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A cross-cultural study of employers' concerns about hiring people with psychotic disorder: implications for recovery

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Abstract *Introduction* Employment discrimination is considered as a major impediment to community integration for people with serious mental illness, yet little is known about how the problem manifests differently across western and non-western societies. We developed a lay model based on Chinese beliefs and values in terms of Confucianism, Taoism, Buddhism, and folk religions which may be used to explain cross-cultural variation in mental illness stigma, particularly in the arena of employment discrimination. In this study, we tested this lay approach by comparing employers' concerns about hiring people with psychotic disorder for entry-level jobs in

US and China. *Method* One hundred employers (40 from Chicago, 30 from Hong Kong, and 30 from Beijing) were randomly recruited from small size firms and interviewed by certified interviewers using a semi-structured interview guide designed for this study. Content analysis was used to derive themes, which in turn were compared across the three sites using chi-square tests. *Results* Analyses reveal that employers express a range of concerns about hiring an employee with mental illness. Although some concerns were raised with equal frequency across sites, comparisons showed that, relative to US employers, Chinese employers were significantly more likely to perceive that people with mental illness would exhibit a weaker work ethic and less loyalty to the company. Comparison of themes also suggests that employers in China were more people-oriented while employers in US were more task-oriented. *Conclusion* Cultural differences existed among employers which supported the lay theory of mental illness.

Key words psychotic disorder – recovery – employment – cross-cultural differences – lay theory

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Introduction

Although the stigma of mental illness is a long-recognized problem, the study of its manifestations across cultures is relatively new. In an effort to enhance understanding of cross-cultural differences in stigma, particularly between eastern and western cultures, we have developed a lay model based on Chinese beliefs and values in terms of Confucianism, Taoism, Buddhism, and folk religions which may be used to describe mental illness stigma and its impact on China. In this study, we apply this lay model to help account for cultural differences in the role of

stigma in the employment process, focusing particularly upon the role of the employer or manager in making hiring decisions. A significant body of research suggests that when employers hold negative attitudes about mental illness, they are less likely to hire individuals with these conditions [24, 43, 50, 56, 74]. Our inquiry seeks to explore the particular nature of their concerns and the degree to which these concerns persist across contexts in which social beliefs and business practices vary, in this case between urban areas in the United States and China. Based on our lay theory model, we hypothesize that employers' in China have more negative concerns about hiring people with psychotic disorder and that the content of the specific concerns will vary between employers in western countries and China. Since these questions carry implications for psychiatric rehabilitation practice, we highlight the ramifications of our findings for efforts to promote the recovery and rehabilitation process of those with psychotic disorder.

Although many definitions of recovery have been put forward, some have argued that its main components include hope, success orientation, responsibility, industriousness, empowerment, re-establishment of identity, and satisfaction in life [1, 19, 20, 49, 52, 57]. Competitive employment represents especially an important component because it provides a window into many other avenues of community integration, such as the experience of being a valued, contributing citizen in the context of societies in which paid work is a normative expectation for adults. The importance of work in the recovery process is supported by recent exploratory studies from the consumer perspective conducted in both the United States and Hong Kong [47; Working Group on Recovery and Remission in Schizophrenia (Unpublished report)], providing support for the importance of including vocational services in the continuum of psychiatric rehabilitation services [16]. Although innovative services have been developed to improve employability, outcomes are disappointing. Barriers to employment include low educational attainment, unfavorable labor market dynamics, low productivity and related skills, lack of appropriate vocational and clinical services, failure of protective legislation, poverty-level income, linkage of health care access to disability beneficiary status, and ineffective work incentive programs [15, 58]. Apart from these, there is an emerging body of evidence documenting the existence of labor force discrimination [6, 22, 23, 40, 41, 44, 64, 66] and accounting for its role in disparities in employment rates [4]. Some research suggests that employment discrimination is the product of employers' negative attitudes toward mental illness [24, 43, 50, 56, 74], which in turn reflect broader societal views that people with mental illness are incompetent and dangerous [46]. To use Jorm's terminology, these stigmatizing attitudes may be conceptualized as a problem of limited mental health literacy, or an inability to appropriately recognize mental disorders as treatable

illnesses [33, 34]. In the hiring context, this mental health illiteracy prompts the employer to inaccurately judge the abilities and employability of employees with psychotic disorders.

It is also important to acknowledge that although applying stereotypes about mental illness to all people with mental illness is problematic, some research suggests that stereotypes may contain a "kernel of truth." Employers who encounter an applicant with mental illness may accurately judge that these individuals may, for example, have excessive absenteeism or cognitive disturbances that impede work performance. On the other hand, the unilateral application of this reasoning (an increased likelihood of problematic performance) to every case represents the crux of discrimination, and may have harmful consequences for the applicant. Research on stereotypes [38], for example, shows that even accurate and negative stereotypes may also produce derogatory impact on targets (e.g., those patients with psychotic disorders in this case). Reducing or minimizing prejudice and discrimination against people with psychotic disorders in the workplace will thus require employers to avoid stereotyped judgments when assessing qualifications and desirable work attributes in a particular applicant.

