

## ADVANCES IN THE ASSESSMENT OF ADDICTIONS

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*El fenómeno de la adicción al consumo de drogas legales e ilegales supone un grave problema sociosanitario a nivel global. La correcta evaluación de la gravedad de la adicción y de sus consecuencias es crucial para poder ofrecer alternativas terapéuticas adecuadas a las necesidades de los pacientes. A lo largo de las últimas décadas se han desarrollado multitud de entrevistas diagnósticas para facilitar la detección de los trastornos por consumo de drogas, así como entrevistas centradas en la gravedad de la adicción para determinar el alcance de las consecuencias de su uso. También se han elaborado cuestionarios genéricos que evalúan diversos aspectos relacionados con el uso de sustancias de forma transversal, y cuestionarios específicos que se centran en áreas muy concretas o en sustancias puntuales. La evolución de los instrumentos de evaluación para población adulta ha sido muy significativa, pero las herramientas para adolescentes son de aparición relativamente reciente y la disponibilidad, sobretudo de instrumentos validados al castellano, es más escasa. No obstante, en la actualidad se dispone de una amplia variedad de herramientas psicométricamente robustas. En esta revisión se analiza en primer lugar la magnitud del problema de la adicción a nivel global y nacional, su impacto y coste social, y los antecedentes y avances en la evaluación de las adicciones. Finalmente se discuten las necesidades más acuciantes y las líneas futuras en este campo de la psicología.*

**Palabras clave:** Adicción, Evaluación, Cuestionarios, Entrevistas, Adultos, Adolescentes.

*The phenomenon of addiction to legal and illegal drugs represents a serious social and health problem at a global level. The correct assessment of the severity of the addiction and its consequences is crucial in order to be able to offer suitable therapeutic alternatives adapted to the needs of the patients. In recent decades, numerous diagnostic interviews have been developed to facilitate the detection of substance use disorders, as well as interviews focused on the severity of the addiction which determine the extent of the consequences of drug use. Additionally, generic questionnaires have been created that assess different aspects related to substance use across multiple substances, as well as specific questionnaires focused on particular areas or substances. The evolution of the assessment instruments for adults has been very significant, but tools aimed specifically at adolescents have only appeared relatively recently and their availability, particularly with regard to instruments validated in Spanish, is scarcer. Nevertheless, there is now a wide variety of psychometrically robust instruments available for professionals. The present review firstly analyses the magnitude of the problem of addiction worldwide and in Spain, its impact and social costs, and the background and advances in the assessment of addictions. Finally, we provide a discussion on the most pressing needs and the future lines of development in this field of psychology.*

**Key words:** Addiction, Assessment, Questionnaires, Interviews, Adults, Adolescents

According to the American Psychological Association (APA), addiction "is a condition in which the body must consume a certain substance to prevent withdrawal symptoms of a physical and psychological nature" (American Psychological Association, 2015). This definition can be extended and amended to include new concepts of addiction not related to substance use, such as pathological gambling. However, at present the main healthcare problem due to addiction has to do with drug use (Gowing et al., 2015), and therefore this will be the main focus of this review.

When using instruments for assessment and intervention in the field of addictions, the main guidelines suggest an approach specifically adapted to adults and adolescents (National Institute on Drug Abuse, 2014). In this way, the differences in the substances consumed, the patterns of use and the problems deriving from the use can be dealt with more appropriately. However, while the instruments for attending to adults have advanced considerably in recent decades, in working with

adolescents there has been a lack of developmentally appropriate assessment tools (and interventions) until recent years (White, Dennis, & Tims, 2002). Therefore, this paper deals separately with the advances in the field of addictions to substances in each of these populations, with special emphasis on the latest advances for working with adolescents.

### THE MAGNITUDE OF THE PROBLEM

According to the *Plan Nacional Sobre Drogas* [the National Drug Plan] (PNSD, 2013) among Spaniards aged between 15 and 64 years, regular use of alcohol was detected (typically collected in surveys such as consumption in the last 30 days) in 62.3% of respondents, tobacco in 37.6%, cannabis in 7.0%, hypnotosedatives without prescription in 8.3% and tranquilisers in 6.9% of respondents. These rates of consumption are considerably high, and in fact Spain holds the first place in Europe for cocaine consumption, the second place in cannabis use, and it is among the first in the use of tobacco and amphetamines (European Monitoring Centre for Drugs and Drug Addiction, 2015a). Among young Spaniards, approximately 74% had consumed alcohol in the last month, 29.7% tobacco, 16.1% cannabis, 6.6% hypnotosedatives and 1.5% cocaine (PNSD, 2014). In this age group, Spain's position is

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alarming in the consumption of cannabis (the second highest in Europe) and cocaine (the third highest).

