

Alicia Figueroa Barra<sup>1</sup>  
Ana Paula Machado Goyano Mac-Kay<sup>2</sup>  
Eduardo Durán Lara<sup>1</sup>

# Narrative evaluation strategies as metacognitive task in subjects with schizophrenia

## *Estrategias de evaluación en la narración como tarea metacognitiva en personas con esquizofrenia*

### Keywords

Evaluation  
Schizophrenia  
Affective Psychotic Disorders  
Narration  
Metacognition

### Descriptor

Evaluación  
Esquizofrenia  
Trastornos Psicóticos Afectivos  
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Metacognición

### ABSTRACT

**Purpose:** This study aims to explore the differences in the evaluative component of the narrative structure in subjects diagnosed with schizophrenia compared to subjects diagnosed with affective psychosis. **Methods:** The present investigation was descriptive, not experimental and it included the analysis of the narration evaluative components of interviews of 25 individuals with psychiatric diagnosis of chronic schizophrenia and 25 of chronic affective psychosis, matched by age, gender and sociodemographic characteristics. **Results:** The relationship between diagnosis and type of evaluation showed statistically significant results with a chi square value of 39.880a ( $p < 0.00$ ). It was possible to observe that in the schizophrenia there is a greater inhibition in the elaboration of expressions that imply opinions and that narratives tended to identify facts regardless of how they affected subjects, suggesting a limitation of intersubjective function. **Conclusion:** The diagnostic variable confirms that in schizophrenia there is a functional deterioration in the process of elaborating narrative structures especially in the articulation of the evaluative component. In the case of the affective psychosis group, superficial dysfunctions were manifested, without compromising their performance in the evaluation of narratives.

### RESUMEN

**Objetivo:** Este estudio procura explorar las diferencias en el componente evaluativo de la estructura narrativa en personas con diagnóstico de esquizofrenia, en comparación con personas con diagnóstico de psicosis afectiva. **Método:** El presente estudio es descriptivo, no experimental, y comprende el análisis de los componentes evaluativos de la narrativa, en entrevistas realizadas a 25 individuos con diagnóstico psiquiátrico de esquizofrenia crónica y a 25 individuos diagnosticados de psicosis afectiva crónica, pareados por edad, género y características sociodemográficas. **Resultados:** La relación entre diagnóstico y tipo de evaluación arrojó resultados estadísticamente significativos con un valor de *chi* cuadrado de 39,880\* ( $p < 0.00$ ). Fue posible observar que en la esquizofrenia existe una mayor inhibición en la elaboración de expresiones que impliquen opiniones, que los relatos tendieron a identificar los hechos independientemente de cómo les afectaron, sugiriendo una limitación de la función intersubjetiva. **Conclusión:** La variable diagnóstico confirma que en la esquizofrenia existe un deterioro funcional en la elaboración de estructuras narrativas y en la articulación del componente evaluativo. En el caso de la psicosis afectiva se manifiestan disfunciones superficiales, sin comprometer su desempeño en la evaluación de las narraciones.

### Correspondence address:

Alicia Figueroa Barra  
Departamento de Psiquiatría y Salud Mental, Facultad de Medicina, Universidad de Chile, Campus Sur Av. José Miguel Carrera, 3100, San Miguel, Santiago, Chile, CEP: 8900-085.  
E-mail: alfigeba@gmail.com

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<sup>1</sup> Departamento de Psiquiatría y Salud Mental, Facultad de Medicina, Universidad de Chile, Campus Sur – Santiago, Chile.

<sup>2</sup> Facultad de Salud, Carrera de Fonoaudiología, Universidad Santo Tomás – Viña del Mar, Chile.

