Psicothema

Psicothema 2016, Vol. 28, No. 2, 201-206
doi: 10.7334/psicothema2015.89

ISSN 0214 - 9915 CODEN PSOTEG
Copyright © 2016 Psicothema
www.psicothema.com

Spanish version of the Link's Perceived Devaluation and Discrimination scale

Francisco Martínez-Zambrano[1,3], Marcelo Pizzimenti[1,3], Sara Barbeito[2,3], Regina Vila-Badia[1,3], Gloria Comellas[1,3], María José Escandell[1,3], María José Hernández[1,3], Blanca Fernández-de Corres[2,3], Ana González-Pinto[2,3], María Purificación López-Peña[2,3], Mónica Martínez[1,3], Marta Puig[1,3], Judith Quilis[1,3], Patricia Vega[2,3] and Susana Ochoa[1,3]

[1] PSSJD, [2] Hospital Santiago Apostol and [3] CIBERSAM

Abstract

Background: The aim of this study is to translate, adapt and validate the "Perceived Devaluation and Discrimination Scale" (PDD) in Spanish in a sample of people with schizophrenia. **Method:** A total of 130 people between 18 and 65 years and with a diagnosis of schizophrenia according to DSM-IV-R criteria from Barcelona and Vitoria were included. The patients were assessed with the translated version of the PDD, the Social Functioning Scale (SFS), the Global Assessment of Functioning (GAF), the Clinical Global Impression Scale (CGI-S) and the Self-perception of Stigma Questionnaire for people with schizophrenia (SSQ). **Results:** The questionnaire scored a Cronbach's a of .868 regarding its internal consistency reliability. Two components were found in the factorial analysis explaining 40% of the variance of the instrument (component 1 associated with individual self-perception and component 2 refers more to social stigma). The stability of the instrument measured using the intraclass correlation coefficient on both occasions oscillated between .415 and .806. Significant correlations were found with SSQ and SFS. **Conclusions:** The Spanish version of the PDD seems a good instrument for the assessment of self stigma.

Keywords: Auto-estigma, esquizofrenia, evaluación.

Resumen

Versión española de la escala Perceived Devaluation and Discrimination de Link. **Antecedentes:** el objetivo de este estudio es traducir, adaptar y validar la "Perceived Devaluation and Discrimination Scale" (PDD) en español en una muestra de personas con esquizofrenia. **Método:** se incluyeron un total de 130 personas de entre 18 y 65 años con un diagnóstico de esquizofrenia según los criterios del DSM-IV-R de Barcelona y Vitoria. Los pacientes fueron evaluados con la versión traducida de la PDD, la Escala de Funcionamiento Social (SFS), la Evaluación Global de Funcionamiento (GAF), la escala Clinical Global Impresión (CGI-S) y la autopercepción de Estigma Cuestionario para las personas con esquizofrenia (SSQ). **Resultados:** la consistencia interna del cuestionario, evaluada utilizando α de Cronbach, fue .868. Dos componentes fueron encontrados en el análisis factorial explicando el 40% de la varianza del instrumento (componente 1 asociado a la auto-percepción y el componente 2 individual se refiere más al estigma social). Los valores de estabilidad temporal medidos utilizando el coeficiente de correlación intraclase en ambas ocasiones oscilan entre .415 y .806. Se encontraron correlaciones significativas con SSQ y SFS. **Conclusiones:** la versión española de PDD parece un buen instrumento para la evaluación del auto-estigma.

Palabras clave: Self-stigma, schizophrenia, assessment.

Stigma is a social construct that includes negative attitudes, feelings, beliefs, and behaviors, which is configured as prejudice and which has negative consequences for the stigmatized person (Barbato, 2000; Haghighat, 2001). People with a mental disorder are one of the most stigmatized groups; mainly people with schizophrenia (Brohan, Elgie, Sartorius, Thornicroft, & Gamian-Europe Study Group, 2010; Quinn, Shulman, Knifton, & Byrne, 2011). Moreover, the social stigma towards them has been increasing in the last decades (Brohan, Slade, Clement, & Thornicroft, 2010; Torrey, 2011). Specifically, people with schizophrenia have been stigmatized as being aggressive, strange, unpredictable, weak, lazy, and responsible for their own chronic illness (Byrne, 2001; Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000).

