

Adaptation and Reliability of the Structured Clinical Interview for DSM-5-Disorders - Clinician Version (SCID-5/CV) to the Turkish Language



Müge ELBİR¹, Özge ALP TOPBAŞ², Serkan BAYAD³, Tuğba KOCABAŞ⁴, Osman Zülkif TOPAK⁵, Şahabettin ÇETİN⁶, Osman ÖZDEL⁷, Figen ATEŞÇİ⁸, Ömer AYDEMİR⁹

SUMMARY

Objective: In this study, we aimed to adapt the Structured Clinical Interview for DSM-5-ClinicianVersion into Turkish and to demonstrate its reliability.

Method: A total of 185 patients, both inpatient and outpatient, from two different university hospitals were included. Training sessions on the features and use of SCID-5/CV were held before the data collection. During the study, in order to test the diagnostic agreement and accuracy, two psychiatrists remained present at the evaluation of each participant; alternatively being interviewer and the observer. Cohen's kappa coefficient for inter-rater reliability was calculated for every diagnostic category.

Results: The patient group had a mean age of 37.2 (± 13.5) years and 55.7% were female. The education status was as follows: 2.7% were illiterate, 1.7% literate with no primary education, 33% had primary education, 23.8% had secondary education and 38.9% had higher education. The calculated kappa value showed excellent agreement for schizophrenia ($\kappa=0.93$), bipolar disorder ($\kappa=0.96$), major depressive disorder ($\kappa=0.89$), dysthymic disorder ($\kappa=0.82$), alcohol use disorder ($\kappa=0.96$), panic disorder ($\kappa=0.84$), agoraphobia ($\kappa=0.85$), social anxiety disorder ($\kappa=0.95$), generalized anxiety disorder ($\kappa=0.89$), obsessive compulsive disorder ($\kappa=0.87$), posttraumatic stress disorder ($\kappa=0.89$), adult attention deficit and hyperactivity disorder ($\kappa=1.00$), specific phobias ($\kappa=0.82$) and very good agreement with adjustment disorder ($\kappa=0.78$) and somatic symptom disorder ($\kappa=0.65$).

Conclusion: Similar to the past SCID versions, kappa values were found to be quite high and all were statistically significant. The Turkish version of SCID-5/ CV can be reliably used in both clinical practice and clinical studies.

Keywords: DSM-5, SCID-5, Reliability

INTRODUCTION

Definitions of mental disorders and diagnostic criteria specific to each disease have been uncertain for a long time causing poor diagnostic reliability. Although the problems of diagnostic validity and reliability had been addressed on a large scale with the development of diagnostic systems and the revision of the diagnostic systems in the oncoming period, one of the main contributing factors to the weakness of

diagnostic reliability has been the lack of unity in diagnostic questions to interrogate psychiatric symptoms. This issue has also been addressed through the development of structured clinical interviews (Segal et al. 2006).

Standardisation of structured clinical interview, by using diagnostic criteria, serves multiple purposes such as increasing diagnostic validity and reliability, preventing skip-out diagnosis, creating common language in studies,

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^{1, 2, 3, 4}MD/Resident, ⁹Prof., Manisa Celal Bayar University, Department of Psychiatry, Manisa, ^{5, 6}MD/Resident, ^{7, 8}Prof., Pamukkale University, Department of Psychiatry, Denizli, Turkey.

e-mail: soaydemir@hotmail.com

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METHOD

Adaptation of SCID-5/CV Into the Turkish Language

The forward and backward translation of the English form of the SCID-5/CV to Turkish language, mainly with a semantic approach and together with its controls and proof of equivalence, was carried out by the Boylam Psychiatry Institute in Turkey and was jointly approved with the American Psychiatric Association.

Experimental Subjects

The study was approved by the Celal Bayar University School of Medicine Scientific Research Local Ethics Committee with the decision number 20478486-050.04.04 dated 11.08.2017.