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## INTRODUCTION

In schizophrenia and in affective psychoses, the diagnosis is based, fundamentally, on the history of the development of symptoms, the clinical interview and observation of the behaviors of the affected person, due to the absence of biomarkers. In both pathologies, the reduction of the period between the onset of psychotic symptoms and the beginning of treatment would prevent further neurobiological and neurocognitive damage, favoring a more benign evolution<sup>(1)</sup>. The psychotic symptoms evolution is influenced by other factors such as gender and the age of the person at the onset of the disease. It has been verified that men have an earlier onset and an important deteriorating course<sup>(2,3)</sup>.

In contrast to affective psychosis, schizophrenia presents a high morbid-mortality, etiological multidimensionality and deteriorating course of great consideration, to the point that it is one of the most challenging mental illnesses for both psychiatry and public health<sup>(4-6)</sup>. Starting in early stages of the life cycle, it is associated not only with significant neurocognitive and psychosocial disorders, but also, in addition to not having an opportune and effective treatment, it will tend to chronicity.

Coping with morbid process in psychosis also presupposes the integration of various neurocognitive skills. Metacognition, understood as the capacity to think in thought, is diminished in severe mental pathologies such as schizophrenia, in comparison with affective psychosis<sup>(6)</sup>. The doctor-patient interaction, in itself, represents an imbricated communicative process that constitutes an ideal framework for the study of some functional difficulties, as well as the identification of possible cognitive alterations also present in schizophrenia and other mental illnesses<sup>(7-11)</sup>. The mental health clinical interview rests on the connectivity with the patients and the exploration of their behavior through psychiatric semiology. This form of interaction has an informative advantage and it contributes to the therapeutic discourse investigation, which includes three essential steps such as the analysis of the global communicative context, the identification of rules of discourse and the analysis of interactions. Those conditions are indispensable for a strategic understanding of the cognitive-communicative functioning of the patient<sup>(12)</sup>.

Narration is the main activity carried out in the psychiatric clinic<sup>(13,14)</sup> because the narrative establishes a rational mechanism that provides frameworks and schemes of necessary knowledge for the elaboration of the world's interpretation, reality and personal experience, elements of one's identity framework, permanently subjected to the negotiation of meaning<sup>(13)</sup>.

The evaluation component constitutes a metacognitive mechanism par excellence, which is a fundamental process for the elaboration of life experience judgements<sup>(14-16)</sup>. The comprehension of the inferential aspects related to intentions, emotions and beliefs of the person with whom one interacts allow identity consciousness conservation. The possibility of distinguishing and differentiating internal states is fundamental for the individual to control his affective experience<sup>(17)</sup>. The acquisition of limited abilities and the presence of an impoverished narrative can favor behaviors that avoid confrontation, giving rise to a cycle of continuous dysfunction<sup>(18)</sup>.

Labov and Waletzky<sup>(15)</sup> proposed one of the most important models for the study of narratives in different communicative contexts. It established transcendental bases for the narration empirical study by stating that stories are organized through a canonical superstructure constructed of hierarchically organized categories (although not necessarily compulsory): abstract, orientation, complicating action, resolution, evaluation and final denouement. The authors defined *narration* as a way of recalling a past experience, pairing verbal clauses with events that actually occurred<sup>(15)</sup>. In the present study the theoretical proposal is extended and the evaluative component is considered of utmost importance<sup>(12,15,16)</sup>. The evaluation category corresponds to the part in which the meaning or purpose of the story is expressed; the interest of the speaker or audience is maintained, as well as the important reason for narrating. It also offers a personal point of view that may occur in different points/moments of the story<sup>(15,19,20)</sup>. The forms of evaluation are four: external, chained, narration by the fact, and by suspension of the action.

The evaluation also represents a complex discursive mechanism developed in different levels of semantic and pragmatic processing. It is a central task in maintaining the positive image and, strategically, provides clues about other aspects of cognitive functioning of subjects affected by schizophrenia, such as inhibitory control, working memory and sustained attention, skills that are particularly diminished in schizophrenia<sup>(11)</sup>.

