

# Speech disturbances and quality of life in schizophrenia: Differential impacts on functioning and life satisfaction

Eric J. Tan<sup>a,\*</sup>, Neil Thomas<sup>a,b</sup>, Susan L. Rossell<sup>a,b</sup>

<sup>a</sup>Monash Alfred Psychiatry research centre, Monash University Central Clinical School, and The Alfred Hospital, Melbourne, Australia

<sup>b</sup>Brain and Psychological Sciences Research Centre, Swinburne University of Technology, Hawthorn, Australia

## Abstract

Speech disturbances in schizophrenia impact on the individual's communicative ability. Although they are considered a core feature of schizophrenia, comparatively little work has been done to examine their impact on the life experiences of patients. This study aimed to examine the relationship between schizophrenia speech disturbances, including those traditionally known as formal thought disorder (TD), and quality of life (QoL). It assessed effects on functioning (objective QoL) and satisfaction (subjective QoL) concurrently, while controlling for the influence of neurocognition and depression. Fifty-four patients with schizophrenia/schizoaffective disorder were administered the MATRICS Consensus Cognitive Battery (MCCB), the PANSS, MADRS (with separate ratings for negative TD [verbal underproductivity] and positive TD [verbal disorganisation and pressured speech]) and Lehman's QOLI assessing both objective and subjective QoL. Ratings of positive and negative TD, depression, and general neurocognition were entered into hierarchical regressions to explore their relationship with both life functioning and satisfaction. Verbal underproductivity was a significant predictor of objective QoL, while pressured speech had a trend association with subjective QoL. This suggests a differential relationship between speech disturbances and QoL. Verbal underproductivity seems to affect daily functioning and relations with others, while pressured speech is predictive of satisfaction with life. The impact of verbal underproductivity on QoL suggests it to be an important target for rehabilitation in schizophrenia.

© 2014 Elsevier Inc. All rights reserved.

## 1. Introduction

As one of the most disabling mental disorders, reducing the negative impact of schizophrenia symptoms on quality of life is a major aim of treatment. Speech disturbances are considered a core schizophrenia symptom [1,2], and describe the aberrant speech patterns and word choices that manifest in conversation. While traditionally and diagnostically known as formal thought disorder (TD), these speech disturbances are no longer seen as deriving solely from disordered thought [3]. We have chosen to retain the term TD here for continuity and ease of reference. The presentation of speech disturbances are broadly categorised under either positive or negative domains. Positive TD symptoms typically exceed normal presentations of speech,

such as frequent ventures off a topic (derailment) and pressure of speech. Negative TD symptoms represent reductions from the norm, such as monosyllabic or unelaborated responses to questions (poverty of speech). These speech disturbances can result in fragmentation and impaired fluidity [4], and reduce a patient's ability to successfully communicate intended meanings [5]. TD can thus degrade communication, which is arguably critical to daily functioning. This is a key area of investigation because while only 20% of schizophrenia patients will meet diagnostic criteria for TD, varying levels of speech disturbances will be observed in about 80% of them [6].

Measurement of quality of life (QoL) has proven important in understanding the functional impact of symptoms in schizophrenia. An individual's QoL can be considered as a statement of his/her daily life experience, with the most common definition relating to the individual's sense of well-being and satisfaction with his/her life situation [7]. While there is still no agreement on the precise definition of QoL, evidence supports two distinct, though related, components within the concept [8,9] that

\* Corresponding author at: Monash Alfred, Psychiatry Research Centre, Level 4 607 St Kilda Rd, Melbourne, VIC 3004, Australia. Tel.: +61 3 9076 6564; fax: +61 3 9076 6588.

E-mail address: [Eric.Tan@monash.edu](mailto:Eric.Tan@monash.edu) (E.J. Tan).

should be assessed concurrently [10]. Objective QoL relates to quantifiable measurements of functioning such as frequency of social contact and financial income, whilst subjective QoL reflects the individual's reported experience of well-being and life satisfaction.

Prevailing evidence suggests that individuals with schizophrenia have a reduced QoL compared with the general population [11–13]. Schizophrenia symptoms established as being related to reduced QoL include increased positive and negative symptomatology [14–16], and depression and anxiety [17–20]. Better neurocognitive ability has also been linked to higher objective but lower subjective QoL [21–23], while better insight seems to reduce subjective QoL [24].