A total of 185 patients at the age of 18 years and older were included in the study. They were volunteering participants, without severe psychotic symptoms or agitation, having the cognitive ability to conduct the interview, and selected from the inpatients and outpatients, previously not given psychiatric treatment when attending the Psychiatry Clinics of Pamukkale University School of Medicine and Celal Bayar University School of Medicine between July 2017 and January 2017.

Study Procedure

Altogether eight psychiatrists with at least two years of experience carried out the research. Before the onset of the study program, training meetings were held on the characteristics and use of SCID-5 / CV with the researchers. These training meetings were conducted by one of the authors (ÖA) who had the certificate of SCID training for DSM-IV, since training meeting for the original version of SCID-5 had not yet been started at the time. During the study at both of the centers, patient interviews were administered simultaneously by two psychiatrists with one conducting the interview while the other was an observer. A selection pattern was not used in the interviewer's sequence. Choosing one- to- one interviewing instead of the video interview and the coding of the same interview in the same sessions yielded the best agreement between the interviewers. Because, if the interviewers had evaluated the same patient in separate interviews, the SCID-5 / CV performance of the interviewers, rather than that of SCID-5 / CV itself, would have been measured. Also, recording interviews with a large number of patients from groups with different diagnoses is much more difficult. At the termination of the interviews the forms were completed without discussion or exchange of impressions between the interviewers.

Statistical Evaluation

Diagnostic agreement between the interviewers and the kappa coefficient were calculated. According to Fleiss, (1981) the Kappa coefficient values of >0.75 represent excellent

providing epidemiological data such as the past and present disease prevalence, incidence, and improving the psychiatric interviewing skills of the health professionals (Segal et al. 2006; American Psychiatric Association 2015).

The first structured interview for DSM was published in 1990 for DSM-III-R. It has been shown to be reliable by different researchers (Segal et al., 1994) and its reliability has also been shown by adapting it into the Turkish Language (Elbi et al. 1990). After the publication of DSM-IV in 1994, a new Structured Clinical Interview for DSM-IV Axis I (SCID-I) and Axis II (SCID-II) disorders were developed according to new diagnostic criteria (First et al. 1997a, First et al. 1997b). All evaluation studies on the SCID-I, including the Turkish version, have demonstrated acceptable reliability (Ventura et al. 1998, Lobbestael et al. 2011, Zanarini et al. 2000, Özkürkçügil et al. 1999).

Structured Clinical Interview for DSM-5 Disorders (SCID-5) was introduced after the significant changes brought about in contents by the transition from DSM-IV to DSM-5 (First, 2015). There are no reliability or validity data for SCID-5 in other languages except the one used for the development of SCID-5 products (American Psychiatric Association 2015).

SCID-5 differs from SCID-I in that SCID-I consists of 6 modules, whereas SCID-5 has 10 modules comprising 32 diagnostic categories with detailed diagnostic criteria, and 17 diagnostic categories including only probing questions. The modules include psychotic symptoms, psychotic disorders, mood disorders, substance-use disorders, anxiety disorders, obsessive-compulsive disorder and related disorders, posttraumatic stress disorder, attention deficit and hyperactivity disorder, probing questions for other disorders and adjustment disorder (American Psychiatric Association 2015). Having obsessive-compulsive disorder and related disorders and posttraumatic stress disorder in a separate module together, adding a new module for attention deficit and hyperactivity disorder, interrogating adjustment disorder with full criteria are seen as prominent innovations.

SCID-5 can be used for patients over 18 years of age without severe cognitive deficits, severe psychotic symptoms or agitation. The sources of information are the patient himself/herself, the patient's family members and relatives, the medical team, medical resources, and observations. If necessary, correction can be made in the light of additional information and can be completed in more than one session. Average application time is 40-60 minutes.

Given the widescale use of the Structured Clinical Interview (SCID) in Turkey, the recent clinical version of SCID for DSM-V disorders (SCID-5/CV), was adapted into the Turkish language and its reliability was investigated in this study.

agreement, 0.75-0.41 a reasonable agreement, and <0.40 a poor agreement in DSM-III and DSM-IV reliability studies. Comparatively, interpretations of the kappa coefficient values accepted and used in the study by Tolin et al. (2018) were the values obtained in field studies on the DSM-5, with values > 0.80 being excellent, 0.60-0.79 very good, 0.40 -0.59 good, 0.20-0.39 acceptable and < 0.20 unacceptable (Tolin et al. 2018, Kraemer et al. 2012, Clarke et al. 2013). In the present study interpretation of kappa coefficients by Tolin et al. (2018) was preferred since the rating was more comprehensive. The kappa coefficient for less than 4 cases of a particular disorder was not calculated to avoid misleading results.

RESULTS

Sociodemographic characteristics of the participating patients are given in Table 1. The patients consisted of 103 (55.7%) females; 72 (38.9%) were literate; 93 (50.3%) were married; 50 (27%) were housewives. Mean age of the patients was 37.2 years (\pm 13.5; range 18-79); 126 (68.6%) had a personal history and 44 (23.8%) had a family history of mental illness.

The kappa coefficients and the diagnostic agreement percentages calculated for the Structured Interview for DSM-5 disorders-CV are given in Table 2. Also, in order to facilitate the comparison of the results and to prepare the basis for discussion both the data of the previous reliability studies on the Turkish language versions of the SCID

Table 1. Demographic Features

N=185		
Age (mean)	37.2 \pm 13.5	
	Number	Percent (%)
Gender		
Male	82	44.3
Female	103	55.7
Education		
Illiterate	5	2.7
Literate	3	1.6
Primary school	61	33.0
High school	44	23.8
University	72	38.9
Marital status		
Single	68	36.8
Married	93	50.3
Divorced	17	9.2
Widowed	7	3.8
Occupation		
Unoccupied	17	9.2
Housewife	50	27.0
Employee (white collar)	22	11.9
Employee /blue collar)	25	13.5
Privately employed	11	5.9
Farmer	3	1.6
Retired	14	7.6
Student	26	14.1
Other	17	9.2
Mental disorder in the past		
Yes	127	68.6
Mental disorder in the family		
Yes	44	23.8

Table 2. Reliability Studies

	SCID-I (DSM-III-R)		SCID-I (DSM-IV)		DIAMOND (DSM-5)	SCID-5 (DSM-5)	
	Kappa Coefficient	Agreement rate (%)	Kappa Coefficient	Agreement rate (%)	Kappa Coefficient	Kappa Coefficient	Agreement rate (%)
Schizophrenia	0.90	98	1.00	100		0.93	99.4
Other psychotic disorders	0.90	99	0.86	98.1			
Bipolar disorder	0.96	99	1.00	100	1.00	0.96	99.4
Major depressive disorder	0.82	95	0.80	93.4	0.62	0.89	94.5
Dysthymic disorder	0.93	99	0.89	98.1	0.65	0.82	97
Depressive disorder NOS			0.89	97.1			
Alcohol use disorder						0.96	99.4
Panic disorder	0.88	97	0.95	99.0	0.88	0.84	98.3
Agoraphobia					0.87	0.85	96.7
Social phobia			0.73	96.2	0.70	0.95	99
Specific phobia			0.91	98.1	0.66	0.82	94
Generalized anxiety disorder	0.82	98	0.86	98.1	0.71	0.89	96.2
Anxiety disorder NOS			0.52	92.5			
Obsessive-compulsive disorder	0.82	97	0.92	99.0	0.62	0.87	98.3
Post-traumatic stress disorder			1.00	100		0.89	98.9
Adult attention deficit and hyperactivity disorder					0.60	1.00	100
Somatic symptom disorder	0.57	93	0.84	97.1		0.65	98
Adjustment disorder			0.68	95.3		0.78	99
ALL CATEGORIES	0.88	98	0.86	98.1	0.78	0.74	97.2

for DSM-III and DSM-IV, and the reliability data of the diagnostic criteria between interviewers on the psychometric properties of Diagnostic Interview for Anxiety, Mood, and OCD and Related Neuropsychiatric Disorders (DIAMOND) are shown in Table 2.