Much of the previous research on stigma in the decision-making process of employers has focused mainly on determining whether employers react negatively to the mental illness label. However, little is known about the precise nature of their concerns and sources of their hesitation about hiring people with these disorders. For example, earlier studies [22, 31] mainly explored the global concerns of employers towards disabilities. A more comprehensive effort [22] showed the stigmatizing attitudes towards hiring people with psychiatric disabilities. Their concerns included symptomatology, work personality, work performance, and administrative concerns. Other studies [17, 30] reported that employers who had previous experience hiring people with psychiatric disabilities were more positive in their hiring attitudes. Among the limited existing studies, most of them are conducted in US. We were unable to locate any investigations of these problems in Mainland China, despite its size and increasing prominence in the global economy. Studies of attitudes about mental illness in Chinese communities indicate the presence of severe negative stereotyping; however, research on the sources of impact of these beliefs is critically needed [8, 11, 12; Chow et al. (in preparation)].

Goffman originally defined stigma as the mark that distinguishes someone as discredited [29]. People marked by skin color (ethnicity), physiology (gender), body size (obesity), and clothes (poverty) are stigmatized by the general public. Social psychological perspectives, on the other hand, put emphasis on the stigmatizer by analyzing the social cognitive processes by which individuals (in this case, employers) per-

ceive, make sense of, and respond to a person with a psychotic disorder. This social cognitive model explains the causal attributions for both the onset and offset of a health condition. However, these theories do not directly account for the role of cultural beliefs in the stigma process. Research on the general population shows that members of the public share common folk conceptions about psychiatric disorders, also known as lay theories. In previous work, our group has traced the philosophical roots in Confucianism, Taoism, Buddhism, and folk religions in mainland [Chow et al. (in preparation)] to conceptualize how these values have shaped the lay conceptions of psychotic disorder in China.

Our analysis shows that many Chinese have limited mental health literacy and lack a clear understanding of mental illness. Lay beliefs about mental illness are vague and stereotypic, often demonstrating that the public equates mental illness with craziness and insanity. Importantly, the Chinese public typically attributes the deviant behaviors of mental illness to a character flaw or the absence of moral standards, rather than the involuntary effects of a difficult illness. As harmonious social relationships are expected by the Confucian Chinese, people with mental illness who exhibit bizarre behaviors are ostracized, since their comportment deviates from the Five Cardinal Relations set out by orthodox Confucian values. Moreover, in rural areas the illness is usually regarded as punishment from the supernatural or spiritual world. These lay beliefs explain why mental illness stigma is so severe in Chinese communities. One study in Hong Kong, for example, showed that people believed that individuals with mental illness should be kept in mental hospitals and were reluctant to have them live in their neighborhood [Chow et al. (in preparation)]. While this preference for social distance is commonly present in western culture, it is stronger in Chinese societies, perhaps because it is viewed as destructive to the common good. The Confucian interpretation of disability, including mental illness, holds that any type of deformity or deviance is a dissonance in an otherwise ideal state of harmony.

Familism introduces another unique cultural aspect of mental illness stigma in Chinese society. That is, the individual with mental illness suffers not only personal embarrassment, but also bears responsibility for bringing enormous shame to their family lineage of past, present, and future generations. Another direct influence on lay disease theories results from folk religion. People regard mental illness as turmoil of the supernatural spirits which manifest in the person as bizarre behaviors. Some regard mental illness as possession of evil spirits or punishment of the ancestral spirit prompted by the descendants' failure to show respect to the dead souls. A preference for folk healers over western treatments for mental illness is relatively common in Asian cultures, as demon-

strated by a study in Singapore [54] that reported that more than half a group of people with mental illness had visited spiritual healers before their admission to the mental hospital.

The foregoing lay theory approach provides a theoretical account to explain substantial differences in stigmatization of psychotic disorders between Chinese and western cultures. This explanation is consistent with a growing body of research that indicates a high prevalence of stigma in Chinese communities. In a survey among medical, nursing, and allied health professionals at the An Ding Hospital in Beijing [61], almost 80% of respondents perceived social stigma as the most important hurdle for individuals with mental illness returning to the community. Similar levels of prejudice and discrimination also exist in Hong Kong, particularly in the arena of housing. A public opinion survey ($N = 5604$) conducted by the Chinese University of Hong Kong showed that about three quarters of respondents expressed fear towards halfway house residents and more than 90% opposed the setting up of halfway houses in their neighborhoods. Some citizens in Shatin District of Hong Kong went on mass rallies and protest marches against the setting up of a residential facility for ex-mental patients in a low-cost public housing estate [11, 12] It has also been reported that the attitudes of Chinese students towards people with mental disabilities are less positive than comparable students from America [9, 10, 25, 28]. Although there has been almost no study of the role of stigma in the employment process in China, our lay theory would predict that the problems of social exclusion reported in the housing arena would likewise extend to employers, producing problems of labor force discrimination.