### SOCIAL IMPACT

These high rates of consumption are an important social and healthcare risk, manifested in the form of direct costs (mainly healthcare), indirect costs (lower productivity, unemployment, loss of years of life, etc.) and intangible costs (such as personal and family suffering) (World Health Organization, 2014). The World Health Organization (WHO) estimates that about 0.7% of the global cost of health problems is due to the use of cannabis and cocaine, with a global cost of using illegal drugs at around 2% of the economy (World Health Organization, 2008). Alcohol consumption costs between 1.3% and 3.3% of Gross Domestic Product (GDP) (World Health Organization, 2014). Other estimates for the particular case of Spain suggest that illegal drugs represent a cost equivalent to 0.2% of GDP (García-Altes, Olle, Antonanzas & Colom, 2002). With regards to legal drugs, according to Camarellés Guillem et al. (2009), smoking is the health problem that causes the greatest healthcare and social costs faced by Spanish society. More specifically, Lievens et al. (2014) estimated the cost of treatments aimed at problems of alcohol and illegal drug consumption in the EU, concluding that these represent a total cost of 7,600 million euros - in hospital treatment alone, amounting to 2.1 per capita in the case of Spain.

With regards to the indirect costs, it is estimated that in the European Union 3.4% of deaths in people between 15 and 39 years of age are due to substance overdose, in 66% of cases as a result of opioid use (European Monitoring Centre for Drugs and Drug Addiction, 2015b). However, tobacco is the leading cause of preventable death and if it continues at the current rates of consumption, by 2030 it will be responsible for 8 million deaths annually worldwide (World Health Organization, 2015). In Spain, it is calculated that in 2006 more than 53,155 deaths (1 in 7 deaths in people aged 35 years) could be attributable to tobacco use (Banegas et al., 2006). With regards to alcohol, the legal drug par excellence, it is responsible for 3.3 million deaths annually, 5.9% of the total, as well as being the cause of some 200 illnesses and medical problems. According to the analysis conducted by Nutt and his colleagues in the UK (Nutt, King, Phillips, & Independent Sci Comm Drugs, 2010), alcohol is in fact the substance that causes the most social damage, ahead of heroin and crack. Although according to this study, alcohol is not the most harmful drug to the individual consumer, it is however the one that causes the most harm to the people around, so considering its effects as a whole, it is the most damaging. Nationally, it is estimated that 10% of all deaths and 30% of deaths from traffic accidents in 2011 were attributable to alcohol consumption (Pulido et al., 2014).

As for the "intangible" costs, drugs are an important source of personal and family problems which lead many users to seek professional help. According to the Observatorio Español de Drogas y Toxicomanías [Spanish Observatory on Drugs and Drug Addiction] (OEDT, 2014), 3,000 new requests were recorded in 2011 for treatment for heroin use, 10,637 for cocaine use and 9,736 for cannabis

consumption, to which must be added 29,014 people being treated for alcohol use. Furthermore, the OEDT notes how each year hospital emergencies receive about 10,000 cases related to the non-therapeutic use of drugs, of which more than half are directly related to consumption. Especially noteworthy in this regard is the increase in the number of cases where cannabis is mentioned, which has gone from 7.4% of the total to 44.9% between 1996 and 2011.

### BACKGROUND

In the field of psychological assessment, it is difficult to go back in time beyond a few decades, because it was not primarily until the 70s and thereafter when the object of evaluation in psychology began to extend to multiple fields beyond measuring the individual characteristics (Fernández Ballesteros, 2004). It was from this time onwards that specific assessment instruments began to be created and validated in the field of drug addiction. As a result, there is now a multitude of questionnaires and interviews for the specific assessment of the consequences of consumption, as well as other related aspects. Thus, one can find large repositories of instruments for adolescents and adults on websites such as the National Institute on Drug Abuse (NIDA, [www.drugabuse.gov/nidamed-medical-health-professionals](http://www.drugabuse.gov/nidamed-medical-health-professionals)), or the Bank of Instruments of the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA, [www.emcdda.europa.eu/eib](http://www.emcdda.europa.eu/eib)), where one can find tools in Spanish.