Although in the psychiatric clinical interaction the canonical narratives cannot be expected because of the general psychotic process that interferes in the discourse, it is feasible to observe the evaluative component within the actual morbid process experienced by the framework interpretation. As the individual processes its discourse on the disease and its impact, the narrative serves as a mechanism that enables access to its own identity<sup>(11)</sup>. It is difficult for subjects affected by psychosis to evaluate their morbid process and it is even more difficult to assume it from a conscious analytical experience, expressed in the evaluation of personal narratives. Additionally, the evaluations in a story presume a full coincidence with the historical-biographical perspective, reason why we are interested in this aspect of the model<sup>(11)</sup>.

The present study adopts the Clinical Linguistics paradigm, which applies linguistic concepts, theories and methods to the study of language disorders<sup>(21)</sup>.

It aims at describing the uses of narrative evaluation component by individuals diagnosed with schizophrenia compared to individuals with affective psychosis, and to establish the possible relationship between clinical diagnoses, gender and the discursive phenomena. The study hypothesis is that narrative evaluation tends to be more dysfunctional between subjects with schizophrenia compared to those suffering of affective psychosis.

## METHODS

This investigation was approved by the C.E.C. of the South Metropolitan Health Service S.S.M.S Scientific Ethics Committee, of Santiago, Chile. All participants and a relative or legal caregiver signed the Informed Consent Form.

The is a transversal, comparative and non experimental research that included a random selection of 50 clinical interviews - 25 of individuals diagnosed with chronic schizophrenia (G1-EC), and 25 of individuals with a diagnosis of chronic affective psychosis (G2-PA). The sample includes a representative portion of both pathologies, and it was extracted from the Language, Psychosis and Intersubjectivity (LEPSI) database. Individuals were paired by gender, age range and sociodemographic characteristics. The corpus consisted of interviews conducted with Chilean individuals respecting the following inclusion criteria: interviews with the group diagnosed with chronic schizophrenia (G1-EC) and with chronic affective psychosis (G2-PA); individuals of both genders, with an age range between 25 and 50 years, diagnosed for more than three years by a team of psychiatrists, psychopathologically stabilized and receiving oral doses of antipsychotics for at least a month. The exclusion criteria were: individuals with other psychiatric pathologies, with neurodegenerative diseases and with addiction to alcohol or drugs.

Clinical and qualitative observation assessments were the grounds for the assessment that was based on their metacognitive contribution to the story, linking the problem experienced by personal situation (which implies that the narrator must explain his / her status in the first person), beliefs, emotions or feelings, expressed by linguistic utterance such as: “*and I felt that they were watching me*”, “*I was sorry that*”, “*I thought that*”, etc.. For these study purposes, the types of evaluations were ranked from higher to lower, reflecting the relationship distance between personal situation and illness. In this way, it was assigned scores to the evaluative components typology. Chart 1 describes discursive characteristics, types of evaluation and accredited score.

The orthographic transcription of the interviews was carried out following the premises proposed by Gallardo Paúls in the PeErLA corpus, described in Annex 1.

Variables generated from the transcribed data were categorized for the assessment of the evaluation component. Since the study included multiple quantitative variables, we checked the normal distribution of the data with chi-square test, which served to correlate the presence or absence of some variables such as the stage of the disease and the gender of the participants. In all cases, the degree of statistical significance was defined at  $p = <0.05$ .

## RESULTS

The characteristics of all the participants are outlined in Chart 2.

In Chart 2 it can be verified that both groups present an equilibrium between the number of individuals of the male and female gender. One can observe that more than half of the G1-EC have high school education and of G2-PA incomplete high school education. Both groups presented a significant number of individuals unemployed.

In order to differentiate the types of narrative evaluations between groups, the data obtained was organized in different levels of observation that could provide convergent evidence: in descriptive terms, in percentages of frequency of variables according to the diagnosis; in qualitative terms, in relation to the communicative effectiveness achieved by the participants in each variable. Chart 3 illustrates the evaluation results presented in percentage according to the diagnosis.