LeBel (2008) suggested that perceived stigma includes what an individual thinks most people believe about the stigmatized group in general, and how the individual thinks society views him/her personally as a member of the stigmatized group (Caltaux, 2003). Granerud and Severinsson (2006) found that people with serious mental illness feel embarrassment and fear of exclusion, as well as loneliness and the feeling of living life more slowly. Lack of knowledge and false ideas about mental illness produce an increase in society's stigmatizing attitudes towards this group. This causes lower self-esteem, increases the possibility of depression, and reduces the quality of life of the person suffering from a mental illness (Caqueo & Lemos, 2008; Gutiérrez-Maldonado, Caqueo-Urízar, Ferrer-García, & Fernández-Dávila, 2012; Finzen & Hottman-Richter, 1997; Leff & Warner, 2006). Sartorius and Schulze (2006) note that stigma is very harmful, and

Received: April 8, 2015 • Accepted: December 28, 2015
Corresponding author: Francisco Martínez-Zambrano
PSSJD - Parc Sanitari Sant Joan de Déu
Dr. Pujades, 42
08330 Sant Boi (España)
e-mail: fmartinez@pssjd.org

that there are signs that, despite the advances and improvements in psychiatry and medicine, stigma continues to grow. This fact has ever greater negative consequences, not just for the patients themselves, but also for their families (Caqueo-Urízar et al., 2014). Furthermore, these stigmatizing attitudes of the public towards people with a serious mental illness do not completely disappear but rather continue even when the symptoms have disappeared and even when the person is integrated in society and fulfils his or her duties as a citizen.

There are few studies that focus on self-perceived stigma. Understanding how people with schizophrenia perceive their own situation, their fears and attitudes is vital to the provision of patient-centred care. This scarcity of information may be due to the limited number of instruments for the evaluation of self-perceived social stigma. One of the most frequently used scales is the Perceived Devaluation and Discrimination Scale (PDD), created by Link (1987), designed to assess the perception of social stigma presented by patients with severe mental disorder (Link, Cullen, Struening, Shrout, & Dohrenwend, 1989). The scale was subsequently revised and expanded to include evaluation measures of feelings produced in an affected person when confronted with stigma (Link, Struening, Neese-Todd, Asmussen, & Phelan, 2002; Link, Yang, Phelan, & Collins, 2004). Studies carried out using the different versions of the Perceived Devaluation and Discrimination Scale show predictive properties in the evaluation of self-perception of stigma, the internalised attitudes of community beliefs about mental illness and how social interaction is affected (Link, 1987; Link et al., 1989; Link et al., 2004). Viable Spanish-language evaluation instruments in the context of real clinical practice are necessary, as is the design of instruments that minimize the cost and resources required for their administration. In this regard, having instruments in Spanish that allow us to assess the stigma felt by patients is useful and necessary.

In the rehabilitation services, integration in the community is one of the main aspects that the professionals work on with people with schizophrenia. Self-stigma is a limitation to a better integration in the community. In this line, the assessment of patients' self-stigma is necessary in order to adjust the interventions provided in the services to improve patients' self-esteem and inclusion in the community. However, as previously commented, no instruments in Spanish are available in this area. Therefore, the aim of this study is to translate, adapt and validate the Perceived Devaluation and Discrimination Scale in Spanish in a sample of people with schizophrenia.

Method

Procedure

An observational, descriptive, longitudinal study was performed. The adaptation and validation process for the PDD consisted of three phases: a): translation from English to Spanish followed by back-translation from Spanish to English carried out by a native English speaker. The back-translation was very similar to the original version, but the discrepancies were sent to the original author in order to assess the meaning of these in the questionnaire; b) revision and evaluation of the final Spanish version by a group of mental health experts with the aim of determining whether the items could be readily understood. In addition, it was administered to 15 schizophrenia patients with varying levels of education to assess comprehension of the instrument; and c) implementation of the Spanish version. The randomly selected users at each of the participating centres responded to the various study questionnaires. The evaluation was hetero-administered by interviewers who had previously been trained by the research team. The assessment consisted of the PDD and other instruments for the assessment of self-stigma and for the assessment of other constructs (social functioning and clinical symptoms). To evaluate the stability of the instrument a second assessment of the PDD was performed, at seven days.

Participants

Participants in this study were users of Community Rehabilitation Services (CRS) at Parc Sanitari San Joan de Déu (Barcelona, Catalonia) and Hospital Santiago Apóstol of Vitoria (Basque Country).