However, the bulk of this development has taken place in the field of working with adults while the greatest advances in tools for use with adolescents are from more recent years. Below, we review the background and progress made in the assessment of adults and young people, including the generic and specific questionnaires, and the diagnostic interviews and those referring to the severity of the addiction. To this end, we first include the tools that have been used longest in the clinical and research field and which are the main references in the assessment of addictions. Then, we detail the latest progress including updates of several key tools, the use of new technologies and a number of questionnaires and interviews of recent creation or adaptation into Spanish covering important clinical needs with psychometrically robust alternatives.

### Questionnaires

The questionnaires in the field of drug addiction are mainly divided into generic questionnaires (applicable to different substances or providing a cross-sectional assessment) and specific questionnaires for a given substance. The first questionnaires for addictions were of this second type. Specifically, they were for evaluating the problems associated with alcohol use in the adult population, determining the presence of alcoholism and assessing its seriousness. Thus, between the 60s and the 80s, a multitude of self-reports emerged, some of which are now widely used in clinical work, such as the *Michigan Alcoholism Screening Test (MAST)* (Selzer, 1971), the *Alcohol Clinical Index* (Skinner & Holt, 1987), the *CAGE* (the acronym corresponding to Cut down –the need to reduce consumption, Annoyed –the feeling of annoyance due to being criticised for drinking, Guilty –feeling guilty for drinking, and Eye-opener –early morning consumption to steady the



nerves or relieve a hangover) by Ewing (1984), the *Münchener Alkoholismus Test* (MALT) (Feuerlein, Küfner, Ringer, & Antons, 1979) or more recently the *Alcohol Use Disorders Identification Test* (Saunders, Aasland, Babor, De La Fuente, & Grant, 1993). Subsequently, questionnaires have been created aimed at evaluating very varied aspects related to the use of different substances. Table 1 lists, as examples, some of the most used. However, it is not the aim of this study to perform a systematic review of the many existing instruments, and for a more detailed review of the classic (and new) instruments, the aforementioned repositories and other more comprehensive reviews and manuals can be consulted (Fernández Hermida, Secades-Villa, & Fernández-Artamendi, in press; García-Portilla & Bobes-Bascarán, 2011; Winters, McLellan & Dembo, 1999).

The creation of these specific tools was followed by the significant development of generic tools applicable to various substances. These questionnaires enable us to assess the problem of drug use in situations of polydrug use, and to make comparisons between different substances. In this regard, it is worth mentioning two main instruments, widely used today and validated in Spanish:

- ✓ The *Drug Abuse Screening Test* (DAST), by Skinner (1982), validated in Spanish by Pérez-Gálvez et al., (2010). There is a version of 10 items and another of 20, and in its Spanish validation they had a high internal consistency of  $\alpha = 0.89$  and  $0.93$  respectively, showing high reliability and sensitivity to the diagnostic criteria of the Diagnostic Statistic Manual- IV TR (DSM-IV TR, American Psychiatric Association, 1994).
- ✓ The *Severity of Dependence Scale* (SDS) by Gossop et al. (1995), validated in Spanish by González-Sáiz et al. (2008). This consists of five items that assess the severity of dependence on any substance. It has good psychometric properties with a test-retest reliability of  $0.89$  (Gossop, Best, Marsden, & Strang, 1997).

**TABLE 1**  
**SUMMARY OF THE SPECIFIC INSTRUMENTS FOR**  
**VARIOUS SUBSTANCES**

Substance	Test	Authors
Tobacco	Fagerström Test for Nicotine Dependence (FTND)	Heatherton, Kozlowski, Frecker, & Fagerstrom, 1991
	Nicotine Dependence Syndrome Scale (NDSS)	Shiffman, Waters, & Hickcox, 2004
Cocaine	Cocaine High Risk Situations Questionnaire (CHRSQ)	Michalec et al., 1992
	Cocaine Reasons for Quitting (CRFQ)	McBride et al., 1994
Cannabis	Marijuana Craving Questionnaire (MCQ)	Heishman, Singleton, & Liguori, 2001
	Cannabis Problems Questionnaire (CPQ)	Copeland, Gilmour, Gates, & Swift, 2005
Opiates	Situational Confidence Questionnaire (SCQ)	Barber, Cooper, & Heather, 1991

