to have consequences on employers' decision making. Studies have shown that employers had fewer interpersonal interactions with people labeled with specific conditions and were less likely to give these people job interviews (Farina, 2000; Farina, Holland, & Ring, 1966). Much of this research has been conducted on two groups of people: those with a mental illness and those with HIV/AIDS. What is common to these conditions is the perception that they are controllable and reflect prior behavioral decisions rather than biological processes. We adopt Weiner's (1995) terminology to distinguish between two forms of responsibility for one's condition: onset responsibility, where a person is blamed for initially contracting the condition, often because of diminished personal strength and/or a poor sense of propriety, and offset responsibility, where people are blamed for not acting to overcome their condition.

We selected five health conditions that appear to constitute a continuum of behaviorally driven disorders. At one end is serious mental illness, typically described as depression, schizophrenia, bipolar disorder or psychosis (Corrigan, River, Lundin, & Uphoff Wasowski, 2000; Weiner, Perry, & Magnusson, 1988). In addition, alcohol and drug abuse are viewed as especially negative mental conditions (Pescosolido, Monahan, Link & Stueve, 1999), perhaps because they are understood as more behaviorally driven compared to other

mental health conditions. Cancer is another condition included here because although it was once stigmatized, it is less so now (Miller, Fellows, & Kizito, 2007; Mosher & Danoff-Burg, 2007), perhaps because of ex-patients' speaking out about their illness (Gray, Doan, & Church, 1991). HIV/AIDS was included because it seems to fall in a fuzzy middle ground. At the beginning of the epidemic, HIV/AIDS was understood as a moral blemish, and sufferers were ostracized (Burkholder, Harlow, & Washkwich, 1999; Swendeman, Rotheram-Borus, Comulada, Weiss & Ramos, 2006). As the illness became better understood and a more diverse group of people revealed that they had HIV/AIDS, attributions about responsibility diminished (World Health Organization, 2003). Admittedly, research on this topic is muddled, with some studies showing more positive stereotypes of individuals with HIV/AIDS and others not (Brown, Macintyre, & Trujillo, 2003; Herek & Glunt, 1988). Hence, we tentatively hypothesize that HIV/AIDS falls between mental illnesses and cancer on the continuum of behaviorally driven disorders.

Finally, given the inherent social character of stigma, research has sought to explain the phenomenon in terms of cultural mediators. More specifically, we expected societal forces to interact with stigma and influence employer perspectives (El-Adl, & Balhaj, 2008; Yang, Kleinman, Link, Phelan, Lee, & Good, 2007). Constructs like individualism and collectivism might be useful for explaining the interaction of cultural and stigma effects (Triandis, 2005; Triandis, Chen, & Chan, 1998). Chinese and American cultures might reflect these constructs, so we recruited employers from Chicago (relatively individualistic) and Beijing (relatively collectivist). Given Hong Kong's many years as part of the British Commonwealth, we selected it as a place with cultural influences in between those of Chicago and Beijing. Cultures higher in collectivism are expected to be more stigmatizing (Au, Hui, & Leung, 2001).

Based on past research, we established several goals and hypotheses for the study. We expected employers' self-reports of two important attributions underlying health stereotypes – onset and offset responsibility – to differ by health condition. We also expected employers' hiring perspectives to reveal other aspects of their stereotypes as bases for hiring discrimination. Consequently, we used qualitative methods to elicit critical elements of their perspectives that could then be used to create items for quantitative assessment. We then examined the relationships between these hiring perspectives and responsibility judgments. Finally, we expected more collectivistic societies to more strongly endorse restrictive perspectives about hiring people with health conditions. Hence, employers from Beijing were expected to attribute more responsibility and blame to people with behaviorally driven health conditions than were employers from Chicago, with Hong Kong employers in the middle.

Methods

We used a mixed methods approach to address the goals of this paper. We began with a qualitative study to identify elements of employers' perspectives regarding hiring people with behaviorally driven health conditions. Information from the qualitative interviews was integrated with findings from relevant existing research to develop a survey-based quantitative instrument representing employers' perspectives on the five health conditions. We then assessed the hiring perspectives and attributions of responsibility of a randomly recruited stratified sample of employers from Beijing, Chicago, and Hong Kong. Ethical approval was granted by institutional review boards at the University of Chicago, Evanston Northwestern Healthcare and Illinois Institute of Technology. Both arms of the study were conducted between July 2006 and January 2008.