Two previous attempts have been made to relate TD to aspects of QoL. The first study found no association between general TD symptoms and subjective QoL [25]. However, this study neither examined objective QoL nor considered the potential for separate effects of positive and negative TD. Subsequently, another study looked at positive and negative TD separately, finding that verbal underproductivity (negative TD), but not positive TD, predicted social disengagement and reduced friendships [26], a component of objective QoL. They did not however investigate subjective QoL. Taken together, there thus appears to be some evidence that TD relates to QoL. However, the specificity of this association to the relationship between negative TD and objective QoL requires clarifying in a study considering both elements of TD and both subjective and objective QoL.

It remains possible that subjective QoL is additionally affected by specific aspects of TD, considering (i) that TD affects communication of meaning [27], and so could conceivably impact on interpersonal relations and functioning, which should then influence satisfaction; and (ii) growing evidence for associations between QoL and schizophrenia symptoms that are comorbid with TD, such as poorer neurocognitive function [28] and reduced insight [29,30].

To this end, this study sought to assess the impact of positive and negative TD on both functioning and satisfaction within the same cohort by measuring both objective and subjective QoL. Following Bowie and Harvey [26], it was hypothesised that negative TD would be associated with lower levels of objective and also subjective QoL. The relationship between positive TD and both objective and subjective QoL will be examined, while accounting for the effects of depression, neurocognition and insight. No specific hypothesis was made for this due to a gap in the literature.

## 2. Method

### 2.1. Participants

Fifty-four patients with DSM-IV schizophrenia/schizoaffective disorder were recruited for this study from the Alfred Hospital and surrounding community clinics in Melbourne, Australia. All patients were on stable doses of anti-psychotic

medication (no change in previous 8 weeks). All participants were screened for previous traumatic brain injury, current substance abuse (previous 6 months), previous neurological illness, and proficiency in English. This research received ethical approval from the Alfred Hospital Human Research Ethics Committee, Melbourne. Written voluntary informed consent was collected from all participants prior to assessment. Demographic and clinical characteristics are presented in Table 1.

### 2.2. Measures

#### 2.2.1. Symptom assessment (incl. insight)

The Positive and Negative Syndrome Scale [PANSS; 31] was used to assess schizophrenia symptomatology. Specific items were selected to represent elements of TD; conceptual disorganization (P2) and excitement (P4) for positive TD and lack of spontaneity/flow of conversation (N6) for negative TD. P2 is commonly used as a measure of TD, P4 contains the pressure of speech element characteristic of TD and N6 is akin to poverty of speech (alogia). G12 (Lack of judgment and insight) was used as a basic measure of patient insight.

#### 2.3. Depression

The Montgomery–Asberg Depression Rating Scale [MADRS; 32] was selected to provide a brief but comprehensive measure of depression, which has been strongly linked to reduced subjective QoL in chronic schizophrenia [33]. The PANSS depression rating was not used as it is considered to be less sensitive than the MADRS.

Table 1  
Demographic and clinical characteristics of the sample (n = 54).

Variable	Mean	SD
Age (years)	43.35	10.74
Gender (% male)	51.9	–
Years of education	14.31	2.65
Premorbid intelligence (WTAR)	101.76	13.88
Employed (%)	40.7	–
Partnered (%)	14.8	–
Age of onset	23.55	6.67
Length of illness	19.77	11.59
Medication (CPZE)	489.85	439.13
PANSS positive <sup>a</sup>	12.06	4.82
PANSS negative (minus N6) <sup>a</sup>	14.04	4.65
PANSS conceptual disorganization (P2)	2.07	1.27
PANSS excitement (P4)	1.44	.79
PANSS lack of spontaneity/flow of conversation (N6)	1.70	1.02
PANSS Lack of judgment and insight (G12)	1.94	1.24
MCCB Overall Cognitive Score	35.24	12.12
Depression score (MADRS)	9.76	8.64

SD: standard deviation; WTAR = Wechsler Test of Adult Reading; CPZE = Chlorpromazine equivalence; PANSS = Positive and Negative Syndrome Scale; MCCB = MATRICS Consensus Cognitive Battery; MADRS = Montgomery–Asberg Depression Rating Scale. <sup>a</sup>Calculated from PANSS five-factor model [36].

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات