TRANSCULTURAL COMPARISON OF SYMPTOM RATING TEST (SRT) IN WOMEN COPING WITH AN ADDICTION PROBLEM IN THE FAMILY

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SUMMARY

The purpose of this study was to test the factorial validity of the Symptom Rating Test (SRT) on women (mothers and wives of alcohol and drug users) coping with alcohol and drug use in a close relative (n=155). The purpose was to develop a common model of symptoms that would serve as the basis for establishing comparative analyses based on variables such as type of relationship with the drug user and country.

This article is part of a broader transcultural study on family and addictions, carried out simultaneously in Mexico City and Southeast England. The overall sample in the two countries consisted of 200 families from both countries. The original methodology has been broadly described in previous studies. Half the sample came from specialized drug treatment centers, while the other half was drawn from the community population.

The criteria for inclusion were as follows: a) Alcohol and/or drug use of a son, daughter or spouse during the six months prior to the interviews; b) Display of concern over active alcohol and/or drug consumption of close relative (of either sex).

Evidence was found of the validity and consistence of the symptom rating test, which included thirteen items (alpha = .93) and consists of two sub-scales of physical and psychological symptoms (X^2 = 64.6 64 gl, p= 0.053). Variance analysis showed one main effect for the sub-scale of physical symptoms: Mexican women were more likely to somatize an addiction problem than English women (F=4.930. $gl^{1/155}$, p ≤.05) and the interaction between the type of relationship and the country was also significant (F=6.327, $gl^{1/155}$, p <.05).

On the basis of the above, the implications of this study for future research are to increase the evidence of the factorial structure on the 13-item symptom scale in which different sociocultural groups are considered, for instance, to explore how the male relatives of drug users express their symptoms. On the other hand, it is very important to consider the differences about type of drug and trajectory of use, between the rural and urban population, in order to identify the communalities and differences regarding symptoms and their meanings. This can be achieved by using complementary qualitative methodologies, in order to have more sensitive measurements and to establish standards of transcultural comparison that will enable to promote comparative studies.

Key words: Addictions, symptom rating test, women, factorial validity, transcultural validity.

RESUMEN

El objetivo de este trabajo fue comprobar la validez factorial de la Escala de Síntomas (Symptom Rating Test, SRT), en mujeres (madres y esposas de usuarios de alcohol y drogas) que hacen frente al consumo de alcohol y de drogas en un familiar cercano (n=155). El propósito fue desarrollar un modelo común de síntomas que sirviera como base para establecer análisis comparativos a partir de ciertas variables tales como tipo de relación con el usuario de drogas y país.

Este trabajo forma parte de un estudio trascultural más amplio sobre familia y adicciones, que se llevó a cabo simultáneamente en la Ciudad de México y en el Suroeste de Inglaterra. La muestra global en ambos países fue de 200 familias. La metodología original se ha descrito en trabajos previos. De la muestra, 50% provenía de centros especializados de atención en drogas y el restante 50% de población comunitaria. Los criterios de inclusión fueron los siguientes: a) Consumo de alcohol y/o drogas en un hijo(a) o cónyuge durante los seis meses previos a la realización de la entrevista; b) Mostrar preocupación por el consumo activo de alcohol y/o drogas de un familiar cercano (de uno u otro sexo).

*S*e encontraron pruebas de la validez y consistencia de la escala de síntomas que incluye trece reactivos (alpha=.93) y que consta de dos subescalas de *síntomas físicos y psicológicos* (X^2=64.6 64gl, p=0.053). El análisis de varianza mostró un efecto principal para la subescala de síntomas físicos. Las mujeres mexicanas tendían más a somatizar un problema de adicciones que las inglesas (F=4.930. $gl^{1/155}$, p ≤.05) y la interacción entre el tipo de relación y el país también fue significativa (F=6.327, $gl^{1/155}$, p <.05).