This study extends our theoretical efforts and aims at using qualitative means to obtain empirical information concerning the similarities and differences of employers' concerns about hiring people with psychotic disorder in the US and China and test the hypotheses we set out earlier. We used Chicago as the city to represent the US culture and Beijing as the city to represent the traditional Chinese culture. In addition, we included Hong Kong as the city in between with a mixture of Chinese and western cultures. In the context of this study, we hypothesize based on the lay theory that public stigma is more prevalent in China than in the US and that the concerns between employers of US and China would be different.

Method

■ Interviewees

We targeted small size firms with the number of employees ranging from 3 to 100 and without a human resource department. With these criteria, we required the interviewees to be employers of the firms charged with responsibility for making hiring decisions. This

Table 1 Interviewees of the three samples

	Chicago (<i>N</i>)		Hong Kong (<i>N</i>)		Beijing (<i>N</i>)	
	Male	Female	Male	Female	Male	Female
Education	3	3	4	1	2	4
Healthcare	3	6	2	3	3	1
Business	3	4	1	4	5	2
Manufacturing	3	2	1	4	2	2
High tech	3	3	1	4	4	1
Low tech	2	5	4	1	1	3
Total	17	23	13	17	17	13

sampling strategy was designed to ensure that we captured individuals with discretionary hiring authority who, because they resided in small firms, would not be subject to human resources regulations. To be representative of the distribution of small-scale firms in Chicago, Hong Kong and Beijing, the firms in our study were selected from six industries which included high technology, low technology, education, healthcare, business, and manufacturing. In addition, they were limited to private firms with government organizations excluded, because we expected that managers in government organizations would be unable to express their own opinions due to government regulations. Random calls were made to prospective employers appearing on the yellow pages of telephone directories for relevant companies in respective cities by research assistants explaining the purposes of the study and inviting them to be interviewees. Telephone recruiters also screened potential subjects who met the following criteria: (1) at least 1 year management experience; (2) ability to converse knowledgeably in the language relevant to the city; (3) were of age above 18; (4) were willing to participate in an audiotaped in-person interview. Based on the above recruitment criteria and method, 30 employers were selected in Beijing and Hong Kong, and 40 employers were selected in Chicago. Across sites, about 40% of the employers approached met the inclusion criteria and accepted the invitation to participate. Table 1 shows the demographic features of the interviewees in the three cities.

■ Instrument

A semi-structured interview guide was developed collaboratively by members of the research team in all three sites. Items were initially suggested by a US based qualitative methodologist, and were subsequently reviewed by the cross-site expert panel to assess relevance of each item and to refine the format of the interview guide. The panel consisted of seven experienced practitioners and researchers in clinical psychology, social work, rehabilitation, vocational counseling, social, industrial, and cross-cultural psychology. The final interview guide, developed through consensus among the expert panel members, was initially developed in English. Subsequently, the English version of the interview guide (which was used in the Chicago site was translated into Mandarin or Cantonese Chinese for use in Hong Kong and Beijing, respectively. The process involved forward and backward translations performed independently by qualified translators. Reconciliation was performed by another expert panel which consisted of a clinical psychologist, a social psychologist and rehabilitation scientist.

The interview guide was divided into four major parts, designed as a funneling approach in which the interviewer moves progressively from broad themes to specific probes [72]. The first part thus began with general questions about the background of employers, their business, and employees. The second part asked employers to describe the hiring process in their firm and to discuss the criteria they used to judge applicants, with a specific focus on entry-level jobs, which are considered the most common type of position for individuals receiving psychiatric rehabilitation services [2, 59, 65]. The third part of the interview guide probed the attitudes of the interviewees toward hiring people with psychotic disorders in

particular. Broad open-ended questions were followed up with directed probes regarding employers' prior contacts with people with psychotic disorders, whether they be applicants, existing employees, or people encountered outside the workplace; any concerns about hiring them; and emotions they experience or might conceivably experience when interacting with them. Since our purpose was to understand more about how employers would understand and respond to the label "psychotic disorders," we deliberately chose not to provide a professional definition. Instead, respondents who asked for a definition were asked what the term meant to them and were encouraged to respond based on their personal understanding.

■ Procedures

Interviewers in each site underwent a two-day training workshop and a certification process before interviews were conducted. Before the training, all interviewers reviewed background readings related to the substantive focus of the study and on qualitative interview techniques. They then received didactic instruction in qualitative interviewing techniques during the workshop. Specific training in conducting the employer interview was also provided via a training manual and demonstration DVD developed by the qualitative methodologist, and simulated practice was also provided. To become certified, interviewers were required to conduct three pilot interviews, which were rated by the site coordinator using a quality assurance checklist. Across the three sites, 10 interviewers attained quality assurance ratings of 90% or higher, and thus were permitted to conduct interviews. No prospective interviewers failed in this quality assurance process.