Development of Instrument Representing Employer Perspectives

We conducted 90-minute qualitative interviews with employees from small firms with 3 to 100 employees and without a human resource department. We sought only interviewees who were owners of their firms or personally charged with making hiring decisions. The enterprises in our study were selected from six sectors: business, education, health, high tech (information systems, health, travel technologies and other complex equipment), low tech (maintenance and service that do not require special training), and manufacturing (industries involved in the production of commodity and technologies). These sectors were defined by consensus of an expert panel (N=11), which also made additional decisions described later in this section. The panel included researchers from Beijing, Chicago, and Hong Kong with expertise in rehabilitation psychology (important for decisions about health conditions) and industrial/organizational psychology (for work-related decisions). The expert panel used definitions of occupational titles from the U.S. Department of Labor that their Chinese colleagues reported as meaningful.

The expert panel also identified physical and mental health conditions that varied in terms of perceived responsibility (seemingly behaviorally driven). As in the definitions of business sectors, health conditions were selected for the study when they were identified as meaningful to both the American and Chinese members of the expert panel. With this in mind, five conditions were selected: drug abuse, alcohol abuse, psychosis, bone cancer, and HIV/AIDS. We selected psychosis as the mental illness because the Chinese members of the expert panel reported that schizophrenia and bipolar disorder would be unfamiliar to employers in their cities. The Chinese researchers also argued that depression is viewed more as a somatic condition in their culture. Although a bit harsh in English, the term “psychosis” was viewed by the expert panel as representing a behaviorally driven mental illness in the “serious” range. Several issues were also considered when selecting a cancer condition. The expert panel eliminated breast, ovarian, and prostate cancer from consideration because their gender-related nature might affect stigma differently across cities. The expert panel also ruled out lung cancer because it is affected by attitudes about smoking. Bone cancer was consensually selected by the panel as serious and uncontaminated by other salient health issues. Research participants’ reactions to the five health conditions and six sectors were examined in the qualitative interviews.

Phone numbers of prospective employers were randomly selected from a comprehensive list found in the yellow pages of telephone directories in Beijing and Hong Kong. Enterprises in Chicago were obtained from Dun and Bradstreet, the leading source of credit information about American small businesses. Potential participants were required to have at least one year of management experience; to be able to converse proficiently in the language relevant to the city (i.e., English in Chicago, Cantonese in Hong Kong, and Mandarin in Beijing); and to be older than 18 years. Interviews were carried out at a time and place convenient to the employer. Research participants were paid US \$70 for their time in Chicago, 70 RMB in Beijing, or 200 Hong Kong dollars. Thirty employers were interviewed individually in Beijing, thirty in Hong Kong, and forty in Chicago. Both Chicago and Hong Kong had 40% recruitment rates, and Beijing’s was 53%.

Interview guide and coding survey responses

A semi-structured interview guide was developed collaboratively by the expert panel. Interviews began with a general discussion of the interviewee’s business, difficulties in hiring people of all kinds, and factors that influence hiring of individuals. The questions about hiring segued into specific questions about people with psychosis, alcohol abuse, drug abuse, bone cancer, and HIV/AIDS. A penultimate draft of the interview guide was written in English and revised into Cantonese and Mandarin through translation, back-translation,

and reconciliation of items by the expert panel. Interviewers in each city completed a two-day training workshop and subsequent certification prior to conducting interviews. Ten interviewers across the three sites attained and maintained quality assurance ratings of 90% or more. Verbatim transcripts of the audio-taped interviews were produced and, in the case of those from Hong Kong and Beijing, translated into English. Our paper reports findings from the English versions of all transcripts.