**Questionnaires for adolescents**

Since adolescents have their own peculiarities in terms of consumption patterns, associated problems and the evolution of disorders, this population requires adapted tools. While it is true that the *Adolescent Alcohol Involvement Scale* (AAIS) (Mayer & Filstead, 1979) was published back in 1979, one of the first questionnaires aimed at the adolescent population, Leccese and Waldron (1994) note how in the mid-90s most practitioners in the US still used questionnaires in clinical practice that had been developed for use in adults, or without proper validation with young people. If this was the state of things in the US, in Spain the situation was not much different, and it was customary to use tools for the adult population or prepared by the practitioners and institutions themselves. Throughout the 90s, a significant number of specific tools to assess problems of drug use in adolescents began to appear, and greater accessibility to these instruments facilitated the incorporation into clinical practice of reliable questionnaires, validated specifically for young people. However, this development has been slow, and it is not until recently that we find the first instrument for assessing problems due to marijuana use among young people, the *Marijuana Problems Inventory* (Vandrey, Budney, Kamon, & Stanger, 2005).

As for generic questionnaires, the first tools appeared in the 90s. At that time, the urgent need for psychometrically valid instruments that were not focused solely on alcohol led Winters (1992) to develop the *Personal Experience Questionnaire* (PESQ) for adolescents. This is a brief self-report instrument to identify young people in need of treatment for various substances. At the same time, Tarter (1990) developed a more extensive instrument (also applicable as an interview), the *Drug Use Screening Inventory* (DUSI) which reviews multiple areas of the life of the adolescent consumer.

**Interviews**

The use of interviews in addiction assessment is divided into two main types: diagnostic interviews and problem-focused interviews. The former are an assessment guide to determine whether the consumer has symptoms that meet criteria for the diagnosis of abuse or dependence on one or more psychoactive substances according to the main diagnostic manuals, the ICD-10 (International Classification of Diseases - 10; World Health Organization, 1992) and the DSM-IV-TR (or more recently, the DSM-5). One of the first diagnostic interviews is the *Structured Clinical Interview for DSM* (SCID) available since the earlier versions of the DSM (Spitzer et al., 1992).

Problem focused interviews are aimed at assessing the severity of the consequences caused by consumption. The main instrument that has been the model for subsequent tools is the *Addiction Severity Index* (ASI), developed by McLellan, Luborsky, Woody and O'Brien (1980). It was developed in response to the lack of tools that offered a detailed and comprehensive assessment of the substance consumption and its consequences, which went beyond information on the pattern of use of chemical substances. Over the years, this instrument would be the starting point for many similar tools with proven clinical and research utility.

For working with adolescents, the ASI was also a model for subsequent tools. Thus, an adaptation of the ASI was created, the *Teen-Addiction Severity Index* (T-ASI, Kaminer, Burkstein, & Tarter, 1991) as well as other interviews, such as the ADAD (*Adolescent Drug Abuse Diagnosis*) by Friedman and Utada (1989).

**LATEST DEVELOPMENTS**

Currently, the field of drug dependency evaluation has many questionnaires for assessing consumption problems in adults, and specific interviews focused on the diagnosis and problems of drug abuse. Also, for assessing teenagers, there are reliable and valid interviews and questionnaires that can be used in clinical practice and research. In this regard, what recent developments can be highlighted in the field of the assessment of addictions? The main developments concerning substance use disorders and their diagnostic criteria are discussed below, as well as some new tools for adults and adolescents.

**Diagnostic Criteria**

One of the most significant recent changes in the field of the assessment of drug addiction is the modification of the diagnostic criteria of the *Diagnostic Statistic Manual* (DSM), which in its DSM-5 version (American Psychiatric Association, 2013) proposes a new classification with regards to the previous versions such as the DSM-IV-TR (American Psychiatric Association, 1994).