Las implicaciones de este trabajo en investigaciones futuras son poder comprobar más ampliamente la validez de la estructura

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factorial de la escala de síntomas con trece reactivos en la que se consideren diferentes grupos socioculturales, por ejemplo, cómo se expresan los síntomas en el caso de los familiares varones de usuarios de drogas. Por otra parte, es importante contrastar a la población rural y urbana, por tipo de droga y por trayectorias de consumo, a fin de poder identificar las comunalidades y diferencias respecto a los síntomas y sus significados. Lo anterior puede lograrse utilizando estrategias metodológicas complementarias de carácter cualitativo, para poder establecer estándares de comparación transcultural y contar con mediciones más sensibles que permitan impulsar los estudios comparativos.

Palabras clave: Familia, adicciones, comparación transcultural, México, Reino Unido.

INTRODUCTION

Research in the field of addictions has traditionally been focused on alcohol and drug users. In recent years, however, there has been an increasing recognition of the need to provide timely attention for families coping with this problem. The background to this article is a trans-cultural study in which Mexican and English families participated, which is theoretically based on the stress-coping-support model; the aim was to identify the stressors and dilemmas faced by families coping with the addiction problem of a nearby member and the impact this has on family members' health and well-being (Orford, Natera, Casco, Nava and Ollinger).

Despite the great socio-cultural contrast between Mexico and England, the effects and health risks for drug users' relatives are similar. These include changes in lifstyle, alterations in sleep patterns, eating, weight, and mood; a deterioration in health, symptoms such as anger, irritability, anxiety, despair, worry, feelings of guilt and vulnerability, and suicidal thoughts. These findings have been reported in a number of previously published articles (Orford, Natera, Davies, Nava, Mora et. al., 1998; Orford, Natera, Velleman, Copello, Bowie et. al., 2001; Orford, Natera, Copello, Atkinson, Mora et. al., 2005[a]).

One of the instruments used in the research was the Symptom Rating Test (SRT) (Kellner and Sheffield, 1973), to assess the health of family members forced to cope with the chronic stress of the alcohol and/or drug consumption of a close family member. This instrument enables one to explore the presence of psychopathological features not only in clinical practice. It also includes somatic, depressive and anxiety symptoms common among the general population.

There is evidence that the psychometric properties of SRT are appropriate for intervention programs targeting families, and that it is a sensitive measure over time, although there is no factorial validation for the instrument specifically among women, as it is a well-known fact that the mothers and wives of alcohol and drug users are one of the groups most highly affected by this problem and that they are the ones that most frequently seek specialized attention (Natera and Holmila, 1990; Natera, Mora and Tiburcio, 1997).

This article responds to the need of conducting a comparative analysis of the symptoms that result from the alcohol and drug use of a close relative reported by a sub-sample of women, i.e. the mothers and wives of users in Mexico and the United Kingdom, for which it is essential to have a valid, reliable measurement through the Symptom Rating Test, that will enable to carry out a transcultural analysis in this specific population.

The aim of this study is to ensure the factorial validity of the Symptom Rating Test in a sample of women from two Mexican and English socio-cultural groups (n=155). The goal is to determine the psychometric properties of the instrument in order to develop a common model of the presence of symptoms in both cultures, and, on the basis of this model, to draw a comparison between the symptomatology reported and some variables such as the type of family relationship (mothers vs. wives) and the country.

The importance of finding out the contrasts and similarities of the symptoms reported by Mexican and English women lies in the fact that this makes it possible to evaluate the prevalence and severity of symptoms quickly and easily. In turn, this could prove useful for the application of the test in clinical practice and research.

METHOD

This article is part of a broader transcultural study on family and addictions carried out simultaneously in Mexico City and Southeast England. The overall sample in the two countries consisted of 200 families. The original methodology has been broadly described in previous studies (Orford et al., 1993; Orford et al., 1998; Orford et al., 2005[a]). Half the sample came from specialized drug treatment centers, while the other half was drawn from the community population. A great deal of promotion was carried out in community centers, in primary health care units, churches and workplaces, to mention just a few examples. Leaflets were handed out, briefly explaining the goals of the study and the population was invited to take part in the research while those interested could be referred to specialized treatment centers, if they so wished. All the relatives interviewed agreed to take part in the study voluntarily.