Employers were contacted via recruitment letter followed up by telephone invitations. Interview time, date and venue were arranged according to the employers' preferences. Before proceeding with the interview, employers were asked to read an information sheet describing the broad purpose of the study (to understand the problems employers face in hiring staff) and specific procedures in which they would be asked to participate. To maintain subject anonymity, verbal consent was obtained in lieu of written informed consent. In the United States, employers were also informed that their responses would be protected by a Federal Certificate of Confidentiality. After verbal consent was obtained, interviewers conducted the semi-structured interview according to the four-section interview guide described above. All interviews were audiotaped and transcribed verbatim.

■ Data analysis

A coding template was developed by the qualitative methodologist based on the 15 pilot interview transcripts with five from HK, five from Beijing, and five from US. The coding template specified a range of responses to each question based on common elements identified across respondents. A codebook was then created in which coders were instructed to rate whether or not the identified themes were discussed in response to each interview question. The list of codes was further refined after a thorough discussion by the eight-member expert panel. The finalized codebook was used for analyzing each of the interview transcripts. The coding for each transcript was performed in the native language of the site by two independent coders. Across all sites, the inter-coder consistency rate was $91.59 \pm 1.6\%$.

The 15 transcripts which were used in developing the codebook described in the above were retained in the final analysis. The analysis therefore included the 100 transcripts based on the interviews. The focus of this article pertains to responses to questions which asked respondents to identify (1) the qualities they consider most important in hiring for an entry level position; and (2) specific concerns they might have about hiring a persons with a psychotic disorder for such a position. The number and percentage of respondents for all items are presented by site. The number (*N*) and percentage (%) refer respectively to the number and percentage of respondents in each site that regarded a particular item as

Table 2 Qualities considered important for entry-level workers

Quality	Chicago % (N)	Hong Kong % (N)	Beijing % (N)	Total % (N)	χ^2	Post hoc χ^2		
						Chicago versus Hong Kong	Chicago versus Beijing	Hong Kong versus Beijing
Skills/qualification to do job	67.5 (27)	53.3 (16)	86.7 (26)	69.0 (69)	7.862*	1.452	3.425	7.937*
Communication skills (verbal and body-language)	65.0 (26)	63.3 (19)	63.3 (19)	64.0 (64)	.029			
Confidential/Trustworthy/Loyal/Honest/"character"	35.0 (14)	80.0 (24)	83.3 (25)	63.0 (63)	22.494*	13.988*	16.231*	.111
Work ethic/Hard Working/Motivated	35.0 (14)	76.7 (23)	86.7 (26)	63.0 (63)	23.066*	11.944*	18.686*	1.002
Compatible with others	35.0 (14)	80.0 (24)	70.0 (21)	59.0 (59)	16.494*	13.988*	8.400*	.800
Knowledge of official language of site	80.0 (32)	33.3 (10)	53.3 (16)	58.0 (58)	15.709*	15.556*	5.657*	2.443
Dependable/ responsible	32.5 (13)	76.7 (23)	70.0 (21)	57.0 (57)	16.599*	13.387*	9.651*	.341
Knowledge of English	82.5 (33)	50.0 (15)	13.3 (4)	52.0 (52)	32.926*	8.402*	32.912*	9.320*
Nice appearance/clean	40.0 (16)	60.0 (18)	50.0 (15)	49.0 (49)	2.761			
Polite/Good manners	15.0 (6)	60.0 (18)	30.0 (9)	33.0 (33)	15.875*	15.408*	2.291	5.455*
Obedient/willing to learn	30.0 (12)	40.0 (12)	20.0 (6)	30.0 (30)	2.857			
Multi-lingual (national language + other)	32.5 (13)	40.0 (12)	0.0 (0)	25.0 (25)	14.800*	.420	11.974*	15.000*
Healthy/non-smoker	0.0 (0)	16.7 (5)	20.0 (6)	11.0 (11)	8.410*	7.179*	8.750*	.111
Longevity in previous job	2.5 (1)	3.3 (1)	26.7 (8)	10.0 (10)	13.241*	.043	8.936*	6.405*

Key: *Significant at the .05 level (2-sided)

important or cited as a concern. Chi-square tests and post-hoc analyses were used to determine the significance of cross-site differences.

Results

Qualities for entry-level workers

The first set of analyses are themes regarding general qualities regarded as important in a worker by the employers; frequencies of these themes are presented in Table 2. Chi square statistics comparing differences among the three sites and the subsequent post-hoc analysis comparing two sites are also tabulated.

Table 2 shows that the most important five qualities rated by our three samples are in descending order: possessing the skills/qualifications required for the position, communication skills, confidence or trustworthiness, diligence, and compatibility with others. Other qualities that were regarded as important by almost half of the employers were language-related competence, being dependable, and having a nice appearance. In Hong Kong, being polite was regarded as important by 60% of employers while obedience and being multi-lingual were considered important by 40% of employers.

Among the qualities considered important, the one discussed most consistently by employers across sites is possession of the skills necessary for performance of the particular job, which was discussed by more than half of the employers in each site, though more commonly in Beijing (86.7%) than in Hong Kong (53.3%). On the other hand, employers in Hong Kong and Beijing were more likely than employers in Chicago to discuss the importance of attributes that are considered "soft skills" in the occupational literature: trustworthiness, having a strong work ethic, dependability, ability to get along with others, and politeness.

Employers were asked specifically whether language ability factored into their hiring decisions. In Chicago, 83% of employers reported that knowledge of English (the native language of the site) was essential in an entry-level hire, whereas knowledge of the official language of the site was considered significantly less primary in Beijing (53.3%) and Hong Kong (33.3%). In Hong Kong, half of the employers reported that knowledge of English was considered important, a significantly greater number than we observed in Beijing (13.3%). Similarly, it was more common for employers in Chicago (32.5%) and Hong Kong (40%), relative to those in Beijing (0%), to report that being multi-lingual is a desirable employee attribute.

Items that were regarded as important by only a small number of employers included being healthy (at times discussed as being a non-smoker), and longevity in previous job. None of the employers in Chicago reported that they saw employee health as an important quality for the job whereas significantly more employers in Beijing and Hong Kong regarded it important. As for job tenure, more employers in Beijing regarded it an important quality for entry-level jobs than the other two cities.

Concerns on hiring individuals with psychotic disorder

Table 3 summarizes statistics about concerns of the employers in the three sites on hiring individuals with psychotic disorder. Examples of concerns are illustrated by selected quotations from the interview transcripts which are categorized by type of concern and summarized in Table 4. The concerns that received the attention of at least a quarter of the employers on the whole included, in descending order: safety threat to other employees and customers,

Table 3 Concerns about hiring individuals with psychotic disorder

Concern	Chicago % (N)	Hong Kong % (N)	Beijing % (N)	Total % (N)	χ^2	Post hoc χ^2		
						Chicago versus Hong Kong	Chicago versus Beijing	Hong Kong versus Beijing
Safety threat to fellow employees/customers	32.5 (13)	86.7 (26)	40.0 (12)	51.0 (51)	22.202*	20.385*	.420	14.067*
Detracts from productivity, job performance	40.0 (16)	33.3 (10)	43.3 (13)	39.0 (39)	.659			
Behavior strange, unpredictable, erratic	10.0 (4)	50.0 (15)	30.0 (9)	28.0 (28)	13.690*	13.870*	4.534*	2.500
Concerned about potential for relapse	10.0 (4)	60.0 (18)	10.0 (3)	25.0 (25)	28.000*	19.886*	.000	16.484*
Will bother, argue, lose temper with co-workers, customers	7.5 (3)	13.3 (4)	40.0 (12)	19.0 (19)	12.660*	.648	10.755*	5.455*
Likely to have accidents or make mistakes	15.0 (6)	33.3 (10)	10.0 (3)	19.0 (19)	6.000*	3.268	.383	4.812*
Bad mood, attitude will negatively affect coworkers/customer	2.5 (1)	26.7 (8)	26.7 (8)	17.0 (17)	9.934*	8.936*	8.936*	.000
Attendance will be unreliable/frequent lateness or absence	15.0 (6)	26.7 (8)	3.3 (1)	15.0 (15)	6.405*	1.458	2.593	6.405*
May lose tact, judgment in social interactions	5.0 (2)	26.7 (8)	10.0 (3)	13.0 (13)	7.457*	6.572*	.646	2.783
Disorganized thinking/difficulty understanding instructions	20.0 (8)	10.0 (3)	6.7 (2)	13.0 (13)	3.036			
Coworker fear and avoidance would contaminate work atmosphere	0.0 (0)	26.7 (8)	10.0 (3)	11.0 (11)	12.496*	12.043*	4.179*	2.783
Worker may not be independent/requires monitoring	0.0 (0)	16.7 (5)	16.7 (5)	10.0 (10)	7.470*	7.179*	7.179*	.000
Behavior depressed or withdrawn	0.0 (0)	0.0 (0)	13.3 (4)	4.0 (4)	9.722*	NA	5.657*	4.286*

Key: * Significant at the .05 level (2-sided)

productivity and job performance, behaviors being strange and unpredictable, and the potential for symptom relapse. Among these four concerns, compromised job performance and productivity was mentioned most consistently among the three samples with chi-square statistics showing no significant difference.