Two diagnoses related to substance use that were included in the DSM-IV-TR are widely used today: abuse and dependence. Given the criteria required for these diagnoses, classically the latter was understood as more severe, and with a more pronounced physiological character compared with the psychosocial problems of abuse, considered to be milder or earlier. In the DSM-5 however, the two diagnoses have been unified under a single heading of *substance use disorder* (American Psychiatric Association, 2013). This new diagnosis also includes a

continuum of severity according to which the disorder can be considered as mild or severe. While the new diagnosis is mostly a combination of the previous two, the changes made (see Table 2) include the elimination of the criterion related to the legal problems associated with consumption, which corresponded to the diagnosis of abuse. Thus, the cultural problems deriving from legislative differences between countries on this matter are avoided. Additionally, the new list of symptoms includes craving or the urge to consume, and the diagnostic threshold for a mild disorder requires two to three symptoms, compared with the diagnosis of abuse which required only the presence of a single symptom.

Some of the diagnostic criteria of the DSM-IV-TR had shortcomings when used with adolescents. Primarily, the criterion regarding the legal problems in the diagnosis of abuse (when adolescent consumption is generally illegal in most countries), and those concerning the development of tolerance (a common phenomenon caused by the developmental maturing in the population of young people) and physiological dependence (usually a result of continued use for extended periods of time, difficult to observe in adolescence) for the criterion of dependency (Newcomb, 1995; Winters, 2001).

While eliminating the symptom regarding legal issues is a positive development, the symptoms of tolerance and dependence remain in the DSM-5 and are of limited clinical utility with teenagers. Moreover, the addition of the criterion of craving is also of dubious usefulness in adolescents, as well as that relating to consumption in dangerous situations. Craving is rare in young people, as they have usually recently started using the substance and the possibilities of young people consuming in dangerous situations are lower given their limited access to heavy machinery or risk workplaces. One aspect that has been overcome with the DSM-5 is the elimination of what were known as diagnostic orphans: young people that had one or two symptoms of dependence (insufficient for the cut-off point of three symptoms needed

**TABLE 2  
COMPARISON OF THE DIAGNOSTIC CRITERIA OF  
DSM-IV-TR AND DSM-V**

DSM-IV-TR		DSM-5	
One or more symptoms: <b>abuse</b>	1. Problems at work, school or home 2. Consumption in physically hazardous situations <b>3. Recurrent legal problems*</b> 4. Consumption despite interpersonal problems	1. More consumption than intended 2. Persistent desire or unsuccessful effort to control it 3. Much time spent obtaining/using/recovering <b>4. Craving or urge to use **</b> 5. Problems at work, school or home 6. Consumption despite interpersonal problems 7. Reduction or abandonment of other activities 8. Consumption in dangerous situations 9. Consumption despite physical or psychological problems 10. Tolerance (need for more of the substance or diminished effect) 11. Withdrawal (withdrawal symptoms or consumption of substance to avoid them)	Presence of at least two symptoms: <b>Substance Use Disorder (SUD)</b>  Severity: <b>Light:</b> 2-3 symptoms <b>Moderate:</b> 4-5 <b>Severe:</b> 6 or more
Three symptoms or more: <b>dependence</b>	1. Tolerance (need for increased amount of the substance or diminished effect) 2. Withdrawal (withdrawal symptoms or consumption of the substance to avoid them) 3. More consumption than intended 4. Persistent desire or unsuccessful efforts to cut down or control 5. Much time spent obtaining/using/recovering 6. Reduction or abandonment of other activities 7. Consumption despite physical or psychological problems		

\*Excluded in the DSM-5 \*\*New in the DSM-5

for diagnosis regardless of severity) and none of abuse. Ultimately these cases were not diagnosed despite the problems presented. Therefore, although some problems have been resolved with the DSM-5, an alternative has still not been offered that is specially adapted to substance use in adolescence and that includes the particularities of their associated problems and improves the usefulness of the diagnostic criteria.

**NEW TOOLS FOR ASSESSING ADDICTIONS**

**Questionnaires**

In recent years, a number of new tools have emerged for assessing addiction in adults, improving previous versions or using new technologies as a means to facilitate their use and dissemination. An interesting tool recently developed by the WHO and launched in Spain by the *Plan Nacional Sobre Drogas* [National Drug Plan] is the "ASSISTete". It is an adaptation of the ASSIST (*Alcohol, Smoking and Substance Involvement Scale*), created by the WHO (WHO ASSIST Working Group, 2002) for the early detection and early treatment of problems related to substance use, with appropriate Kappa levels of interrater reliability (> 0.60). This tool uses a virtual platform for the assessment (available from <http://assistete.es/index.php?nuevo=1>), it requires little time and it also provides a detailed report and a guide with links to the main help services that are closest.