There was 97.2% agreement between interviewers on all diagnoses made on the SCID-5/CV and the mean kappa coefficient was calculated to be 0.74, ranging between 0.65 and 1.00, all results being statistically significant. Kappa coefficient values of ≥ 0.8 indicated excellent diagnostic agreement for schizophrenia, bipolar disorder, major depressive disorder, dysthymic disorder, alcohol use disorder, panic disorder, agoraphobia, social anxiety disorder, generalized anxiety disorder, obsessive compulsive disorder, post-traumatic stress disorder, adult attention deficit and hyperactivity disorder, and specific phobia. Kappa coefficients in the 0.60-0.79 range reflected the very good agreement for somatic symptom disorder and adjustment disorder. Diagnostic agreement between interviewers was over 90% for all diagnostic groups, indicating an excellent agreement.

DISCUSSION

SCID versions developed according to DSM criteria are the most common assessment tools in psychiatry for diagnostic research and clinical use. In this study, the structured Clinical Interview for DSM-5 Disorders – Clinician Version (SCID-5 / CV), which is widely used in Turkey, was adapted into Turkish language and its reliability was demonstrated.

In SCID-I for DSM-III, the agreement between interviewers for all diagnoses was 98%, and the kappa coefficient was 0.88 ranging between 0.57 - 0.96 (Elbi et al. 1990). For DSM-IV in SCID-I / CV, agreement between interviewers on all diagnoses was 98.1%, and the kappa coefficient was 0.86 ranging between 0.52 – 1.00 (Özkürkçügil et al. 1999). In our study, the agreement for all diagnoses in SCID-5 / CV was 97.2% with a kappa value of 0.74 ranging between 0.65 -1.00. All results were statistically significant.

Both the kappa coefficients and the diagnostic agreement were found to be excellent for major psychiatric disorders such as schizophrenia, bipolar disorder, major depressive disorder, panic disorder, dysthymic disorder and obsessive compulsive disorder. In the previous Turkish versions of SCID, the reliability values of these diagnostic groups were also excellent (Elbi et al. 1990, Özkürkçügil et al. 1999). On the other hand, in the SCID-5 / CV studies conducted by Tolin et al. (2018), all diagnoses showed a perfect agreement with the exception of those on major depressive disorder. It is suggested that SCID-5 / CV works well in major psychiatric disorders. Relatively low reliability values for major depressive disorder and dysthymic disorder found by Tolin et al. (2018) may be attributed to the slightly more heterogeneous composition of their research participants.

In our study the kappa coefficient for assessment of alcohol use disorder was 0.96. Inter-rater diagnostic agreement was 99.4%, representing perfect reliability. In the study by Tolin et al.,(2018), the kappa coefficient for substance use disorder was 0.65; and although reflecting very good agreement, it was lower than our results based on criteria specific for alcohol use, and has been attributed to a general evaluation of substance use as well as alcohol use.

In our study, as also seen in the previous Turkish language versions of the SCID and the SCID-5/CV, excellent reliability results were obtained for generalized anxiety disorder, social phobia, specific phobia and agoraphobia under the anxiety disorder category (Elbi et al. 1990, Özkürkçügil et al. 1999, Tolin et al. 2018). In our study, SCID-5 / CV showed excellent interviewer agreement on post-traumatic stress disorder, as was seen in the Turkish language version of SCID for DSM-IV (Özkürkçügil et al. 1999).