The relationship between diagnosis and type of evaluation yielded statistically significant results with a chi-square value of 39,880a ( $p <0.00$ ).

**Chart 1.** Types of evaluation

	CHAINED (3 points)	EXTERNAL (2 points)	SUSPENSION OF THE ACTION (1 point)	NARRATION BY THE FACT (0 point)
DISCURSIVE CHARACTERISTICS	The evaluations intermingle and express feelings and emotions that occur when narrating. They often take the form of a monologue.	It consists in the interruption of the story in order to explain to the interlocutor where the purpose of the story is. It is often done at the beginning and takes the form of a revision.	The emphasis is on a particular point in the story. It often takes the form of a brief comment.	It corresponds to the description of the actions that take place between the interlocutors (about what they say).
	Evaluation with explicit emotional self-regulation.	Evaluation with restricted emotional self-regulation	Evaluation with implicit emotional self-regulation	Absence of evaluation.
MARKERS	Explicit relationship between lived experience and morbid process.	Explicit, but discordant relationship between lived experience and morbid process.	Implicit relationship between some aspects of lived experience and morbid process (secondary level).	Distant relationship between lived experience and morbid process.
	The explanatory, comparative or intensifying elements are presented in the first person and include the expression of feelings	Identification of the causes and consequences of the morbid process and life experience are restricted to some aspects and are limited to the expression of feelings.	A specific aspect of the narrative is prioritized and the evaluation occurs indirectly.	The narrator, as a witness who reports the actions of others, is not involved from a personal perspective.

**Chart 2.** Clinical and demographic data of the sample

GROUP	n	Gender		Years/ Schooling		Occupation			
		H	M	8	12	With remunerated activity	Without remunerated activity*		
							1	2	3
G1-EC	25	13	12	40%	60%	12%	48%	40%	0%
G2-PA	25	14	11	52%	48%	8%	64%	12%	16%
TOTALES	50	25	25						

\*(1) Unemployed- (2) Home Owner- (3) Student

**Chart 3.** Frequency of the types of evaluation according to the diagnosis

Diagnose	Types of Evaluation			
	CHAINED	EXTERNAL	SUSPENSION OF THE ACTION	NARRATION BY THE FACT
G1-EC	(5) 10%	(18) 36%	(10) 20%	(17) 34%
G2-PA	(20) 80%	(1) 5%	(4) 15%	(0) 0.0%

In relation to the clinical diagnosis and type of evaluation, as reported in Chart 3, it can be observed that the chained evaluation was present in 80% of the interviews of the G2-PA, in contrast to a low occurrence (10%) in the G1-EC interviews that indicated higher percentages of external evaluation and narration.

The study's descriptive results demonstrate the communicative efficacy achieved by the study participants. The following examples highlight important findings of the evaluations used by the patients.

Type of evaluation and clinical diagnosis (interviewer is indicated by E and the subject by S):

Example 1:

1 S: *ahora/ya que superé la parte más crítica de mi depresión/ me doy cuenta que quiero hacer hartas cosas/ quiero estudiar literatura// me encanta leer/ escribir/ aunque con este tema de la depresión dejé de lado todo eso.*

2 E: *ya*

3 S: *como que ahora me cuesta concentrarme en leer/ no escribo igual que antes y eso igual me frustra/ Me gustaría trabajar en un café literario porque no quiero algo// no quiero ser profesora porque sería muy cuadrado.*

4 E: *mmm*

As can be seen in Example 1, a fragment of a G2-PA individual production, an elaborated chained evaluation of the story is introduced and so the discursive context does not require the intervention of the interviewer as requesting any kind of clarification; in addition, the patient established comparisons between his initial disease situation and his present condition, with the use of discursive connectors that fulfill logical functions, which allows an understanding of the utterance without inconvenience.