The growing interest in offering specific tools for adolescents, on the part of both clinicians and researchers, has led to the creation of various questionnaires, some of which have already been validated in the Spanish population. As for the generic questionnaires, in the international literature the POSIT (Problem Oriented Screening Instrument for Teenagers) is noteworthy, which includes various domains related to substance use, physical and psychological health, social relationships, skills, problem behaviour, and educational and work situation (Dembo, Turner, Borden, Schmeidler, & Manning, 1994). Most of the subscales have acceptable Cronbach's alphas above 0.70 (Knight, Goodman, Pulerwitz, & DuRant, 2001). The DAST-A (*Drug Abuse Screening Test - Adolescents*) is an adaptation of the aforementioned DAST for use in adolescents, which through a rapid assessment (approximately 5 minutes) provides an estimate of the

severity of the problems of consumption (Martino, Grilo & Fehon, 2000), with good internal reliability ( $\alpha = 0.91$ ) and concurrent validity. Another of the instruments recently validated with adolescents is the *Severity of Dependence Scale* (SDS) (G. Martin, Copeland, Gates, & Gilmour, 2006), with a good reliability of  $\alpha = 0.83$  (and which has been validated in Spanish by the *Plan Nacional Sobre Drogas* [National Plan on Drugs] (Plan Nacional Sobre Drogas, 2009) for young cannabis users.

Among the questionnaires of a specific nature, we find several that have already been validated with Spanish adolescents, such as the *Rutgers Alcohol Problems Index* (RAPI) by White and Labouvie (1989), adapted by López-Núñez et al. (2012) for problems related with alcohol consumption. In this study a good reliability was obtained ( $\alpha = 0.87$ ), as well as high sensitivity and specificity for detecting alcohol abuse and dependence. In addition, there are validations of the abbreviated Spanish version of the *Cannabis Problems Questionnaire*, the CPQ-A-S (Fernandez-Artamendi, Fernandez-Hermida, Muniz-Fernandez, Secades-Villa & Garcia-Fernandez, 2012) and the CAST (*Cannabis Abuse Screening Test*, Plan Nacional Sobre Drogas, 2009) which evaluates the severity of problems caused by consuming this substance. Both have good psychometric properties with  $\alpha = 0.74$  for the CPQ-A-S and  $\alpha = 0.84$  for the CAST (Fernandez-Artamendi et al., 2012). Recently, the Expectancy Questionnaire by Leigh and Stacy (1993) has also been validated with Spanish adolescents (CE, Camacho et al., 2013); this evaluates the positive and negative expectancies concerning alcohol, with a reliability between acceptable ( $\alpha = 0.75$ ) and excellent ( $\alpha = 0.96$ ) for the subscales.

*Interviews focused on the problem*

As described above, the development of assessment tools in the field of addictions has meant that there are a wide range of instruments available for various purposes today. In the field of adult assessment, the semi-structured clinical interview remains a key instrument, in particular ones derived from the ASI (see Table 3). The Europ-ASI (Kokkevi & Hartgers, 1995) has existed for years in Europe. It is a version of the ASI adapted to the European population, and it is the comprehensive assessment instrument par excellence in the field of addictions. It consists of 141 items divided into 6 areas (health status, employment status, alcohol and drug use, legal problems, family and social relations, and psychiatric status), and its implementation takes about 45-60 minutes. The interview collects information on the problems experienced by users, with particular emphasis on the last 30 days. From these data a series of severity scores are obtained in each of the areas by following a standardised protocol which facilitates the good inter-rater reliability of the instrument. The interview and the application manual can be downloaded from the website of Socidrogalcohol (<http://www.socidrogalcohol.org/manuales-y-guias-clinicas-de-socidrogalcohol.html>).