The criteria for inclusion were as follows: a) Alcohol and/or drug use of a son, daughter or spouse during

TABLE 1. Relatives interviewed by substance

Substance consumed	*Mexico (n=79)*		*England (n=76)*		*Total*
	Mothers	Wives	Mothers	Wives	
Drugs	33	10	22	27	92
Alcohol	10	26	14	13	63
Total	43	36	36	40	155

the six months prior to the interviews; b) Display of concern over active alcohol and/or drug consumption of close relative (of either sex).

Participants

For the purposes of this study, a sub-sample was selected, consisting of the mothers and wives of the alcohol and drug users (n=155). Table 1 shows the sample of women participants in each country, according to the type of relationship with the alcohol- and drug-using relative. The group of mothers in Mexico was slightly larger than in England, whereas a higher number of wives were interviewed in the UK.

As for the socio-economic level, most of the interviewees in Mexico had a low socio-economic status (76%), whereas in England most of the participants were middle class. Nearly 6% belonged to the upper class in both countries. As far as age is concerned, 60% of the interviewees in both countries were aged over forty-one, while 40% were aged between 20 and 40. The interviewees' main reason for concern was a male relative's alcohol and/or drug consumption (93%). In Mexico, a higher response was obtained for drugs (54%) than for alcohol consumption (46%), whereas in England the reverse was true, with more alcohol (54%) than drug use cases (45%) being reported.

Measuring instruments

The main information-gathering strategy was a semi-structured interview that explored several issues linked to family and addictions. The Symptom Rating Test was used to determine the effects on the interviewee's health of a relative's alcohol or drug consumption in order to explore the health symptoms reported by women over the previous three months.

The Symptom Rating Test (Kellner and Sheffield, 1973) consists of 30 items measuring psychological distress among the general population without apparent psychiatric symptoms. It has a number of advantages over other instruments, such as being brief and easily understandable. Items are expressed as easily understandable symptoms and written in everyday language. The test has three choices for answering (0) "never", (1) "sometimes" and (2) "often". The items were read out as a list during the face-to-face interview with the relative.

The test has been used in England in various projects measuring the health effects among the relatives of patients with schizophrenia and Alzheimer's disease (Cochrane and Stopes-Roe, 1980). Previous research findings in Mexico, where the instrument was validated among high-school students (Mora, Natera and Andrade-Palos, 1994), and in England, among the general (Matson, 1995) and clinical population (Welch, McColl and Peace, 1989), indicate that the factorial structure through two sub-scales has proved extremely stable, with slight variations in the items and high levels of reliability (alpha=0.93).

Procedure

This is an ex-post-facto, transcultural field study, with a 2×2 factorial design among two groups of English and Mexican women, 50% of whom are mothers and 50% of whom are wives of alcohol and drug users. The research team comprised a group of psychologists previously trained to use the instruments.

As for the ethical considerations taken into account in the research, participants were given information on the aims of the research and the confidentiality of the information was guaranteed. If any health problems were detected, the interviewees could be referred to various public or private institutions for treatment; this information was also given to those who were not interested in participating in the study.

With the purposes of analyzing the information, the SPSS program (Version 10) was used. In order to obtain the physical and psychological health indicators of women in both countries, a Confirmatory Factorial Analysis was carried out to identify a common model among the population of women that would facilitate comparative analysis through the SRT. On the basis of the general model, a variance analysis was carried out in order to establish comparisons between women in the two countries regarding their physical and psychological symptomatology by type of relationship and country.

RESULTS

In order to explore possible commonalities and differences by country, an initial comparative analysis was carried out, including all the SRT items and considering them within an ordinal measurement; to this purpose, the frequencies obtained in each of the groups through a X^2 test, were compared. Table 2 shows the frequencies of the 30 symptoms included on the SRT scale, establishing a comparison by country. As one can see, significant differences were found in 16 of the symptoms. In Mexico, higher scores were obtained in

TABLE 2. Frequency of S.R.T. symptoms by country over past three months

S.R.T	Mexico (n=79)			England (n=76)			X^2
Items	Never %	Some-times %	Often %	Never %	Some-times %	Often %	
1. Feeling dizzy or faint	11.4	50.6	38.0	45.3	38.7	16.0	23.91**
2. Feeling tired or a lack of energy	10.1	46.8	43.0	2.6	42.1	55.3	4.74
3. Nervous	6.3	38.0	55.7	10.5	59.2	30.3	10.22*
4. Feelings of pressure or tightness in head or body	22.8	29.1	48.1	30.3	42.1	27.6	6.92*
5. Scared of frightened	25.3	39.2	35.4	22.4	60.5	17.1	8.59*
6. Poor appetite	48.1	29.1	22.8	41.3	48.0	10.7	7.32*
7. Heart beating quickly or strongly without reason (throbbing or pounding)	44.3	36.7	19.0	35.5	46.1	18.4	1.57
8. Feelings that there was no hope	32.9	35.4	31.6	30.3	42.1	27.6	0.74
9. Restless or jumpy	22.1	45.5	32.5	11.8	63.2	20.0	5.30
10. Poor memory	22.8	34.2	43.0	24.0	46.7	29.3	3.50
11. Chest pains or breathing difficulties or feelings or not having enough air	40.5	39.2	20.3	56.6	35.5	7.9	6.37*
12. Feeling guilty	30.4	43.0	26.6	18.7	53.3	28.0	3.01
13. Worrying	3.8	24.1	72.2	3.9	42.1	53.9	5.87
14. Muscle pains, aches, or rheumatism	24.1	22.8	53.2	26.3	43.4	30.3	9.93*
15. Feelings that people look down on you or think badly of you	46.8	25.3	27.8	43.4	40.8	15.8	5.48*
16. Trembling or shaking	59.5	26.6	13.9	51.3	42.1	6.6	5.22
17. Difficulty in thinking clearly or difficulty in making up your mind	29.1	41.9	29.1	15.8	59.2	25.0	5.62
18. Feeling unworthy or a failure	29.1	40.5	30.4	32.9	50.0	17.1	3.81
19. Feeling tense or "wound up"	39.5	38.2	22.4	6.6	44.7	48.7	25.66**
20. Feeling inferior to other people	51.9	24.1	24.1	39.5	46.1	14.5	8.52*
Parts of body feel numb or tingling	43.0	35.4	21.5	52.6	42.1	5.3	8.74*
Irritable	34.6	29.5	35.9	5.3	71.1	23.7	31.69**
Thoughts which you cannot push out of your mind	19.2	32.1	48.7	10.5	49.8	48.7	2.76
Lost interest in most things	51.9	27.8	20.3	51.3	43.4	5.3	9.39*
Unhappy or depressed	8.9	58.2	32.9	5.3	60.5	34.2	0.76
Attacks of panic	84.8	7.6	7.6	43.4	44.7	11.8	31.71***
Parts of your body feel weak	52.6	32.1	15.4	41.9	48.6	9.5	4.58
Cannot concentrate	37.2	43.6	19.2	11.8	69.7	18.4	14.68***
It takes a long time to fall asleep, or restless sleep, or nightmares	34.2	35.4	30.4	22.4	47.4	30.3	3.23
Awakening too early and not being able to fall asleep again	41.0	26.9	32.1	21.1	43.4	35.5	8.05*

*p≤.05, **p≤.005, ***p≤.001

the following somatic symptoms: 1) "feeling dizzy or faint", 11) Chest pains, 27) "parts of your body that feel weak", 4) "pressure inside the head", and 14) "muscle pains, aches or rheumatism", as well as in the psychological symptoms, such as 3) "nervous", 5) "scared or frightened", and 24) "loss of interest" in virtually everything.

The following psychological symptoms obtained the highest scores among the English women: 28) "cannot concentrate", 26) "panic attacks", 22) "irritable", 20) "feeling inferior to others", and 19) "feeling tense". Two physical symptoms, 6) "poor appetite" and 30) "awakening too early and being unable to get back to sleep" were higher among this group than among Mexican participants.

On the basis of this initial exploration, a series of statistical procedures were carried out to obtain a Symptom Scale that would serve as a starting point for establishing a transcultural comparison. To this end, it was necessary to create a common model of symptoms that could be applied to women in both sociocultural groups with the aim of determining how each item contributed to the general construct and how it behaved in the regions studied. This made it possible to establish similarities in the items that function in both cultures.

A Confirmatory Factorial Analysis was used for two groups (Bentler, 1995) for the global scale of symptoms to corroborate the best fit of the test. The procedure used to satisfy the sample size criterion in each of the countries was to take the total sample and carry out a confirmatory factorial analysis, using the EQS program (Version 5.4) to provide more evidence of the factorial structure of the instrument through two sub-scales, with physical and psychological symptoms and to identify the best fit of this instrument. A series of tests were subsequently carried out using this model and its applicability to the population under study in each of the countries in order to obtain additional analyses to adjust the scale.

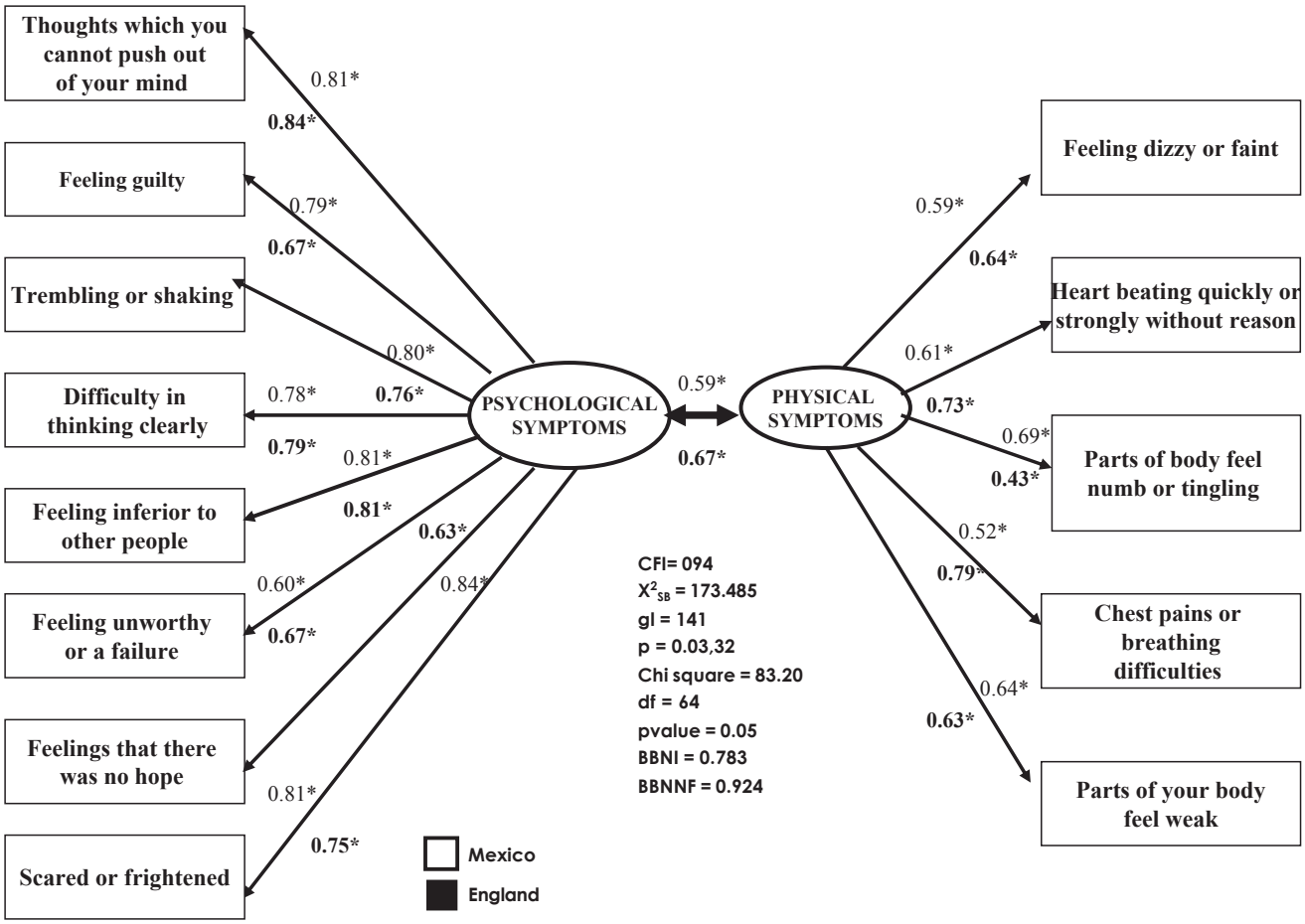

Fig. 1. Confirmatory Factor Analysis for S.R.T. Subscales

The total sample (n=155) was halved, while maintaining the proportion of subjects from each country, which served to establish the initial model. Various analyses were therefore carried out using the Lagrange multiplier to obtain a model with factorial loads greater than 0.53 that would adjust to all the data. The results of this analysis corroborated the existence of two related factors (physical and psychological symptoms r = 0.63) with five and eight items respectively. Finally, the other part of the sample was used to create the model shown in Figure 1 for both countries. The results indicated that the model fits the data very well (as a non-significant X^2 of 64.61, gl= 64, p=0.0538 was obtained), with an adjustment index of nearly 1 (CFI=0.950).

The Lagrange Multiplier indicates that the factorial loads of each item are similar in Mexico and England. The items included in each of the sub-scales of physical and psychological symptoms are shown in Table 3 with their respective internal consistencies (Cronbach's Alpha), which corresponded to .76 for the sub-scale of physical symptoms and .85 for the sub-scale of psychological symptoms.

Variance Analysis for SRT with Thirteen Items

In order to determine whether variables such as "type of relationship" and "country" had any relationship to the SRT sub-scales, a two-factor variance analysis was carried out. The variables "country" and "type of relationship" were the factors and the sub-scales of physical and psychological symptoms were dependent variables. This analysis showed differences by "country" for the sub-scale of physical symptoms ($F=4.930$, $gl^{1/155}$, $p \leq .05$) where Mexican women scored higher than their English counterparts. Likewise, the interaction between type of relationship and country also proved significant ($F=6.327$, $gl^{1/155}$; $p \leq .05$). On the basis of the previous procedure and according to the confirmatory factorial analysis, only 13 items (Figure 1) are valid and suitable for transcultural comparison. An analysis of the differences in the symptoms observed in Table 2 yields statistically significant evidence for symptoms such as "dizzy or faint", "chest pains" and "parts of your body feel weak", which were higher in Mexican than English women, while the frequency of the first two symptoms was higher among Mexican wives.

TABLE 3. Reliability Rates of S.R.T Symptoms in Mexican and English Women

Items	*Item-total correlation*	
Psychological		
5. Scared of frightened	.54	
8. Feelings that there was no hope	.60	
12. Feeling guilty	.60	
16. Trembling or shaking	.58	
17. Difficulty in thinking clearly or difficulty in making up your mind	.60	
18. Feeling unworthy or a failure	.69	
20. Feeling inferior to other people	.53	
23. Thoughts which you cannot push out of your mind	.53	
Physical		
1. Feeling dizzy or faint		.50
7. Heart beating quickly or strongly without reason (throbbing or pounding)		.50
11. Chest pains or breathing difficulties or feelings or not having enough air		.54
21. Parts of body feel numb or tingling		.49
27. Parts of your body feel weak		.55
Cronbach's alpha	.85	.76

There were no statistically significant differences in the sub-scale of "psychological" symptoms between the groups studied, which suggests that this type of symptomatology is expressed in the same way between women, whether they are mothers or wives, in both countries. Only the symptom "feeling inferior to others" was reported more frequently among Mexican than English women (Table 2).

A comparison of the group of mothers of users showed that among Mexican women, physical symptoms such as "feeling dizzy or faint", and "parts of your body feel numb or tingling" prevailed, whereas English women scored higher on "parts of your body feel weak" and the psychological symptom called "scared or frightened", since 64% of the English women reported having experienced this "sometimes".

As for the other differences found in the symptoms observed in Table 2, although they cannot be interpreted, they warrant future studies, since the symptoms may express cultural contents. For example, whereas "panic attacks" are often mentioned among the English population, this symptom is unusual among the general population in Mexico. Likewise, in Mexico, "nerves" are a common way of expressing psychological distress, whereas in England this does not appear to have the same meaning.

DISCUSSION

The confirmatory factorial analysis produced a valid, reliable version of the Symptom Rating Test (SRT), which was useful for undertaking a comparative analysis between Mexican and English women coping with a close relative's addiction problem. Although the researchers experienced some difficulties in meeting the sample size criteria in each of the countries, a series of statistical procedures were carried out to cover these requirements, in view of the fact that this instrument had previously been validated in both countries (Cochrane and Stopes-Roe, 1980; Mora et al., 1994). In transcultural psychology, it is extremely important not only to show the diversity that exists between cultures, but also the analogies in the field of mental health and the facts that are psychologically universal or common in the human species, since this enables knowledge to be constructed (Berry, Poortinga, Dasen and Sartorius, 1992). Hence the importance of studying the common symptoms associated with alcohol and drug consumption in Mexico and England.

The Structural Equation Model permitted the identification of common symptoms expressed by women

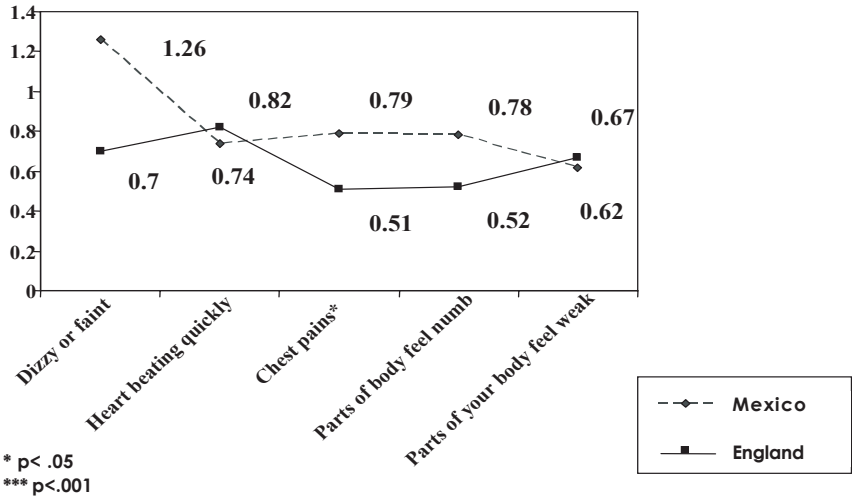

Fig.2. Means obtained on sub-scale of physical symptoms by country (n=155).

of both countries as a result of a relative's alcohol or drug use. On the basis of the common model, thirteen symptoms were identified that served to establish commonalities and transcultural differences. Statistically significant evidence was found that corroborates the factorial structure comprising two sub-scales of physical and psychological symptoms, while the reliabilities obtained were similar to those reported in previous research undertaken in the United Kingdom (Orford, Templeton, Velleman and Copello, 2005[b]) and in Mexico (Mora et al., 1994). The common psychological symptoms were fear, despair, feelings of low self-worth and guilt, shaking and difficult thinking. Physical symptoms common to the two cultures include "heart beating quickly without reason", "chest pains or breathing difficulties", dizziness, weakness, and numbness of the body.

These common symptoms indicate that women, as either wives or mothers, suffer the effects of alcohol and drug consumption in the family in the same way. Since this version is designed to be used exclusively by women, the 13-item Symptom Rating Test allows gender-related aspects to be identified. The importance of undertaking these analyses responds to the need to make adaptations in specific groups, as it is extremely important to include gender aspects in measurements in the area of health, since society continues to hold women responsible for coping with the problem of addiction in a family, which makes them a vulnerable group.

When one considers the variable known as type of relationship, it is interesting to see how the symptoms can be extremely representative in each of the groups. By way of an example, women in the mothers' group scored higher on symptoms such as "worrying" and "difficulty in sleeping", whereas "irritability" was more commonly reported among wives. However, these finding are still open to further research and for the moment should be interpreted with caution.

Findings from the variance analysis indicate that significant differences were only found in the sub-scale of physical symptoms, with Mexican women scoring higher than their English counterparts, which indicates that women in Mexico tend to somatize more when coping with a relatives addiction. These results corroborate the findings of other authors. For example, Argyle (1994) notes that in countries with higher levels of poverty, people tend to express their distress psychosomatically, and in the specific case of Mexican women, the stress caused by a problem of addictions is expressed organically.

A propos of this, it is important to mention the socio-economic contrast between the women studied. For example, the Mexican participants lived in greater poverty than the English women. As mentioned earlier, most of them were middle-class women, whereas the interviewees in Mexico were mostly heads of household and the addictions simply placed a further strain on the family economy, since women were not only responsible for the upkeep of the user and his family, in the event that the latter was unemployed, but also for the cost of treatment.

Another of the contrasts between the groups studied has to do with the divergences between the two countries regarding access to health services. In the United Kingdom, for example, health service coverage has increased considerably in recent years, the welfare system is extremely broad and gives families greater protection, while the English women have more resources for dealing with their individual welfare and autonomy. By contrast, in Mexico, where access to state health services is more limited, women, particularly the mothers of alcohol and drug users, are responsible for coping with the consequences of substance abuse in the family, in conditions of isolation, where personal well-being creates an enormous sense of guilt. A propos of this, Boltansky (1975) states that in the relationship between self-care and social class, the low-income sector of the population tends to tolerate symptoms much longer, seeking treatment only when the pain is too great to enable them to carry out their everyday activities. This is particularly true in Mexico, in the case of women of scant resources, who seek primary health care services to find a solution to their emotional distress, which is expressed in physical symptoms, while doctors are not trained to relate these symptoms to stress or refer them for treatment. In this respect, for many years now, women have been overlooked by the health sector, which is why this population requires alternative forms of health care.

In short, the main contribution of this study was to undertake a comparative and transcultural analysis of health symptoms specifically among the mothers and wives of drug users, which is why the SRT scale of symptoms was validated in a 13-item version designed specifically to contrast Mexican and English women. This instrument may be useful as a screening test for identifying psychopathological symptoms, as well as for evaluating the effectiveness of interventions in programs designed specifically for the relatives of drug users in the clinical and research sphere (Tiburcio and Natera, 2003).

On the basis of the above, the implications of this study for future research are, on the one hand, to increase the evidence of the factorial structure on the 13-item symptom scale in which different socio-cultural groups are considered, such as the male relatives of drug users, the differences between the rural and urban population, type of drug and trajectory of use, in order to be able to identify the communalities and

differences regarding symptoms and their meanings, which can be achieved by using complementary qualitative methodologies, on behalf of establishing standards of transcultural comparison and counting on more sensitive measurements that will enable the promotion of comparative studies.

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