A coding template was developed based on five pilot interview transcripts from each of the three cities. We adopted a high-inference coding process in accordance with a grounded theory approach to analyzing the data (Miles & Huberman, 1994). In particular, we were interested in employers' perspectives about the benefits and costs of hiring people with these health conditions. With this outline, independent raters grouped similar codes into broad primary categories. Subcategories were then created by breaking down complex codes into more precise subgroups. We arranged categories into tree-like structures connecting transcript segments grouped into separate categories or "nodes." More than 100 unique themes were gleaned in this way. Through the process of continuous comparison among categories, differing clusters were further condensed into broad themes that were used to understand hiring perspectives related to discrimination. This led to 27 distinct items, which members of the expert panel sorted into overall conceptual factors. Through a consensual process, three overall factors were agreed upon and labeled as follows: resources (governmental funds and support available to employers hiring people with these health conditions), assets (work skills and qualities that appeal to employers), and concerns (the obverse of assets: characteristics that may dissuade employers from hiring the person). Items were then sorted into these three factors by four independent coders; items remained in a factor if three out of four coders sorted the item into that factor. Items that noticeably overlapped were reduced to a single item. These items comprised the quantitative survey, which is discussed more fully below (the Employer Perspectives Scale, EPS). A more complete discussion of the qualitative findings can be found in Corrigan, Kuwabara, Tsang, Shi, Larson, Lam, et al. (2008).

Quantitative Survey

We administered surveys to a randomly selected set of employers in Beijing, Hong Kong, and Chicago, stratified by industry sector. For this arm of the study, comprehensive lists of small employers were obtained from Dun and Bradstreet for Chicago, the Labor Department of Hong Kong, and the Industry and Commerce Bureau in Beijing. In all, 293 employers completed surveys in Chicago, 302 in Beijing, and 284 in Hong Kong. Demographics of research participants are summarized by city in Table 1. Significant differences were found for age ($F(2,872) = 168.4, p < .001$) and attained education ($X^2(16) = 355.3, p < .001$) across cities. No difference was found for gender. Consistent with our stratification, approximately equal numbers of employers in each industry sector in each city were interviewed.

Survey

Employers were presented with a vignette in which they had posted an advertisement in the newspaper for an entry-level position with their business. Employers were presented with materials for ten applicants who differed by health condition. The summary of employer rankings is discussed in a later paper. Research participants were then told that they were to answer a series of questions about one of the ten applicants. They reached into a hat and selected from cards representing the conditions. In fact, they were randomly assigned to only one of the five health conditions: drug abuse, alcohol abuse, psychosis, HIV/AIDS, or bone cancer. The cards read:

"You selected name, who has health condition. He/she is a race/ethnicity man/
woman, who is xx years of age."

The vignette is quite short by design so that the employers' responses would reflect their fundamental reactions to the labeled condition and not some sense of social correctness; the research participants were expected to reveal their stereotypes more when given only brief vignettes.

Research participants then completed several instruments relevant to the person/health condition in the vignette; two of these measures are relevant here. First, the 27-item Employer Perspective Scale (EPS) was administered to collect data on the employers' perceived resources, concerns and assets concerning the person/health condition. For example, "It is unlikely that name could perform the entry level job." Participants responded to individual items by rating their agreement on 7-point scales (1=strongly disagree, 7=strongly agree). Exploratory factor analyses were conducted on the items; these findings were confirmed by subsequent confirmatory factor analysis. We randomly split the overall sample of 879 employers in half for each analysis. Four factors with eigenvalues greater than one and alphas greater than .75 emerged from the exploratory analysis. The subsequent confirmatory analysis confirmed the existence of four factors with fit indicators well above the cutoff values. The factors are: (1) Overall Concern, which includes worries about safety or strange behaviors that could upset other employees; (2) Overall Assets, which includes skills and other values that make the person valuable to the employer; (3) Resources for Employees, which includes rehabilitation or other interventions to improve the candidate's job skills; and (4) Resources for Employers, which includes information on the support available to employers after hiring persons with health conditions.

Second, research participants completed one item selected from the 27-item version of the Attribution Questionnaire (AQ-27) (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003). The item directly represented onset responsibility: "I would think that it is Name's own fault that he/she is in the present condition." We also presented an item representing offset responsibility: "Name is not trying hard enough to overcome this condition." Respondents answered the items using 9-point agreement scales (1=very much disagree to 9=very much agree). As in the qualitative interviews, interviewers in each city completed a day-long training and certification process prior to administering the quantitative surveys. To become certified, surveyors were required to conduct three pilot surveys that were rated by the site coordinator using a quality assurance checklist. Twelve interviewers met criteria. Interviews were about 90 minutes in length and completed in a place that was convenient to the respondents, typically their office. Research participants were paid US \$70 for their time in Chicago, 70 RMB in Beijing, or 200 Hong Kong dollars for participation in this arm of the study.