The CRS in Barcelona covers a catchment area of more than 800,000 people. Each of the services deals with an average of 50 people affected by severe mental disorders, in the majority of cases schizophrenia. Regarding Hospital Santiago Apóstol of Vitoria, the participants were users of Community Services and the Hospital day centre. The catchment area of the hospital in Vitoria includes some 280,000 people.

Participants were selected randomly from the case registers held at each of the services taking part. The final sample had a total of 130 patients, 80 from Barcelona and 50 from Vitoria.

Participant inclusion criteria were: 1) age between 18 and 65 years old; and 2) diagnosis of schizophrenia according to DSM-IV-TR criteria. Patients were excluded if they had: 1) presence of an organic mental disorder; 2) comorbidity with a diagnosis of mental disability; 3) state of clinical decompensation requiring admission to hospital units; or 4) declined to participate in the study.

The study was approved by the ethics committees at Parc Sanitari Sant Joan de Déu in Barcelona and at Hospital Santiago Apóstol of Vitoria.

Instruments

A sociodemographic questionnaire was administered to collect data on age, gender, marital status, education, and employment situation.

- *The Link Perception of Social Stigma Scale (PDD)*, in its latest version, consists of 22 items, although item 11 is divided into two items (11 and 11A). It is a self-assessment instrument dealing with *two factors*. The first factor consists of the *evaluation of the attitude* of the person completing the questionnaire *and of his or her beliefs* extrapolated to society regarding social/public stigma. A *second area*, assessing what the individual thinks about his/her own situation, constitutes self-stigma (Link, 1987; Link et al., 2002; Link et al., 2004).
- Social Functioning Scale (SFS) (Birchwood, Smith, Cochrane, Wetton, & Copestake, 1990). This scale evaluates social functioning in schizophrenia sufferers and is widely used in the planning of rehabilitation processes. It contains 7 subscales: withdrawal, relationships, independence/performance, independence/competence, recreational

activities, social activities and employment. Higher scores indicate better social functioning.
- The GAF (Endicott, Spitzer, Fleiss, & Cohen, 1976) measures users' general social and clinical functioning with scores ranging from 0 to 100. Higher scores indicate better general functioning.
- Clinical Global Impression Scale for Schizophenia (CGI-S) (Haro et al., 2007). This scale evaluates the psychopathology presented by the individual through 4 subscales: positive, negative, cognitive and depression symptoms, and a global psychopathology score. Higher scores indicate greater presence of symptoms.
- Self-perception of Stigma Questionnaire for people with schizophrenia (SSQ) (Ochoa et al., 2001). The questionnaire is composed of 14 items which gather data on perception of social stigma. These questions were formulated based on information obtained in focus groups comprised of users with schizophrenia from rehabilitation services. Higher scores indicate lower self-stigma.

Data analysis

A descriptive analysis was conducted using means, standard deviations, and percentages. Internal consistency of the scale items was evaluated through calculation of Cronbach's α coefficient. Interclass correlation coefficients were calculated for the test-retest reliability analysis.

To check construct validity, an analysis of the main components with Varimax rotation was performed as this was less dependent on the sample and, as such, more reproducible. This type of analysis allowed us to explore the possible dimensions of the scale. The Pearson correlation coefficient was used to assess the relationship between the PDD and the other scales of different contructs (SFS, GAF, CGI-S), as well as other scales that assess self-stigma (SSQ). All statistical analyses were performed using the program SPSS 19.0.

Results

Table 1 shows the sociodemographic characteristics of the sample. The average age of the 130 patients included in the study was 43.49 years (standard deviation: 9.03). A total of 71.5% of the sample were men; 86.9% were single, 49.3% had completed primary education, and 36.9% lived with their parents.

Table 2 shows the stability of each item measured using the intraclass correlation coefficient on both occasions. The values oscillated between .415 and .806. A total of 11 items yielded scores greater than .6.

The Cronbach's α was .868. Construct validity was conducted through analysis of the main components. The indicators of sample suitability were optimum: the significance of Bartlett's test of sphericity was p<.001, showing that there was systematic covariance between the items constituting the PDD, and consequently, that the analysis was appropriate. The value of the Kaiser-Meyer-Olkin test was .754. This value indicated that there was a notable proportion of common variance and the analysis of principal components was viable. Following analysis of the sedimentation graph, it was decided that the optimum solution would be that of two components, both with individual eigen values greater than 3. These two components explained 40.3% of the variance. The items proposed for each of the components were those with a weight greater than .30. The only item with less weight in the first factor was item 9. The analysis of the items included in each of the components indicated that component 1 group items were closely more associated with individual self-perception while component 2 was related to social stigma (Table 3).

