RESUMO

Este estudo é parte de uma exploração da violência de gênero. Verifica se a espontaneidade está correlacionada com o bem-estar psicológico em amostras de estudantes universitários italianos e austriacos, n = 166 e 146, respectivamente, usando três questionários de autorrelato: Inventário de Avaliação de Espontaneidade - revisado (SAI-R); a Medida de Resultado (CORE-OM) e Inventário de Depressão de Beck (BDI-II).
The study forms part of an exploration of gender violence. Using a sample of Italian and Austrian university students (n=166 and 146, respectively), it examines whether spontaneity is correlated with psychological well-being. Three self-reporting questionnaires were applied: the Revised Spontaneity Assessment Inventory (SAI-R); the CORE-OM Outcome Measure (CORE-OM) and the Beck Depression Inventory (BDI–II). The results showed good internal consistency for all scores and strong and statistically significant correlations between the measures as expected in both countries. These findings with non-clinical samples are congruent with the theoretical model and set the ground for future use with clinical samples.

KEYWORDS
intervention, EMPOWER will consider the mother-daughter relationship with the hypothesis that where cultures create supremacy and power for men, attitudes leading to the subordination and victimization of women are transmitted across generations through the mother-daughter relationship (KAUR; GARG, 2010; ZAIDI et al., 1989). EMPOWER will focus on sex trade trafficking: the collective abuse of women trafficked for sexual exploitation. The aim is to intervene where trafficking of women and exploitation is rife working with women who have been victims of domestic violence to help them become aware of the history of their condition and achieve resiliency in their lives and effective self-determination by breaking limits imposed by intergenerational relations. EMPOWER uses Jacob Levi Moreno's Psychodrama (1947) to help the victim reconstruct her life experiences through drama. This technique, an ecologically-integrated model, emphasizes the "changing role" which is a key element for the promotion of resiliency. The goal is to provide victims an environment for psychological development and promote in them a new self-representation by which they are able to break free from a fate of oppression.

Crucially EMPOWER will use both quantitative and qualitative evaluation. This paper reports whether questionnaires for the quantitative evaluation are reliable, valid and fit for this purpose.

HYPOTHESIS

The initial assumption is based on Moreno’s (1947) understanding of spontaneity and creativity conditions created by the capacity for positive thinking the individual reaches by recognizing their own emotions and overcoming past stereotyped behaviour. As a form of intrinsic motivation that precedes the process of taking action (KIPPER; SHEMER, 2006), spontaneity is closely related to personal well-being. Davelaar; Araujo; Kipper (2008) and Steitzel; Hughey (1994), found that spontaneity is a necessary precursor to feeling joy and deep satisfaction in line with Maslow (1970) who considered the capacity to be spontaneous an indispensable condition in order to reach self-realization.

The purpose of this report is to test the internal consistency/reliability of three chosen measures, SAI-R, CORE-OM and BDI-II; to see if their cross-sectional correlations and gender/culture score differences fit the above model of the importance of spontaneity and provide significant validation of the measures and model.
METHOD
MEASURES

SAI-R (Spontaneity Assessment Inventory - Revised)

The SAI-R was chosen given the significance of spontaneity in psychodramatic techniques and its apparently excellent psychometric properties. The SAI-R was designed to support empirical study of psychodrama and the idea of measuring spontaneity goes back to Moreno (1947). The first measure of spontaneity involved creating a variety of circumstances in which the protagonist was asked to identify him/herself and improvise responses. Observers watched the improvisations and evaluated their appropriateness, creativity and speed of response providing what Moreno termed the "quotient of spontaneity". Though not scientifically supported nor very practical, this remained the only measure of spontaneity for decades. The SAI-R provides a more usable and evaluated instrument measuring spontaneity.

The SAI-R is the revised version of the original SAI (CHRISTOFOROU; KIPPER, 2006; KIPPER; SHEMER, 2006). Like the SAI, the SAI-R poses one question: “How strongly do you have these feelings and thoughts during a typical day?” followed by a list of 18 items, some adjectives and others phrases describing different feelings and thoughts; for example: "creative", "happy", "excited", "uninhibited", "satisfied". The participants respond on a five-point Likert scale, ranging from 1 (very weak) to 5 (very strong). The SAI-R’s reported internal consistency is .79 (Cronbach's alpha; KIPPER; SHEMER, 2006).