The perception of dangerousness is one of the most common stereotypes in relation to psychotic illness [46]. However, while this was a common concern across sites, employers in Hong Kong were more likely to raise it spontaneously than those in Beijing and Chicago. Similarly, employers in Hong Kong, and to a lesser extent, Beijing were the most likely to state that they would be concerned about strange or erratic behavior in an employee with a psychotic disorder. In Beijing, similar concerns were more often expressed, relative to the other two sites, in regard to interpersonal volatility, or the tendency to conflict with others in the workplace. In several other areas such as concern about accidents or mistakes, unreliable attendance, and fear that the employee's mental illness would contaminate the work atmosphere, employers in Hong Kong were notably more likely to express concern than employers in Chicago or Beijing.

■ Previous hiring experiences

Across sites, employers varied in their previous experiences of having encountered applicants they knew to have psychotic disorders. In Chicago, more than one third (17 out of 40 employers) reported having employed an individual with psychotic disorder, while the frequency of such experience was lower in China (Hong Kong and Beijing combined), where a total of 17 out of 60 employers across both sites reported having employed an individual with psychotic disorders. We observed few differences between employers with and without previous contact with an employee with psychotic disorder in terms of their preferred characteristics for hiring. The exception is that in Chicago more employers with prior experience employing a person with a psychotic disorder, regarded being honest (chi-square = 7.376; $p < .05$) and polite (chi-square = 4.816; $p < .05$) as important. For Hong Kong and Beijing, those with such an experience considered being a non-smoker (chi-square = 4.558; $p < .05$) and punctual (chi-square = 5.307; $p < .05$) more important than those who did not have experience having an employee with psychotic disorder.

Table 4 Illustrative quotations extracted from interview transcripts

Concern	Illustrative quotation
Interpersonal volatility	
Safety threat to fellow employees/customers	I mean, everything and anything could possibly go wrong to the point of someone going "Postal," looking at another individual cross-eyed and fist fights, violence, thievery, kleptomania. (USA, c010)
Will bother, argue, lose temper with co-workers, customers	For this, he's relatively short-tempered when he works, and never thinks of the consequences. He always loses his temper. (Beijing, B014)
Indicates lack of self-control	Again, we're not going to hire anybody who has lost their mind. (USA, c028)
Behavior strange, unpredictable, erratic	There is no way for you to know when he will explode, no one knows. (Hong Kong, 001)
Concerned about potential for relapse	
Concerns about task performance and availability	In case they relapse suddenly, as we know that if they don't take any medication, in case they haven't taken any medication to control their illness, anything may happen when their thinking becomes disorganized. (Hong Kong, 10)
Likely to have accidents or make mistakes	I worry they make mistakes always. (Hong Kong, 015)
Detracts from productivity, job performance	Because their ability to perform the task might be impaired, you know. (USA, c033)
Difficulty managing job stress/work load	For skills, because we face a lot of pressure here, if they have mental illness, they usually can't handle it. (Hong Kong, 012)
Disorganized thinking	If they didn't seem coherent or able to grasp the concepts of the things we are doing around here and seeing somebody lost in space. I don't know. Somebody talking to themselves? (USA, c006)
Employee will be lazy, will not be diligent/work hard	Or if you go to look for him, he will ignore you. He will just sit there...I think I cannot force him do anything. (Beijing, B011)
Employee will be lethargic, sluggish, will fatigue easily on job	We could tell when they are eating or sleeping everyday. Our staff would report to us. (Beijing, B010)
Difficulty following or remembering instructions	No, he may be too skillful to obey our rule. He just does what he wants. (Beijing, B001)
Worker may not be independent/ requires monitoring	They are not able to work independently. (Hong Kong, 009)
May quit job suddenly	Yes- they quit without telling me. You suddenly can't find them and they will call you and say that they are not coming back. (USA, c030)
Attendance will be unreliable/ frequent lateness or absence	But, you know, if they skip medications or, you know, just decide to stay home, because that can cause a lot more sick days and that kind of thing, then certainly I'd start to take that into account. (USA, c025)
Concerns about relationships with others in the workplace	
Poor communication abilities	Her inability to communicate her need to be always right. Not being able to see the big picture, knit-picking about certain things, moodiness, common sense stupidity. (USA, c010)
Bad mood, attitude will negatively affect coworkers/customer	The emotion of people with mental illness would change drastically, that is, their mood because we have some friends who are like this. People with severe depression [and] schizophrenia ...make other co-workers feel in a way that it is difficult to get along with them, then it is a problem. (Hong Kong, 5)
May lose tact, judgment in social interactions	He just does it, regardless how ridiculous the thing is. Once it comes into his mind, he just goes ahead and does it. Even the things that normal people would not do, but he still goes ahead and does them. (Beijing, B003)
Co-workers would have to cover unfinished work	Then somebody else might need to do the work for her in order to keep the class going. If such things frequently happen, their work would be affected for sure; since each one has her own work to deal with (Beijing, 016)
Personal hygiene likely to be poor	Hygiene and that kind of thing. (Beijing, 003)
Co-worker fear and avoidance would contaminate work atmosphere	This will make the other colleagues having some restraints before danger or not feeling well about working here. (Hong Kong, 026)
Overall harm to the well-being of the firm	
Requires too much supervision to monitor	Like I said, it will take a lot of my time and energy to handle that...The manpower cost is much higher than that of ordinary employees. (Beijing, B016)
Cost to company	Don't take on all that liability risk when you are not being paid. (USA, c030)
Will embarrass company/hurt reputation	We are dealing with the public here. People would notice that. If they can notice it right away, it would cause problems. Make people nervous. They might think about not coming back because of it. It's easier for them to just avoid it. They don't want to see it. (Beijing, 003)
Behavior depressed or withdrawn	She has slight depression. It was unhappy to be with her and we were not able to communicate with her. It was no problem with her job and I didn't have any reason to terminate her employment, but I will do so if she suffered from such illness. (Beijing, B030)
Undermines employee's health	My worry is that if they will collapse when they face great pressure and they themselves cannot develop because they are unable to work. (Beijing, B005)

Discussion

Some of the findings of this study meshed well with results of earlier studies and reinforced known strategies in the field of vocational rehabilitation for people with psychotic disorder. However, some findings are not in accord with established concepts. The cross-cultural findings added to the knowledge base.

The finding that accords most closely with the existing body of literature is that communication skills ranked high in importance for entry-level jobs. It is fundamental and transcultural to different workplaces no matter where and whatever kinds of job we refer to. This finding mirrors earlier studies which persistently demonstrated that social competence is the most significant predictor of vocational success among individuals with psychotic disorder [3, 30, 58]. Another quality considered important across the three samples is the needed skills and qualifications for the job. This is also well known among rehabilitation professionals in Hong Kong, United States, Canada, and India [30, 37, 53, 59] and points to the importance of matching abilities and skill levels to jobs in the vocational placement process. Unfortunately, a majority of recipients of psychiatric services have low education and vocational skills. Combined with the findings regarding employer hesitation to employ people with psychotic disorders, this finding helps explain why they are often relegated to entry level jobs and have difficulty accessing jobs in the primary labor market [5, 35, 59].

We found that perceptions of dangerousness, reduced productivity, presence of strange behaviors, and risk of relapse are main concerns of employers. The findings are akin to previous studies [Working Group on Recovery and Remission in Schizophrenia (Unpublished report)], which indicate that perceptions of safety threat to the public represent the main reason for stigmatizing behaviors. Historically, people with psychotic disorders were often segregated from society because they were considered dangerous [7, 14, 42, 55]. As stated by Johnson-Dalzine, Dalzine, and Martin-Stanley, perceptions of dangerousness may directly lead to fear [32]. Given these concerns, employers are likely to reject an applicant with an acknowledged psychotic disorder. Although dangerousness was a frequently expressed concern in every site, employers in Hong Kong showed the greatest level of such concern for safety, which may be accounted for by the tendency of the media and press in Hong Kong to exaggerate the crime and violent behaviors committed by people with psychotic disorder [60].

As might be expected, issues of language-related competence varied in the importance ascribed to them by employers in different cultural contexts. Naturally, the use of English is considered important by most employers in Chicago; however, this ability is

also prized in Hong Kong (which comprises a mix of eastern and western cultures) while far less so in Beijing. For similar reasons, perhaps, employers in Hong Kong regarded multi-lingual competence (English and Mandarin in addition to Cantonese) as an important quality. While it is well documented that communication skills are important if people with psychotic disorder intend to join the competitive job market [13], relatively less attention has been paid to the issue of language competence, particularly in cultures in which business is conducted in multiple languages. In general, the findings support the hypotheses, derived from our lay theory of psychotic disorder, that public stigma is more prevalent in Chinese communities than in the United States, and that the concerns of the employers between the US and China are different.

Another interesting finding is that employers in Hong Kong and Beijing tended to rank "soft skills" such as trustworthiness, work motivation, and ability to relate to others more importantly than did Chicago employers. Similarly, many of the Chinese employers' concerns about hiring people with psychotic disorders related to issues such as interpersonal volatility and negative impact of the psychotic worker on the other employees. One interpretation of this difference is that the Chinese employers' heightened concern reflects the collectivistic and inter-dependent nature of Chinese culture due to the practice of Confucian values [36, 69, 45]. In Western societies, employers in this study were less likely to express concerns regarding whether employees get along with others relative to their concerns that employees possess the requisite skills to accomplish the job. In Chinese communities, collectivistic values are manifested in employers' concerns about their relationships with the supervisor, co-workers, and customers. An illustration of this cross-cultural difference is concerns about health and smoking. Employers in Chicago were not concerned if the employee is healthy or not, whether he or she smokes. However, employers in Hong Kong and Beijing were more concerned about health issues in the workplace and their effects on other people and the image of the company. On the other hand, employers in Chicago were more concerned about disorganized thoughts which might interfere with their ability to follow instructions and get things done [51]. However, further studies are needed to identify the difference among Chinese and Western values in perceiving the impact of an individual employee's behavior on the company.

More important is the general impression that employers in Hong Kong and Beijing had more employment concerns than their counterparts in Chicago. This may be regarded as empirical support for the lay disease theory as applied to mental illness stigma proposed by Chow, Tsang, Corrigan et al. (in preparation) who predicted that employers' in China would endorse more severe stigma towards psychotic

disorder than in the United States. This in fact mirrored our account that Chinese have limited mental health literacy and do not have a clear understanding of mental illness. In line with this theory, we found that employers in China had a larger number of stereotyped understandings of the likely characteristics of employees with psychotic disorders. This finding is in line with studies on attitudes towards mental illness among Chinese conducted in Hong Kong and the US [8, 11, 12] and bears similarity with research on mental illness stigma in India, which is considered another traditional oriental culture, where a high level of stigma is commonplace [48, 73].

Although Hong Kong is westernized in many ways, our findings suggest that employers' concerns towards individuals with psychotic disorder are heavily influenced by traditional Chinese values. This may be biased by our sampling in small businesses in which most of the employers and employees are Chinese. If we targeted international firms in Hong Kong, we suspect that responses would have been more similar to our Chicago sample. In many ways, then, Hong Kong and Beijing employers in this study shared similar views and concerns.

Finally, our findings on the effect of previous hiring history on employers' attitudes are at odds with earlier reports [17, 30]. Our findings do not suggest that having employed an individual with psychotic disorder in the past was related to more benign attitudes toward hiring such individuals in the future. One possible explanation is that employers' experiences with previous hires may vary widely in the degree to which the experience was successful or unsuccessful in terms of productivity and performance.

■ Implications to recovery

Our findings demonstrated that employers in the three cities had many concerns which may hinder them from hiring individuals with psychotic disorder, thus creating an impediment to such individuals' community integration and recovery. These obstacles warrant greater attention toward stigma reduction efforts.

However, this study cannot illuminate the basis of the concerns and worries cited by the employers. This issue could be better understood by focusing attention at the level of social cognition [18] as well as attributional models such as Bernard Weiner's attribution theory [67–71]. Such explanatory frameworks could be employed to assess whether employers' concerns are related to causal attributions for both the onset and offset of the psychotic disorder. Another fruitful area for future research would be to further examine the cross-cultural differences based on the lay theory approach [Chow et al. (in preparation)]. A better understanding of the causes of employers' negative attitudes will help formulate effective strategies to reduce stigma.

Given the nature of employers' concerns, our findings reinforce the current trends toward improving employability of those with psychotic disorders via social and independent living skills training, job matching by means of skills and qualifications, and counseling on work attitudes. Based on our findings, helping consumers present themselves as skilled, qualified, and motivated, represents the first step in any rehabilitation program. Cultural differences should however be taken into account when vocational rehabilitation plans are formulated. Vocational placement, particularly in Hong Kong, should also attend to matching the consumers' language proficiency with jobs at entry-level. Findings also suggest that rehabilitation programs in Chinese culture should give more emphasis to collective behaviors such as workplace citizenship and interacting harmoniously with colleagues and supervisors.

No matter how effective vocational rehabilitation programs are, at a population level the employment rate of people with psychotic disorders may not significantly increase, unless we also address employers' concerns in hiring consumers. With a better understanding on the formation of stigma in different cultures, we are more capable of developing and mounting strategies to reduce public and employers' stigma. A possible approach is to develop collaboration with businesses. Rochlin [50] remarked that the business sector knows very little about mental illness and rehabilitation. Thus, educating employers to address their worries on the job performance of individuals with mental illness is a potentially fruitful avenue to addressing employment discrimination. This is important to enable consumers to demonstrate their work performance in order to reduce stigma [63]. Another feasible strategy is to use strategic disclosure technique [62]. This is essential to start with an effective working relationship between people with psychotic disorders and their employers, and determine the best timing for disclosure. Since public stigma may lead to self-stigma resulting from the internalization process [21] and interfere with treatment adherence [26, 27], these issues also warrant intervention at the service delivery level.

■ Limitations

Although there is face validity to the notion that Chicago represents US culture and Beijing represents Chinese culture, caution is warranted in any effort to translate our findings to policy formulation or clinical application. How far the data can be generalized to the employment contexts of the US and China, requires further study with national samples. This is also needed to determine how the perceptions reported here related to employers' actual hiring patterns.

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