Results

A review of formulae for standard codes and outcome rates suggested cooperation rate as a good index for examining employer participation in the survey (American Association for Public Opinions Research, 2006). Cooperation rate (CR) is the ratio between partial (P) and fully (F) completed surveys and total responses. The denominator, total responses, is the sum of P's and F's plus two kinds of refusals:

$$RR = \frac{P + F}{(P + F) + (RO + RI)}$$

refusal originals (RO), defined as employers who refused to participate when they were first contacted, and refusal interviews (RI), defined as employers who were scheduled for interviews but failed to appear. Cooperation rate averages varied by city: 58.4% for all

Chicago industry sectors, 39.7% for Beijing, and 48.0% for Hong Kong. These averages are similar to typical values in social science research on organizations and industries (Rogelberg & Stanton, 2007). Cooperation rates did not differ significantly by business sector, though they ranged from 32.8% to 76.6%. Cooperation rates for education (ranging from 41.3% to 76.6%) were more pronounced than rates in the other sectors.

We compared sample and population demographics as another way of checking the representativeness of participating employers. Three variables were selected to compare the sample to the population. Two represented employer demographic characteristics: gender and percentage of employers holding a bachelor's degree or higher. Sample characteristics were compared to population parameters that were collected from national or local government census data on employers from each of the three cities. Employer samples from all three cities reported higher female ownership and a higher level of completed education compared to population findings. In all cases, the differences were significant and robust. Our goal was to create a representative sample stratified by these three variables. Hence, we weighted sample data for the remaining analyses, adjusting the data according to population frequencies of gender and education. These adjustments were performed per employer per city. In particular, all variables in the remaining analyses were transformed into the product of said variable and the sample to population ratio (percent of male/female or education level in the sample divided by frequency in the population). Population parameters came from a 1996 report of the U.S. Census for Chicago employers, the 2008 Hong Kong April to June Quarterly Report on the General Household Survey, and the 2008 Beijing Statistical Yearbook.

Differences in Onset and Offset Responsibility

Responsibility attributions showed that 64.7% of employers disagreed with the notion that people with health conditions are responsible for their disorder, and 57.2% did not believe that people with these conditions are failing to “try hard enough” for recovery. These frequencies were determined by trichotomizing ratings into three groups: 1 to 3, disagree with stigma; 4 to 6, the neutral middle; and 7 to 9, agree with stigma. Still, it is important to note that 15.4% of participating employers ($n = 127$) agreed with onset responsibility, and 13.7% ($n = 114$) endorsed offset responsibility (the remainder fell in the middle of the scales: 19.9% and 29.1%, respectively). Differences were found between onset and offset ratings, with the sample endorsing onset responsibility to a greater degree than offset responsibility, $\chi^2(4)=64.9$, $p<.001$.

The five health conditions used in this project were chosen because they were expected to show variation in perceived responsibility or personal control. To validate the continuum, a MANOVA was conducted with the two responsibility ratings as dependent variables and the five health conditions and three cities as predictors (see the top two rows of Table 2). The main effect for health condition was significant, $F(8,1482)=40.52$, $p<.001$. Separate health x city ANOVAs for the two responsibility ratings were conducted, yielding significant main effects for onset responsibility (health condition, $F(4,763)=80.6$, $p<.001$; city, $F(2,763)=10.6$, $p<.001$, health condition x city, ns) and offset responsibility (health condition, $F(4,760)=24.1$, $p<.001$; city, $F(2,760)=78.0$, $p<.001$; city x health condition, $F(8,760)=2.4$, $p<.05$). Effect sizes were low to moderate at .12 and .31, respectively. For onset responsibility, post-hoc Fisher's least significant differences (LSDs; $p<.05$) showed that people with drug and alcohol abuse disorders were seen as more responsible for the onset of their conditions than were those with HIV/AIDS, psychosis, and bone cancer. Some parallels were evident across groups for offset responsibility. Post-hoc LSDs showed that drug abuse received higher offset responsibility ratings than alcohol abuse and psychosis. HIV/AIDS and bone cancer were attributed the least responsibility in terms of recovery.

Post-hoc ANOVAs also showed significant city effects for onset responsibility and offset responsibility. Post-hoc comparisons showed that Chicago employers blamed people with health conditions significantly less for the onset and offset of their disorders compared to Beijing and Hong Kong employers. Beijing employers endorsed offset responsibility less often than Hong Kong employers did.

Group Differences in Employer Perspectives by Health Condition and City

The analyses examined whether hiring perspectives would change as a function of the health condition's attributions of responsibility. Means and standard deviations shown in Table 2 address this point. We conducted a 3×5 MANOVA (city by health condition) with the four employer perspective factors as dependent measures. The multivariate tests (Pillai's Trace) yielded significant main effects for health condition, $F(20,2940)=8.86$, $p<.001$, though the difference represents a low effect size ($\eta^2=.06$). Post-hoc tests revealed significant differences for three of the four between-group analyses – Overall Concerns, Resources for Employee, and Resources for Employer – with F-values ranging from 2.9 to 32.8; effect sizes ranged from .02 to .14. Overall Assets did not differ across health conditions.

LSD comparisons illustrated health condition differences across the four employer perspectives; these are summarized in Table 2. Overall Concerns seemed to discriminate among health conditions most, and results corresponded with the degree to which the condition was behaviorally driven, $F(4,766)=32.8$, $p<.001$. Employers expressed the greatest concern about drug abuse and alcohol abuse. Employers also reported concerns about psychosis compared to HIV and bone cancer. Significant differences were found for the remaining factors representing employer perspectives, though the trends were not as clear. Employer perspectives on Resources for Employees and Resources for Employers were more positive for HIV/AIDS compared to the other health conditions. Endorsement of resources for people with drug abuse was lower than for the other health conditions. Only one set of differences was found for Overall Assets, with people suffering from alcohol abuse being viewed as having fewer assets than people with psychosis or HIV/AIDS.

A second goal was to examine employer perspective differences according to city -- Chicago, Beijing, and Hong Kong. Table 2 depicts the results of ANOVAs and post-hoc comparisons examining employee perspectives as a function of location. A significant MANOVA main effect was found for city, $F(10,1466)=41.09$, $p<.001$. Significant city differences were found for three hiring perspective factors: Overall Concerns ($F(2,766)=140.8$, $p<.001$), Overall Assets ($F(2,762)=67.8$, $p<.001$), and Resources for Employers ($F(2,761)=9.6$, $p<.001$). Compared to Hong Kong and Beijing, Chicago employers were found to be significantly less likely to endorse overall concerns and more likely to recognize assets. Chicagoans were also likely to recognize more resources for employers than were the Chinese groups. Significant interactions were found for three of the four ESP factors: Overall Concerns, Overall Assets and Resources for Employers ($F(40,3680)=2.52$, $p<.001$). Two of the subsequent pairwise comparisons for planned interactions were interesting. Compared to Hong Kong and Beijing employers, research participants from Chicago identified fewer concerns about health conditions that were seemingly less behaviorally driven: HIV/AIDS and bone cancer. Conversely, Hong Kong employers seemed to express more concerns particularly for people with alcohol abuse.

Employer Perspectives and Ratings of Responsibility

Another way to examine the relation between employer perspectives and attributed responsibility for a health condition is to correlate responsibility ratings with the four employer perspectives. We were interested in models that examine the independent

variances of onset and offset responsibility on the four employer perspectives, though onset and offset ratings were correlated, $r=.32$, $p<.01$. Table 3 summarizes these findings.