The most recent development in this field has been the creation of the ASI-6, a new version of the *Addiction Severity Index*, which corrects some aspects relating to the structure and content of the ASI-5, in order to adapt to new circumstances in the field of drug addiction. This version consists of 257 items and, as well as collecting general information

**TABLE 3**  
**AREAS OF THE VERSIONS OF THE ADDICTION SEVERITY INDEX (ASI)**

Europ-ASI	ASI-6	T-ASI
✓ General information	✓ General information	✓ Substance use
✓ Medical situation	✓ Alcohol consumption	✓ School situation
✓ Substance use	✓ Consumption of drugs	✓ Employment/support
✓ Employment/Support	✓ Physical health	✓ Family relationships
✓ Family/social relationships	✓ Mental health	✓ Legal situation (involvement in judicial system)
✓ Legal situation	✓ Training, employment and financial resources	✓ Social/peer relationships
✓ Psychological/psychiatric status	✓ Legal situation	✓ Psychiatric status
	✓ Personal and social relationships	



about the patient, it contains 7 scales regarding 1) alcohol use, 2) drugs, 3) physical health and 4) mental health, 5) training, employment and financial resources, 6) legal situation and 7) personal and social relationships. The Spanish validation found some psychometric weaknesses (Díaz Mesa et al., 2010), but the ASI-6 has been proven useful for treatment planning, follow-up assessments, and it provides relevant information on variables related to adherence to treatment (Casares-Lopez et al., 2011). Nevertheless, for now the Europ-ASI remains the reference tool for the majority of clinicians in the European context. For work with adolescents, the T-ASI (Kaminer et al., 1991) was validated in Spanish a few years ago (Díaz et al., 2008) and its use continues to spread, little by little, in clinical practice and research internationally.

### **Diagnostic interviews**

The appearance of the DSM-5 has involved the adaptation of the main diagnostic interviews for assessing addiction in adults. Thus, the update is now available of the main structured interview, which aims to determine the presence of a substance abuse disorder based on the criteria of the DSM-5 (Structured Clinical Interview for DSM-5) by First, Williams, Karg and Spitzer (2015). Also, the *Composite International Diagnostic Interview - WMH-CIDI* (World Mental Health - Composite International Diagnostic Interview) by Kessler and Üstün (2010), uses the ICD-10 criteria for diagnosing addiction.

In the case of adolescents, in recent years clinical interviews have been developed, such as the DISC-IV (Diagnostic Interview Schedule for Children - IV), recently validated in Spanish by Saldivia, Vicente, Valdivia and Melipillan (2013). It uses DSM-IV and ICD-10 criteria for the diagnosis of various disorders, including abuse and dependence on alcohol, nicotine, marijuana and other drugs. One of the most used interviews, the SCID-SUDM (*Structured Clinical Interview for the DSM - Substance Use Disorders Module*) by Spitzer, Williams and Gibbon (1987) has also been adapted for use in adolescents (Martin, Pollock, Bukstein, & Lynck, 2000). The versions adjusted to the DSM-5 criteria have yet to be adapted to adolescents.

### **New areas of interest**

The development of research into the consequences of substance use has expanded the field under evaluation in the world of addictions. In recent years, the importance has been demonstrated of studying the neuropsychological consequences of the use and abuse of substances (Verdejo-García, López-Torrecillas, Orozco Giménez, & Pérez-García, 2004) and their mediating role in the possible outcomes of treatment. The abuse of alcohol, cannabis, cocaine, stimulants, opioids and other substances (Fernández-Serrano, Pérez-García, Río Valle, & Verdejo-García, 2010; Fernández-Serrano, Pérez-García & Verdejo-García, 2011; Verdejo-García, Toribio, Orozco, Puente, & Pérez-García, 2005), has negative consequences on the executive functions (abilities such as short and long term memory, processing speed, visuospatial memory, learning, planning, attention, etc.) which must be taken into account in the assessment process due to the implications for intervention. The new assessment protocols in drug addiction must take

into account the particularities of these potential deficits to adjust the interventions.