Table 4 shows the concurrent and discriminant validity of the PDD with the SSQ, social and general functioning, and symptoms. With respect to discriminant validity, no correlations were found between the CGI-S, GAF, and SFS, and the 2 components of the PDD. Regarding concurrent validity, the PDD factor associated with individual perception of stigma correlated negatively with the SSQ (-.324, p<.01). The first factor in the PDD correlated negatively with the social activities subscale of the SFS (-.279, p<.05). However, no significant relationship was found between the PDD individual self-perception factor and SSQ.

Discussion

The data that emerge from this study suggest that the Spanish version of the PDD is a valid, reliable scale for the evaluation of self-stigma in people with schizophrenia.

Regarding the instrument's structure, two-factor solutions were obtained which allowed good grouping of the subscale items initially formulated by the original author. Examining the items which constitute each of the factors, it may be observed how the first factor groups the items associated with individual perception of stigma, such as social acceptability, in various contexts (family, work, social interaction, and threat to others). The second factor

Table 1
Sociodemographic characteristics of the sample

Sociodemographic variables	N	%
Gender		
Men	93	71.5
Women	35	26.9
Marital status		
Single	113	86.9
Married	3	2.3
Separated	11	8.6
Other	1	.8
Educational level		
No formal education	2	1.5
Primary	64	49.3
Secondary	58	44.6
University	4	3.1
Living with:		
Alone	19	14.6
With parents	48	36.9
Other family members	8	6.2
Own family	3	2.3
Care home/supervised	44	33.8
Other	6	4.6
Employment		
Active employed		
Active unemployed	3	2.3
Student	2	1.5
Pensioner-retired	3	2.3
Housewife	105	80.8
Protected work	7	5.4
Sick leave	2	1.5
Other	8	4.6

groups self-perception of stigma items more from the social perspective (society's discriminatory attitudes, concealment, secrecy surrounding mental illness, and isolation). The only item that presented difficulties was item 9 which explores the attitude of employers towards hiring a person who has been hospitalised due to mental illness. This is for two reasons: firstly, because it did not reach the .30 criterion set for inclusion in a factor, even though the weight of this variable is very close to the proposed value, and secondly because this item is considered problematic in that it has weight in a factor other than that originally intended by the author. Consequently, we need to consider eliminating the item from the scale or including it in the self-stigma factor in the Spanish version.

The internal consistency of the Spanish version of the PDD (.87) is very similar to the original version in English (.80). The factors that we propose coincide with those of the author and show even better internal consistency. Our grouping has clinical relevance, obtaining the same analysis dimensions found in the original scale. For this study, the extended 22-item version was used. The longer version allows exploration of self-perception of stigma and the perception of social stigma in society in greater depth. This coincides with the author's original version in measuring secrecy, education, and non-adapted social functioning.

Analysis of discriminant validity between the CGI-S, the GAF, SFS, and the PDD did not show any correlation between the SSQ assessed by this scale and psychosocial and general functioning

Table 2
Intraclass correlation coefficient of the PDD between two evaluations

Items	First evaluation		Second evaluation		Intraclass correlation coefficient
	Mean	(SD)	Mean	(SD)	
1. Most people would accept a person who once had a serious mental illness as a close friend	2.50	.763	2.41	.802	.520
2. Most people believe that a person who has been in a psychiatric hospital is just as intelligent as the average person	2.39	.850	2.34	.728	.448
3. Most people believe that a person who has been hospitalized for serious mental illness is just as trustworthy as the average citizen	2.41	.794	2.45	.744	.632
4. Most people would accept a person who has made a full recovery from serious mental illness as a teacher of young children in a public school	2.67	.886	2.65	.851	.525
5. Most people believe that entering a psychiatric hospital is a sign of personal failure	2.45	.887	2.56	.871	.551
6. Most people will not hire a person who has been hos-pitalized for serious mental illness to take care of their children, even if he or she had been well for some time	2.76	.794	2.97	.720	.415
7. Most people think less of a person who has been in a psychiatric hospital	2.76	.797	2.85	.689	.508
8. Most employers will hire a person who has been hospitalized for mental illness if he or she is qualified for the job	2.39	.822	2.38	.680	.430
9. Most employers will pass over the application of a person who has been hospitalized for mental illness in favor of another applicant	2.93	.790	2.85	.653	.473
10. Most people in my community would treat a person who has been hospitalized for mental illness just as they would treat anyone	2.31	.801	2.48	.766	.601
11. Most young women would be reluctant to date a man who has been hospitalized for a serious mental illness	2.89	.738	2.77	.725	.682
11A Most people think that a person who has been hospitalized for serious mental illness is dangerous and unpredictable	2.66	.761	2.61	.725	.530
12. Once they know a person was in a psychiatric hospital, most people will take his or her opinions less seriously	2.52	.903	2.76	.694	.583
13. If you had a close relative who had been treated for a serious mental illness, you would advise him or her not to tell anyone about it	2.55	.895	2.55	.844	.719
14. If you were in treatment for a serious mental illness you would worry about certain people finding out about your treatment	2.32	.857	2.39	.810	.460
15. If you have ever been treated for a serious mental illness, the best thing to do is to keep it a secret	2.47	.963	2.42	.907	.627
16. There is no reason for a person to hide the fact that he or she had a mental illness at one time	2.36	.855	2.34	.762	.707
17. In view of society's negative attitudes toward people with serious mental illnesses, you would advise people with serious mental illness to keep it a secret	2.51	.897	2.48	.855	.621
18. In order to get a job, a person with mental illness will have to hide his or her history of hospitalization	2.45	.877	2.44	.785	.806
19. You encourage other members of your family to keep your mental illness a secret	2.24	.922	2.15	.803	.716
20. You believe that a person who has recovered from a mental illness experienced earlier in life should not tell other people about it	2.48	.850	2.33	.857	.607
21. When you meet people for the first time, you make a special effort to keep the fact that you have been in psychiatric treatment to yourself	2.48	.912	2.50	.797	.600

Table 3
Rotated components of the factorial analysis of the PDD

Items	Components	
	1	2
15	.759	
17	.744	
21	.684	
19	.683	
13	.682	
18	.656	
14	.644	
20	.634	
16	.629	
9	.295	
7		.740
3		.689
12		.678
2		.677
10		.632
1		.604
11A		.600
8		.578
6		.541
11		.456
5		.431
4		.342

Table 4
PDD convergent and divergent validity with social, general functioning and symptoms

	PDD social stigma factor	PDD individual self-perception factor
SSQ	-.324**	-.128
GAF	-.047	.024
CGI		
Positive symptoms	-.011	.046
Negative symptoms	-.095	-.119
Depressive symptoms	.117	.161
Cognitive symptoms	-110	.057
Global	.017	-.006
SFS		
Independence Performance Subscale	-.192	.181
Recreational Activities Subscale	-.102	.139
Social Activities Subscale	-.279*	.013
Employment Subscale	-.037	-.013
Withdrawal Subscale	.045	.060
Relationships Subscale	-.202	.158
Independence Competence Subscale	-.099	.136
Total	-.222	.161

* p<.05; ** p<.01

or symptoms. Authors have found contradictory results in this respect. Some studies have found a relationship between functioning (general and social) and self-perception of stigma (Lysaker, Roe, & Yanos, 2007) while others have not uncovered any relationship between these two constructs (Dickerson, Sommerville, Origoni, Ringel, & Parente, 2002; Switaj, Wciórka, Smolarska-Switaj, & Grygiel, 2009). In one review (Livingston & Boyd, 2010) the conclusion was reached that, in the studies carried out, no significant relationships were demonstrated with sociodemographic, chronicity, illness-awareness, functioning,and diagnosis variables although some negative correlations were found with self-esteem, quality of life, empowerment and social support. These results suggest that the concept of self-perception of stigma is distinct from other concepts such as functioning and symptoms and indicate that the instrument is more robust. With regard to convergent validity, a correlation was found between the most social factor of PDD and the SSQ in people with schizophrenia. However, in contrast to expectations, the self-stigma subscale was not associated with the SSQ. These results led us to reflect on the complexity of the concept of 'self-perception' and the interactions that take place among social prejudice and beliefs, discrimination, and the consequences this could have for the nature of perception of oneself.

In general, test-retest reliability is good as there is no item with an intraclass correlation coefficient score lower than .40. Nevertheless, there is moderate variability which could be because the items with the highest and lowest scores are the constructs which assess aspects associated with secrecy and occupational integration (items 8, 9, and 18) and emotional responses (items 13, 14, and 19). Although the average interval between test and re-test was respected in all cases, the variability in responses could be due to, among other possible explanations, the process of restructuring the self-concept based on the information previously provided.