In support of our hypotheses, both onset and offset variables seemed to predict individual variance in Overall Concerns. Individual associations were fairly robust, leading to $p<.001$ for the t-test values. They accounted for 13% of the variance across the 879 employers from the three cities. Consistent with the previous discussion, the correlation between responsibility variables and Overall Assets was less clear. While a significant correlation was found for offset responsibility, the index for onset showed a nonsignificant trend ($p<.10$). Together, these two responsibility variables accounted for 4% of the variance in Overall Assets. Onset and offset responsibility did not show a clear pattern of associations with the two resource factors. Only one of four correlation coefficients was significant (Offset Responsibility and Resources for Employers), and R^2 was below .01 in both cases.

Discussion

The findings showed that attributions of onset and offset responsibility for health conditions were related to employer perspectives about hiring. About 60% of the sample disagreed with the idea that people with health conditions are responsible for the onset or offset of those conditions. Perhaps the low rate of agreement with onset responsibility represents an amelioration of social stigma. Still, it is important to note that about 14% of participating employers agreed with these ideas. This number is especially compelling given other findings from the study indicating a positive relationship between onset blame and employer concerns.

Additional analyses examined onset and offset attributions by health condition. The findings seem to parallel our assertions about behaviorally driven conditions, especially for onset responsibility. People suffering from drug abuse were viewed as more responsible for contracting their condition compared to those with alcohol abuse, and both of these groups were viewed as more responsible compared to individuals with psychotic disorders, HIV/AIDS, and bone cancer. Moreover, individuals with psychotic disorders were blamed more than those with HIV/AIDS and bone cancer. Findings for offset responsibility were similarly supportive of the hypotheses. People with drug abuse were viewed as more offset responsible than those with alcohol abuse and psychotic disorder. Individuals with HIV/AIDS and bone cancer were viewed as least responsible for the offset of their conditions.

Of the many conclusions that might be drawn from the study, the stigma of HIV/AIDS is notable. Employers seem to hold people with this disorder as less to blame for the onset and the offset of their illness than they do those individuals suffering from other health conditions. At the outbreak of the pandemic, HIV/AIDS was highly stigmatized, reflecting blame as well as contagion (Herek & Capitanio, 1999). The public was concerned about becoming infected with the lethal illness. People with HIV/AIDS were also viewed as morally contagious, and people believed that they had contracted the disease because of perceived “immoral” behavior, such as homosexual lifestyles. HIV/AIDS prejudice and discrimination may have diminished because people who are not associated with gay culture have identified themselves as having HIV/AIDS; e.g., Arthur Ashe and Magic Johnson (Herek & Capitanio, 1997). Two questions of interest issue from these findings. First, has the reduced intensity of prejudice and discrimination against individuals with HIV/AIDS been replicated elsewhere? Second, what lesson from the HIV/AIDS stigma experience over the past decade can be extrapolated to other health conditions?

We expected that employer perspectives about hiring people with health conditions would be more negative when those conditions were viewed as behaviorally driven. Findings were

somewhat mixed in this regard. The findings for the Overall Concerns factor seemed to parallel our hypotheses; namely, behaviorally driven health conditions seemed to evoke more concern. Perceptions of Overall Assets, however, did not break out neatly by behaviorally driven condition. In general, the findings suggest that employers were more attentive to Overall Concerns than to Assets. This kind of caution may protect employers and their businesses from harm after hiring a person with a behaviorally driven health condition.

Employee and Employer Resources are two other interesting factors that may mitigate perceptions of behaviorally driven conditions. However, differences in both factors emerged only when contrasting HIV/AIDS with the other conditions. This suggests two interesting conclusions. It further supports earlier statements about the reduction in stigma associated with HIV/AIDS. Employers were even more supportive of people with HIV/AIDS when both kinds of resources were present. Perhaps an even more interesting finding is that neither employee nor employer resources varied for any of the other behaviorally driven conditions. Still, we need to distinguish perceptions of resources from actual receipt of these resources.

City differences in responsibility attributions and employer perspectives were also examined. Differences in responsibility attributions were found by city. Chicago employers seemed to view people with health conditions as less responsible for contracting their condition and less blameworthy for failing to do enough to treat their condition. In addition, research participants from Chicago expressed fewer concerns about hiring people with these health conditions. They also noted more assets and employer resources.

Finally, we examined the relationship between employer concerns and health condition by directly examining the association between employer perspectives and responsibility. Supporting our assertion about Overall Concern, the largest effect size was found between perspectives and the combination of onset and offset responsibility. The two responsibility scores also independently accounted for variance in perceptions of Overall Assets. These findings suggest that some kind of mix of onset responsibility (blame) and offset responsibility (participation in services) is associated with overall judgments.

There are limitations to this study that need to be addressed in future research. Although interesting patterns were found for employer perspectives across behaviorally driven conditions, the factor structure of the EPS was based on findings from only one sample. Subsequent work needs to replicate these conclusions and attempt to expand employer perspectives beyond the four factors reported here. In fact, measurement validity overall needs to be further examined in future research. Onset and offset responsibility were determined by single items. Factors representing these constructs would provide greater versatility in analyses. The definition of behaviorally driven conditions was categorical. To advance ideas in this arena, future research should consider more continuous indices of behavioral drivenness. Lastly, we opined earlier in the paper that differences across cities might reflect differences in individualism and collectivism. Measures of individual differences (Triandis & Gelfand, 1998) should be incorporated into the next wave of research.

Studies like the one described here are especially useful if they inform anti-stigma programs. One might think that focusing on beliefs about responsibility would diminish employers' concerns and enhance the perceived assets of the potential employee. In fact, research suggests that discussion of the biological bases of illness decreases blame to some extent (Boysen & Vogel, 2008; Montenegro, 1999). There are, however, unintended consequences of this kind of approach to stigma change. While education might decrease onset

responsibility -- “that person is not to blame for his or her disorder” -- it may actually augment offset responsibility (Read, Haslam, Sayce & Davies, 2006). Consistent with the latter notion are beliefs that the person’s biological illness is “hard-wired” into physiological functions and hence the person will not recover. A general pessimism about the illness and corresponding interventions arises.

The above lesson reminds anti-stigma advocates to use caution in developing the content of programs intended to reduce prejudice and discrimination toward individuals with health conditions. Also of interest is the recognition of education as only one way to change stigma. Contact, i.e., purposeful interactions between people with the health condition and the “normal” general population, is an additional, compelling approach to stigma change (Brown, et al., 2003; Herek & Capitanio, 1996, 1997). In these kinds of interventions, people with health conditions tell others about the impact of their illness. Typically, these interventions are comprised of way-down stories -- reviewing the symptoms and disabilities of one’s illness -- and way-up experiences -- in which, despite the illness, people recover, manage their disabilities, and go back to work. Research suggests that purposeful, contact-based anti-stigma programs are more effective than education (Corrigan, River et al., 2001; Corrigan, Markowitz et al., 2003).

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Table 1**Employer Demographics by City**

Item	Chicago n=293	Beijing n=302	Hong Kong n=284
Age	M 49.7 (12.3) ¹	M 34.4 (8.5) ²	M 44.7 (10.1) ³
Gender (% female)	47.4%	49.7%	50.7%
Education completed			
Elementary school or less	0%	0%	1.1%
Some high school	0% ¹	3.0% ¹	28.6% ²
High school diploma/GED, Secondary school in China	3.8% ¹	15.0% ²	12.0% ²
Some college	14.0% ¹	.7% ²	1.8% ²
Two-year college degree, Diploma/higher diploma in China	8.2% ¹	28.3% ²	18.4% ³
Bachelor's Degree	41.3% ¹	48.0% ¹	28.3% ²
Master's Degree	26.3% ¹	5.0% ²	7.8% ²
Doctoral Degree	4.8%	0%	2.1%
Ethnicity (report all that apply)			
Hispanic (% yes)	16.0%		
American Indian or Alaska Native	.3%		
Black or Africa American	26.4%		
Chinese	1.4%		
Other Asian	10.6%		
Native Hawaiian or Other Pacific Islander	1.4%		
White	43.7%		
Number of employees	M 13.6 (16.1) ¹	M 35.2 (35.7) ²	M 15.1 (21.3) ¹
Industry sector			
Business	21.9%	14.3%	17.2%
Education	14.8%	16.0%	16.5%
Health	17.0%	9.1%	16.1%
High Tech	16.3%	19.9%	13.6%
Low Tech	15.2%	20.9%	19.7%
Manufacturing	14.8%	19.9%	16.8%

Note. Standard deviations are included in parentheses where appropriate. No ethnicity variables are reported for Hong Kong or Beijing because the individuals in the samples were uniformly Han Chinese. Cells with different superscripts in any row differ significantly.