Another of the aspects of interest in the assessment process is impulsivity. Impulsive behaviour is both a cause and a consequence of drug use (de Wit, 2009). Assessing the levels of impulsivity in children has proved very useful because it allows us to predict the subsequent development of substance use disorders and the age of onset of these disorders (Tarter et al., 2003). The assessment of impulsivity is also convenient in the clinical setting, because this construct is strongly associated with the patients' ability to achieve and maintain abstinence after treatment (Jentsch & Pennington, 2014). Behavioural tasks, such as delay discounting, enable us to assess indirectly the consumer's preference for immediate reinforcers (such as those associated with the pharmacodynamic effects of the substance) versus delayed reinforcers, such as improvements in health, family life and working life (García-Rodríguez, Weidberg, Yoon, García-Fernández, & Secades-Villa, 2013). Delay discounting is a predictor of the treatment success of different substances such as cocaine (Washio et al., 2011), tobacco (Sheffer et al., 2014) or cannabis (Stanger et al., 2012). Furthermore, although the delay discount rates have proved stable in the absence of any intervention (Beck & Triplett, 2009), growing evidence indicates that they can be reduced with effective treatments in various populations of drug addicts (Bickel, Yi, Landes, Hill & Baxter, 2011; Black & Rosen, 2011). In the case of young people, the following have proven particularly useful in the area of addictions: the *Barratt Impulsiveness Scale version for adolescents* (BIS-11-A, Martínez-Loredo, Fernández-Hermida, Fernández-Artamendi, Carballo-Crespo & García-Rodríguez, 2015), with good reliability ( $\alpha = 0.87$ ), and the *Impulsiveness and Sensation-Seeking subscale* (ImpSS) belonging to the Personality Questionnaire by Zuckerman-Kuhlman (ZKPQ-III, Gutiérrez-Zotes, Ramos Brieva, & Sáiz Ruiz, 2001). These instruments allow us to assess the impulsiveness and decision-making of the substance user, which can be crucial in understanding the habits and patterns of consumption.

### **DISCUSSION AND RECAPITULATION**

The use and abuse of drugs is a serious social problem today worldwide. The personal and social damage caused by the use and abuse of these substances poses a serious risk to the users and to the environment, both economically and in terms of healthcare and society (World Health Organization, 2008). Thus, the aim of this study was to analyse the current needs in the field of the assessment of addictions and the new tools available for clinical work and research.

Fortunately, in recent years the quantity and quality of tools at our disposal in order to carry out this assessment task has grown significantly, offering a wide range of psychometrically robust instruments. There are both generic and specific questionnaires for the different drugs, in Spanish, for different areas of life affected by consumption, and adapted to the particularities of the adult and adolescent population (Becoña Iglesias & Tomás Cortés, 2011; Fernández-Artamendi, Fernández-Hermida, & Secades-Villa, in press; Fernández-Hermida, Secades-Villa, & Fernández-Artamendi, in press; García-Portilla & Bobes-Bascarán, 2011; National Institute on Drug



Abuse, 2014). The need to differentiate between adults and adolescents in the assessment (and intervention) process is no longer debatable today, and the instruments offer a high level of specialisation based on the different substances of consumption. In addition, general tools, such as diagnostic interviews or the assessment of the severity of the addiction and the generic questionnaires, allow us to carry out a first global and cross-sectional approach to the problem of addiction, which is very helpful in planning the intervention. This variety of alternatives has clearly benefited both the clinic and research.

However, it is necessary to continue to promote the use of these tools in daily clinical practice in our country. For this, we must create, adapt and validate tools for certain population groups such as adolescents, since the lack of adaptations and validations substantially limits the possibilities of a valid and reliable assessment. Clinical implications cannot (and must not) be drawn from using tools that have not been properly adapted and validated to the context of use (Callegaro Borsa, Figueiredo Damásio, & Ruschel Bandeira, 2012, Gudmundsson, 2009). But today, the variety of instruments available in the English-speaking world far exceeds those that can be found in Spanish.

Moreover, new issues are arising that must be resolved in the assessment of addictions. Psychologists must keep in mind the possible use of what are known as *synthetic drugs* (ecstasy, synthetic cannabinoids, etc.), which are rapidly evolving and increasingly common especially among young people (Weaver, Hopper, & Gunderson, 2015). In the case of our country, in the future it is necessary to develop new tools for the new substances and situations of consumption, to adjust their formats to the new technologies so they can be used on computers and platforms such as the Internet. The inclusion of questionnaires and tests for assessing neuropsychological functions, impulsivity and decision-making, among other aspects, can help to facilitate the adaptation of interventions to the particularities of each consumer.

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