The design and validation of instruments which can feasibly be used in real care conditions is of great relevance. The acceptance by clinics of measuring instruments intended for routine use is not only dependent on their suitable psychometric properties but also on their ease of administration and clinical significance. In this case, the PDD is an instrument that does not require extensive training for its reliable use as each item refers to simple behaviour. The speed with which it can be administered means that it is recommendable for routine use in clinical settings. It may be useful in helping to customise the aims of rehabilitation interventions if the scores of each subscale are evaluated according to self-perception.

Further studies should focus on exploring the capacity of the scale to predict how self-perception of social stigma could affect the personal and social lives of users as well as the evolution of the illness. Collaboration with people from various services and distinct patterns of care would allow the results to be extrapolated to all those people suffering from schizophrenia who are treated in the public mental health network. In future studies, this could be applied to other types of pathologies to evaluate and compare self-perception of social stigma in groups other than those in mental health.

This study invites the conclusion that the PDD is, in light of the validity and reliability data obtained, a good scale. It is useful in evaluating self-perception of stigma in schizophrenia sufferers. Due to its characteristics, it allows potentially generalizable comparisons to be made with other Spanish-speaking countries with compatible sociocultural environments. The ease of administration, scoring, and interpretation encourages its use in various healthcare settings where people with schizophrenia are treated. It is hoped that

this instrument will be used as a basis for further studies of self-perception of social stigma in patients with schizophrenia with the aim of developing specialised intervention strategies.

Acknowledgments

We are especially grateful to the staff at Parc Sanitari Sant Joan de Déu and Hospital Santiago Apóstol of Vitoria as well as Community Rehabilitation Services in Cornellà, Ciutat Vella, Viladecans, El Prat, Cerdanyola, Poble Sec, and Garraf for their collaboration on this research project. Finally, we would like to thank Professor Bruce G Link, author of the PDD, for his support in carrying out the adaptation and validation of the Spanish version of the scale.

This Research Project was financed by the Instituto Carlos III through Health Research Fund PI08/90551.

References

Barbato, A. (2000). *Consequences of schizophrenia: A public health perspective* (1st ed). New York: W.A.P.R. Bulletin 6-7.

Birchwood, M., Smith, J., Cochrane, R., Wetton, S., & Copestake, S. (1990). The Social Functioning Scale. The development and validation of a new scale of social adjustment programmes with schizophrenic patients. *British Journal of Psychiatry, 157*, 853-859.

Brohan, E., Elgie, R., Sartorius, N., Thornicroft, G., & Gamian-Europe Study Group (2010). Self-stigma, empowerment and perceived discrimination among people with schizophrenia in 14 European countries: The GAMIAN-Europe study. *Schizophenia Research*, *122*(1-3), 232-238.

Brohan, E., Slade, M., Clement, S., & Thornicroft, G. (2010). Experiences of mental illness stigma, prejudice and discrimination: A review of measures. *BMC Health Services Research, 10*, 80-87.

Byrne, P. (2001). Psychiatric stigma. *British Journal of Psychiatry, 178,* 281-284.

Caltaux, D. (2003). Internalized stigma: a barrier to employment for people with mental illness. *International Journal of Therapy and Rehabilitation*, *10*, 539-543.

Caqueo-Urízar A., & Lemos, S. (2008) Calidad de vida y funcionamiento familiar de pacientes con esquizofrenia en una comunidad latinoamericana [Quality of life and family functioning in schizophrenia patients]. *Psicothema, 20*(4), 577-582.

Caqueo-Urízar, A., Miranda-Castillo, C., Lemos, G.S., Lee, M.S., Ramírez, P.M., & Mascayano T.F. (2014). An updated review on burden on caregivers of schizophrenia patients. *Psicothema*, *26*(2), 235-243.

Crisp, A.H., Gelder, M.G., Rix, S., Meltzer, M.I., & Rowlands, O.J. (2000). Stigmatization of people with mental illnesses. *British Journal of Psychiatry*, *177*, 4-7.

Dickerson, F.B., Sommerville, J., Origoni, A.E., Ringel, N.B., & Parente, F. (2002). Experiences of stigma among outpatients with schizophrenia. *Schizophrenia Bulletin*, *28*(1), 143-155.