Table 2
Means and standard deviations of responsibility and employer perspectives by health condition and city

Factor Scores	Alcohol Abuse (AA)			Drug Abuse (DA)			Bone Cancer (BC)			Psychiatric Disorder (Psy)			HIV/AIDS (HIV)		
	Chi	HK	BJ	Chi	HK	BJ	Chi	HK	BJ	Chi	HK	BJ	Chi	HK	BJ
Responsibility Attribution															
Onset	3.3 (3.0)	5.1 (2.2)	4.2 (3.0)	4.5 (2.9)	5.8 (2.1)	4.5 (2.1)	1.4 (1.7)	1.4 (1.2)	1.5 (1.1)	1.4 (1.4)	1.9 (1.3)	1.5 (0.9)	2.8 (2.8)	3.3 (2.5)	3.1 (2.0)
M (SD)															
Offset	2.3 (2.0)	4.3 (2.2)	4.2 (2.2)	3.0 (2.0)	5.0 (2.0)	6.1 (2.4)	1.5 (1.3)	2.4 (1.5)	4.2 (2.5)	2.5 (2.2)	3.4 (2.1)	4.2 (2.4)	1.9 (1.8)	2.9 (1.6)	3.8 (2.3)
M (SD)															
Employer Perspectives															
Overall Concerns	27.2 (15.7)	47.6 (6.7)	36.2 (12.4)	34.8 (14.0)	43.8(6.7)	44.5 (9.0)	16.4 (8.5)	33.4 (14.8)	33.3 (13.4)	32.2 (13.0)	44.2 (8.2)	44.4 (9.6)	20.3 (14.1)	42.9 (9.9)	37.9 (11.2)
M (SD)															
Overall Assets	59.4 (5.0)	53.9 (8.8)	54.7 (6.1)	59.6 (4.1)	50.8 (11.6)	54.7 (5.6)	59.8 (3.5)	53.8 (6.2)	50.7 (11.3)	58.2 (4.2)	53.0 (7.5)	49.4 (13.7)	60.8 (3.4)	53.3 (6.8)	49.3 (13.8)
M (SD)															
Resources for Employees	18.1 (5.7)	20.3 (4.2)	19.0 (4.7)	19.8 (6.6)	18.9 (5.0)	18.4 (5.8)	18.3 (8.3)	17.7 (4.6)	17.2 (6.2)	20.4 (6.3)	17.3 (5.1)	17.4 (6.8)	18.1 (7.3)	16.9 (5.6)	16.8 (6.3)
M (SD)															
Resources for Employers	16.5 (7.7)	20.5 (6.2)	18.3 (7.6)	19.4 (8.5)	18.5 (6.6)	21.4 (7.5)	14.6 (8.6)	19.6 (7.1)	20.0 (6.6)	20.1 (7.3)	17.3 (6.9)	19.5 (8.1)	13.5 (8.4)	17.3 (7.5)	19.1 (6.0)
M (SD)															

Note: Drug Abuse (DA), Alcohol Abuse (AA), Bone Cancer (BC), Psychiatric Disorder (Psy), HIV/AIDS (HIV). City is Chicago (Chi), Hong Kong (HK), or Beijing (BJ). Post-hoc comparisons of the interactions are not reported here for reasons of parsimony. Instead, interesting and important findings are reported in the text.

All planned comparisons reported in the table had $p < .05$.

Table 3

The beta weights and significance of responsibility ratings as predictors of employer perspectives

Overall concerns	Std Beta	t	P	
Onset	.18	5.2	<.001	
Offset	.27	7.8	<.001	
				$R^2 = .13$
Overall assets				
Onset	-.06	-1.8	<.10	
Offset	-.18	-4.9	<.001	
				$R^2 = .04$
Resources for employee				
Onset	-.01	-.33	NS	
Offset	-.04	-1.1	NS	
				$R^2 = .04$
Resources for employers				
Onset	-.01	-.32	NS	
Offset	.10	2.8	< .01	
				$R^2 = .01$