On the other hand, in Example 2, which belongs to a patient of the G1-EC group, the oral text elaboration has distracting elements such as the ambiguous response seen in turn 5, although

the relationship between the disease and its effects on its person's life can be understood in a general way.

Example 2:

1S: *cuando dicen queee <pausa or> las voces cuando dicen esquizofrenio/ esquizo/ que soy esquizofrénico se van <rie> como que les da miedo.*

2E: *yaa/ pero <pausa or> a ver/ explíqueme cómo es eso/ ¿a quién le da miedo?/ ¿a las voces?*

3S: *a mí/ yo cuando lo pens <palabra cortada>/ porque yo cuando empecé a escuchar voces/ altiro declaré que empecé a escuchar voces.*

4E: *ya*

5S: *porqueee <pausa or> yo dije: “esto no es mío”/ “es algo/ algo me está pasando”/ “algo raro estáaa <pausa or>”/ <rie> “no está/ no está funcionando bien po [pues]” / no sé/yo me fui/ me fui directo al médico/ el me/ me/ me/ como se llama/ meee <pausa or>/ me declaró/ me decretó// me dijo que era esquizofreniaaa <pausa or> parenoi <palabra cortada> paranoide// También me he puesto a pensar en/ a pensar/ a estudiar en el cerebro/ a estudiar el cerebro/ también lo he hechooo <pausa or> en los ratos libres/ para poder ente<palabra cortada> entenderme/ ¿en qué parte?/ ¿cómo me funciona el cerebro?/ y qué partes son las que me hacen pensar/ y qué partes no me hacen tanto pensar// eso que más le puedo contar <rie>/ ¿le sigo contando?*

6E: *ya/claro que sí*

The external evaluation and the evaluation by suspension component achieve a higher recurrence in G1-EC in contrast to G2-PA. In the case of the evaluation for the fact component, one perceives that there is a preference for its use in schizophrenic patient narratives (34% of the total occurrences) in contrast to the absence of this type of evaluation among the group of affective psychosis patients.

## Type of evaluation and gender

Regarding the type of evaluation variables and gender, considering the total number of subjects, the data provided did not offer statistically significant results, since the chi-square value was 241a ( $p < 971$ ). Chained evaluation among men reached 14.6%, compared to the group of women who registered 18.6%. On the other hand, the external evaluation among men reached a record of 10.6%, while among women it reached 14.6%. It is interesting to point out that women use more consistently and elaborately the chained and external evaluations, as illustrated in Example 3.

Example 3:

- 1.E: *ok/ya/ ¿me puedes contar porque llegaste acá al hospital?*
- 2.S: *si/ llegué porquee <pausa or> siento///que no soy yo*
- 3.E: *¿mm? <pausa or>*
- 4.S: *que no soy yo/ cuando me miro al espejo/ cuando hablo/ no soy yo*
- 5.E: *¿cómo es eso?/ a ver/ ¿me lo puedes explicar?*
- 6.S: *que/ por ejemplo/ mmm <pausa > / que no hablo yo/ siento que otra persona habla por mi*
- 7.E: *yaa<pausa >*
- 8.S: *es que otra persona<pausa > hace todo por mi*
- 9.E: *ya/ a ver/ ¿y quién sería esa persona/ sabes?*
- 10.S: *una extraña*
- 11.E: *una extraña/ ya/ ¿y esa extraña desde cuándo que está presente?*
- 12.S: *de hace 8 meses*

The type of evaluation due to the fact predominated among men (12%) in contrast to women group (8%). The evaluation for suspension of the action reached 9.33% among women and reached 12.27% among men. Below is an example of evaluation suspension of the action in one of the male individual utterances:

Example 4:

- 1.S: *ya/ mire esta telepatía comenzó/ a través de un libro cuando yo leí/ un libro infantil*
- 2.E: *mm<pausa or>*
- 3.S: *estaba en la cama un día/ empezaron tatata a martillar/ hasta ahí no más po [pues] / después me confunden con loco/ que escucho voces/ cosas raras/ eso pasa en este asunto/ entonces es sufrir internamente/ sufrimiento interno/ yo soy ascendiente al sufrimiento.*
- 4.E: *¿ascendiente al sufrimiento?/ ya*
- 5.S: *¿le quedó claro?*
- 6.E: *mm<pausa or> si/ es que no me queda claro lo de la telepatía/ insisto/ ¿cómo se la practicaron a usted?*
- 7.S: *bueno*

- 8.E: *usted estaba acostado y ¿escuchó?///*
- 9.S: *vamos a explicar cómo es el asunto/ mire/ un día yo estaba en mi casa/ y un joven llegó con una renoleta [antiguo auto de marca Renault]*
- 10.E: *ya*
- 11.S: *y me pasaron un libro que se llama/ “Tus horas mágicas”*
- 12.E: *yaaa<pausa or>*
- 13.S: *yo las considero infantil*
- 14.E: *ya/ ¿y usted tomó el libro?*
- 15.S: *tomé el libro/ lo leí y comencé/ a recibir esta influencia negativa que se llama telepatía*
- 16.E: *ya/ comprendo*

## DISCUSSION

This study sought to explain some differences in the evaluative component of the narrative structure in people with a diagnosis of schizophrenia in comparison with people with a diagnosis of affective psychosis. Currently, the literature presents few studies on the subject. In psychoses, the evaluative component is conditioned by the patients' difficulties to express a reassuring notion of their own experience<sup>(22)</sup>. An irrefutable condition for rehabilitation is to preserve the sense of self, of a self that, although in conflict, is present<sup>(23)</sup>.

It is relevant that in general, and regardless of the pathology, women presented better efficiency in the elaboration of the evaluation of the story. The fact that women use more discursive mechanisms that involve the interviewer, through the opinions of the situations or the people who participate in their story, may be an indicator that they want to reinforce their positive image by the evaluation of the audience. This finding is consistent with the literature on narratives and gender<sup>(2,3,24-26)</sup>. Our female individuals used more resources to resume without passing the conversation turn to the interlocutor.

The chained evaluation represents a conscious articulation between the problem that triggers the morbid process, through the manifestation of their emotions or emotional states<sup>(11,27)</sup>; and this aspect is reflected in the data that evidences greater occurrences in G2-PA.

The use of external evaluation was observed preferentially among the young individuals of the G1-EC group corpus, and it was possible to observe a suspicious and self-monitoring attitude in the delivery of information in the story. This type of evaluation coincides with the literature<sup>(12)</sup> that describes its characteristic use in the therapeutic interview, which is directly related to the stage of the disease<sup>(11)</sup>.

In clinical interview, the evaluation by the fact was presented with an informative but disaffected character, that is, the patient says that someone did this or that, without including any personal impressions about what they report in their story, deriving the evaluation to the interlocutor, a fact observed

more related to the profile of G1-EC<sup>(6,8)</sup>. It is interesting to note that those occurrences were prototypically in the form of brief comments and limited to some episode of the story.

It is possible to synthesize our findings by proposing that there are differences in the use of evaluative strategies in the narrative in both groups of patients. The diagnostic variable confirms that in schizophrenia there is a functional impairment in the elaboration of narrative structures especially in the articulation of the evaluative component. In the case of the affective psychosis group, superficial dysfunctions were manifested though they did not compromise their use of narrative evaluation components. We found that the worst performance in the evaluation in G1-EC was related to the difficulty in identifying the obstacle derived from the morbid process. The development of a positive self-image could be observed in the group of affective psychosis and not in the group of schizophrenia. Although the variable gender did not statistically reflect significance, from a qualitative approach, one can identify poorer performance in the evaluation of the narration in men, while the women demonstrated more adequate results, fact corroborated by the literature. This finding suggests that it would be necessary to investigate more deeply and from different approaches, to verify the value of this variable.