In our study, the SCID-5 / CV kappa coefficient was 1.00 and the agreement between interviewers was 100%, showing excellent reliability on the assessment of adult attention deficit and hyperactivity disorder (ADHD) included for the first time in the structured interview for DSM. Although details of the participants of the study by Tolin et al. (2018) are not reported clearly, ADHD was investigated within the subcategories of obsessive-compulsive disorder and related disorders. Hence, presence of comorbidity may underlie the low kappa coefficient of 0.60 on ADHD.

The kappa coefficients calculated in the assessment of somatic symptom disorder were 0.57 (or acceptable agreement) (Elbi et al. 1990) and 0.84 (or excellent agreement) (Özkürkçügil et al. 1999) with inter-reviewer agreements of 93% and 97.1%, respectively. In our study the kappa coefficient of 0.65 (or a very good agreement) was lower and the inter-rater agreement was 98%. In our study, despite the high percentage of agreement between interviewers on somatic symptom disorder, the kappa coefficient value was low as compared to other categories, suggesting that this may be related to the predominance of somatic symptoms rather than emotional symptoms in depression among eastern populations as compared to western populations (Uluşahin et al. 1994). After all, the number of patients diagnosed with major depressive disorder, anxiety disorder or adjustment disorder comorbidity with somatic symptom disorder could not be underestimated. The symptoms may overlap and affect the interviewer decision. On the other hand, there being a single question on somatic symptom disorder in SCID-5 / CV may cause divergent clinical judgments (Kleinman 1996, Mayouve et al. 2000, Dimsdale et al. 2013). Results of our study resembled those in the literature by reflecting the defects of the course of diagnostic categorisation between somatoform disorder to somatic symptom disorder.

It is noteworthy that adjustment disorder is included in the structured interview as a main module. In the Turkish

language version of SCID-IV, adjustment disorder is queried with a single item and a kappa coefficient of 0.68 and an interviewer agreement of 95.3% was reported by Özkürkçügil et al. (1999). In our SCID-5 / CV study, adjustment disorder was included as a separate module. The kappa value was calculated to be 0.78 and the agreement between interviewers was 99%. Özkürkçügil et al. (1999) indicated an acceptable agreement for adjustment disorder, while our study obtained a very good agreement. In both of these studies, agreement between interviewers was quite high but the kappa values were relatively low compared to the other evaluated categories. Özkürkçügil et al. (1999) argued that the kappa coefficient was low since adjustment disorder is a residual category and the diagnosis is made after exclusion of other major diagnoses. Compared to the results of Özkürkçügil et al. (1999), more patients participated in our study, and adjustment disorder was screened with SCID-5 diagnostic criteria. Despite these differences, the kappa value was also found to be low compared to other categories, appearing to support the discussions of Özkürkçügil et al. (1999).

In a study using SCID-5 to evaluate the validity and reliability of psychopathological symptoms severity in the diagnostic categories, the kappa coefficient was calculated to be low compared to our study. Since the research version of SCID-5 for psychopathology was used in the study and the test-retest was done after one-year follow-up, the results are not discussed here (Shankman et al. 2017).

Limitation of our study includes not evaluating time-dependent reliability data on the diagnostic categories and needs to be supported by time-dependent reliability data. Not having received a certified specific training for SCID-5 by the researchers could be cited as another limitation. Even though the interviewers were warned against being affected by each other after each interview, not using the proposed methods such as videos or separate sessions to prevent this possibility during the scoring stage is also considered to be a limitation. On the other hand, conducting the interviews face to face with the outpatients and inpatients in the clinical environment, having worked with virtually all diagnosis groups, evaluation of adjustment disorder on the basis of diagnostic criteria, ADHD being a new assessment module and the demonstration of its functionality can be cited as the advantages of our study.

CONCLUSION

In conclusion, the SCID-5 with widened scope after changes in the diagnostic categories, and strengthened functionality preventing uncertainty and skipping of diagnoses was tested in our study; and high level of agreement on nearly all categories between the interviewers was achieved. Usefulness of the SCID-5-CV on grounds of its easy applicability to clinical evaluations, research and training, and its use in Turkey with reliability was demonstrated by our study.

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