Endicott, J., Spitzer, R.L., Fleiss, J.L., & Cohen, J. (1976). The Global Assessment Scale. A procedure for measuring overall severity of psychiatric disturbance. *Archives of General Psychiatry, 33*, 766-771.

Finzen, A., & Hottman-Richter, U. (1997). Stigma and quality of life in mental disorders. In H. Katsching, H. Freeman, N. Sartorius, Eds. *Quality of Life in Mental Disorders*. Chichester: John Wiley and Sons.

Granerud, A., & Severinsson, E. (2006). The struggle for social integration in the community-the experiences of people with mental health problems. *Journal of Psychiatric and Mental Health Nursing*, *13*(3), 288-293.

Gutiérrez-Maldonado, J., Caqueo-Urizar, A., Ferrer-García, M., & Fernández-Dávila P. (2012) Influencia de la percepción de apoyo y del funcionamiento social en la calidad de vida de pacientes con esquizofrenia y sus cuidadores [Influence of perceived social support and functioning on the quality of life of patients with schizophrenia and their caregivers]. *Psicothema, 24*(2), 255-262.

Haghighat, R. (2001). A unitary theory of stigmatization: Pursuit of self-interest and routes of destigmatization. *British Journal of Psychiatry*, *178*, 207-215.

Haro, J.M., Kamath, S.A., Ochoa, S., Novick, D., Rele, K., Fargas, A., & Jones, P.B; SOHO Study Group (2003). The Clinical Global Impression-Schizophrenia scale: A simple instrument to measure the diversity of symptoms present in schizophrenia. *Acta Psychiatrica Scandinavica Supplementum, 416*, 16-23.

LeBel, T. (2008). Perceptions of and responses to stigma. *Sociology Compass*, *2*, 409-432.

Leff, J., & Warner, R. (2006). *Social Inclusion of People with Mental Illness*. Cambridge University Press: Cambridge.

Link, B.G. (1987). Understanding labeling effects in the area of mental disorders: An assessment of the effects of expectations of rejection. *American Sociological Review, 52*(1), 96-112.

Link, B., Cullen, F., Struening, E., Shrout, P., & Dohrenwend, B.P. (1989). A modified labeling theory approach to mental disorders: An empirical assessment. *American Sociological Review*, *54*, 400-423.

Link, B.G., Struening, E.L., Neese-Todd, S., Asmussen, S., & Phelan, J.C. (2002). On describing and seeking to change the experience of stigma. *Psychiatric Rehabilitation Skills, 6*(2), 201-231.

Link, B.G., Yang, H.L., Phelan, J.C., & Collins, P.Y. (2004). Measuring mental illness stigma. *Schizophrenia Bulletin*, *30*(3), 511-538.

Livingston, P.H., & Boyd, J.E. (2010). Correlates and consequences of internalized stigma for people living with mental illness: A systematic review and meta-analysis. *Social Science & Medicine, 71*, 2150-2161.

Lysaker, P.H., Roe, D., & Yanos, P.T. (2007). Toward understanding the insight paradox: Internalized stigma moderates the association between insight and social functioning, hope, and self-esteem among people with schizophrenia spectrum disorders. *Schizophrenia Bulletin, 33*(1), 192-199.

Ochoa, S., Martínez, F., Ribas, M., García-Franco, M., López, E., Villellas, R., & Haro, J.M. (2001). Estudio cualitativo sobre la autopercepción del estigma social en personas con esquizofrenia [Qualitative study about the self perception of social stigma in people with schizophrenia]. *Revista Asociación Española de Neuropsiquiatría, 31*(111), 467-486.

Quinn, N., Shulman, A., Knifton, L., & Byrne, P. (2011). The impact of a national mental health arts and film festival on stigma and recovery. *Acta Psychiatrica Scandinavica*, *123***,** 71-81.

Sartorius, N., & Schulze, H. (2006). Reducing the stigma of mental illness. A report from a global programme of the World Psychiatric Association. New York: Cambridge University Press.

Switaj, P., Wciórka, J., Smolarska-Switaj, J., & Grygiel, P. (2009). Extent and predictors of stigma experienced by patients with schizophrenia. *European Psychiatry, 24*(8), 513-520.

Torrey, E.F. (2011). Stigma and violence: Isn't it time to connect the dots? *Schizophrenia Bulletin, 37*(5), 892-896.