## CONCLUSION

It is possible that facing a task of producing a narrative about the own morbid process, it is necessary to integrate the objective situation, the subjective experience and its corresponding evaluation components. The difficulties in this pertinent integration may be reliable indicators of the intersubjective deterioration of the person who narrates, aspects that were evidenced in the oral narratives of the group of schizophrenic individuals in contrast to those of affective psychosis. It was possible to observe that in schizophrenia there is a greater inhibition factor that affects the elaboration of linguistic oral expressions that imply opinions; consequently, the stories tended to identify the facts independently of how they affected the narrator, suggesting limitation of the intersubjective function, which entails social untying, stigma, and the consequent deterioration of psychosocial functioning. It should be noted that the limited nature of this study must be complemented by the expansion of the corpus to first-episode psychosis patients. The enormous vulnerability of people suffering from mental illnesses should motivate efforts to reach forms of intervention based on the bond and not only on the symptoms, a task that is possible in part with the generation of new language evaluation devices.

## REFERENCES

1. McGorry PD, Yung AR, Phillips LJ. The <close-in> or ultra high-risk model: a safe and effective strategy for research and clinical intervention in prepsychotic mental disorder. *Schizophr Bull.* 2003;29(4):771-90. <http://dx.doi.org/10.1093/oxfordjournals.schbul.a007046>. PMID:14989414.
2. Usall J. Diferencias de género en la esquizofrenia. *Rev Psiquiatr Fac Med Barc.* 2003;30(5):276-87.
3. Sánchez R, Téllez G, Jaramillo L. Edad de inicio de los síntomas y sexo en pacientes con trastorno del espectro esquizofrénico. *Biomedica.* 2012;32(2):206-13. <http://dx.doi.org/10.7705/biomedica.v32i2.423>. PMID:23242294.
4. Crow T. Is schizophrenia the price homo sapiens pay for language? *Schizophr Res.* 1997;28(2-3):127-41. [http://dx.doi.org/10.1016/S0920-9964\(97\)00110-2](http://dx.doi.org/10.1016/S0920-9964(97)00110-2). PMID:9468348.
5. Andreasen NC, Grove W. Thought, language, and communication in schizophrenia: diagnosis and prognosis. *Schizophr Bull.* 1986;12(3):348-59. <http://dx.doi.org/10.1093/schbul/12.3.348>. PMID:3764356.
6. McKenna PJ, Oh T. *Schizophrenic speech: making sense of bath roots and ponds that fall in doorway.* Londres: Cambridge University Press; 2005.
7. Chaika E, Lambe R. The locus of dysfunction in schizophrenic speech. *Schizophr Bull.* 1985;11(1):8-15. <http://dx.doi.org/10.1093/schbul/11.1.8>.
8. Elvevag B, Wynn R, Covington MA. Meaningful confusions and confusing meanings in communication in schizophrenia. *Psychiatry Res.* 2011;186(2-3):461-4. <http://dx.doi.org/10.1016/j.psychres.2010.08.015>. PMID:20843559.
9. Fernández Pérez M. Síntesis Lingüística y déficit comunicativos. Lingüística clínica y Logopedia. In: Fernández Pérez M, coordinador. *Lingüística y déficit comunicativos.* Madrid: Madrid Editorial; 2014. p. 19-45.
10. Salavera C, Puyuelo M. Aspectos semánticos y pragmáticos en personas con esquizofrenia. (2010). *Rev Logop Fon Audiol.* 2010;30(Apr-June):84-93.
11. Figueroa A. Análisis pragmalingüístico de los marcadores de coherencia en el discurso de sujetos con esquizofrenia crónica y de primer episodio [tesis]. España: Universidad de Valladolid; 2015. 512 p. [cited 2013 Sep 25]. Available from: <https://uvadoc.uva.es/bitstream/10324/16539/1/Tesis910-160314.pdf>
12. Labov W, Fanshel D. *Therapeutic discourse: psychotherapy as conversation.* New York: Academic Press; 1977.
13. Bruner JS. *Search of pedagogy. The selected works.* USA: Routledge; 2006. 2v.
14. Brown G, Yule G. (2005). *Análisis del discurso.* Madrid: Visor; 2005.
15. Labov W, Waletzky J. Narrative analysis: oral versions of personal experience. *J Narrat Life Hist.* 1997;7(1-4):3-38. <http://dx.doi.org/10.1075/jnlh.7.02nar>.
16. Labov W. Some further steps in narrative analysis. *J Narrat Life Hist.* 1997;7(1-4):395-415. <http://dx.doi.org/10.1075/jnlh.7.49som>.
17. Silva Corvalán C. *Sociolingüística y pragmática del español.* Washington: Georgetown University Press; 2001.
18. Lysaker PH, Buck KD. Neurocognitive deficits as barrier to psychosocial function in schizophrenia: effects on learning, coping and self-concept. *J Psychosoc Nurs Ment Health Serv.* 2007;45(7):24-30. PMID:17679313.
19. Labov W. (1985). Speech actions and reactions in personal narrative. In: Tannen D. *Analyzing discourse: text and talk.* Washington: Georgetown. p. 219-47.
20. Labov W. Narrative pre-construction. *Narrative Inq.* 2006;16(1):37-45. <http://dx.doi.org/10.1075/ni.16.1.07lab>.
21. Garayzábal-Heinze. *La lingüística clínica: teoría y práctica.* Estudios de Lingüística. 2009(3):131-68.
22. Hernández Monsalve M. *Psicoterapia y rehabilitación de pacientes con psicosis.* España: Editorial Grupo; 2014.
23. Bruner J. *La fábrica de historias. Derecho, literatura, vida.* Buenos Aires: FCE; 2003.
24. Camargo L. (2003). *Hacia una definición de la narración oral conversacional.* In: Manuel J, Megías L, Castillo C. *Decíamos ayer: estudios en honor a María Cruz García de Enterría.* Madrid: Universidad de Alcalá; 2003. p. 43-59.

25. Prieto L, San Martín A. Diferencias de género en el empleo del discurso referido: aproximación sociolingüística y pragmático-discursivo. *BFUCh. XXXIX*(2002-2003):269-303.
26. Riecher-Rössler A, Häfner H. Gender aspects in schizophrenia: bridging the border between social and biological psychiatry. *Acta Psychiatr Scand Suppl.* 2000;2000(407):58-62. <http://dx.doi.org/10.1034/j.1600-0447.2000.00011.x>. PMID:11261642.
27. Leroy F, Beaune D. Langage et schizophrénie: l'intention en question. *Ann Med Psychol (Paris).* 2008;166(8):612-9. <http://dx.doi.org/10.1016/j.amp.2006.02.012>.

### **Author contributions**

*AFB: responsible for the conception of the study, the organization of the theoretical paradigm, data collection, analysis of data and its discussion, writing of the article; APMGMK: responsible for the organization of the theoretical paradigm, analysis of data and its discussion, writing of the article; EDL: responsible for the diagnoses of individuals, theoretical paradigm and critical review of the article. The authors, as a group, are responsible for the conclusions and final edition of the article.*

**Annex 1.** Transcription conventions of the LEPSI corpus according to labels proposed by Gallardo Paúls in the corpus PerLA

Transcription conventions for this study	
0001	Numeration of turn-taking
=	Turn-taking maintenance in an overlap
/	Short pause (less than half a second)
//	Pause that oscillates between half to one second
///	Pause of one second
(5.0)	Pause of five seconds: timed in cases of special relevance
-	Pause inside a turn-taking
°()°	Very low or inaudible voice while speaking
MAYÚS	Very loud voice while speaking