Kipper and Shemer (2006) reviewed correlations between spontaneity and personal well-being and between spontaneity and stress (numerous studies have linked stress with low levels of well-being, e.g. BENGSTON; REEDY; GORDON, 1985; CATZ; FELTON; MCCLURE, 2002). Their sample was 105 people (38 men and 67 women) aged between 18 and 69 years. SAIR-R scores ranged from 18 to 90 (M = 66.4, SD = 10.2) with no statistically significant differences between the mean scores of women and men with no significant correlations with either age or level of education. They found a positive correlation between spontaneity and well-being, and a negative correlation with stress supporting the ideas of Moreno that spontaneity plays a significant role in mental health.
CORE-OM (Clinical Outcomes for Routine Evaluation-Outcome Measure)

The CORE-OM is a 34 item questionnaire developed to assess the effectiveness of psychotherapeutic interventions (EVANS et al., 2002) and used in the United Kingdom and other countries as routine clinical assessment tool in primary care and specialist settings and in large-scale population and research studies (BARKHAM; CULVERWELL; SPINDLER; TWIGG, 2005; EVANS; CONNELL et al., 2003). It is complemented by the CORE-A (Assessment), a data gathering form filled out by the therapist at initial assessment end of therapy.

Each of the 34 CORE-OM items is scored by the participant on a 5-point Likert scale from “not at all” to “most or all the times” for how frequently they experienced that state during the last week. The items provide a mean score and four domain scores of well-being, problems, functioning and risk (4, 12, 12 and 6 items per domain respectively).

The first three domains fit the “stages of change” model which suggests psychotherapies proceed sequentially, starting with subjective well-being, then remission of problems/symptoms and finally an improvement in overall functioning (HOWARD et al., 1993). However, the measure does not require therapy follows that model. About half the CORE-OM items are low intensity, e.g. "I felt tense, anxious or nervous," while the remainder are high intensity, e.g. "I felt panic or terror"; 25% of the items are positive statements with reversed scores. The score can be pro-rated if not more than three items are missing: higher scores indicate more problems. A score for "all non-risk items" is also suggested based on the finding in clinical and non-clinical samples in English and in other languages, that the risk items show rather low correlation with the other items (see e.g. LYNE, BARRETT, EVANS; BARKHAM, 2006).

Given its simplicity the CORE-OM is a valuable tool for testing psychological well-being and for verifying the success of the psychodrama intervention in the target group and for the EMPOWER study. One key quality of the CORE-OM is that it is copyleft: i.e. the copyright is owned by CORE System Trust who don’t allow changes, including translations, without their approval; however, they make no charge for reproduction of the measure on paper making it essentially zero cost to use by clinicians and researchers. Two 18 item short forms that can be used alternately to avoid memory effects in repeated use exist (BARKHAM et al., 2001) as does a 10 item short form (BARKHAM et al., 2012). The CORE-OM and its short forms have been translated into 24 languages (e.g. GAMPE,

**BDI-II (Beck Depression Inventory - second version)**

The BDI-II is a questionnaire measuring the severity of depression in adults (and adolescents over 12 years of age). It is designed to assess diagnostic criteria for depressive disorders in the Diagnostic and Statistical Manual of Mental Disorder (DSM-IV, American Psychiatric Association, 1994).

The original BDI (BECK et al., 1987) consisted of 21 items based on typical symptoms and behaviors frequently reported by depressed psychiatric patients and rarely by non-depressed psychiatric patients. The BDI-II includes a series of changes: the first four items "Weight Loss", "Change of body image", "Somatic concern" and "Working difficulties" have been replaced by new items "Agitation", "A sense of futility," "Concentration" and "Energy loss" considered more representative of most severe depression. The items '"Insomnia" and "Loss of appetite" have been amended to indicate their reduction or increase, and called respectively"Sleep" and "Appetite". Finally "Social Withdrawal" is replaced by "Loss of interest". Another change is that the time frame used in the BDI-II has been extended to two weeks in accordance with the DSM-IV criteria. The BDI-II (BECK at al., 1996) has 21 statements about symptoms and depressive attitudes each followed by four response options, from 0 to 3, indicating how much that symptom or behavior has increased or decreased over the past two weeks, where a value of 0 indicates that there has been no change. The total score is calculated by summing scores with the maximum score of 63.

The Italian version of the BDI-II (GHISI, BAPTIST, FLEBUS, MONTANO, SANAVIO & SICA, 2006) was tested in 723 college students: internal consistency was .80 (Cronbach's Alpha) with an average score of 8.2 (SD = 5.6) and no significant correlations were found with age ($r = -.35$); however, women had higher mean score ($M = 9.5$, $SD = 5.5$) than men ($M = 6.9$, $SD = 5.4$).

The BDI-II was chosen as a referential measure. By contrast with the CORE-OM, for the BDI-II a reproduction fee is charged for all use of the measure and aggressively prosecuted by the company owning the copyright.
- Procedure

Participants were administered the three instruments (BDI-II, SAI-R and CORE-OM) individually and anonymously. The questionnaire was delivered to the researchers by the participants immediately after finishing it. The questionnaire included a socio-demographic form (age, gender, occupation) together with the three assessment tools.

Statistical analyses were conducted in SPSS and R (version 2.15.3; R Core Team, 2013). The issues at stake are almost all about how strong the parameters of reliability and convergent validity are, not whether they are statistically significant or not. Parameters that were merely statistically significant in samples of this size would only indicate some systematic relationship, not whether the instruments were fit for purpose or not. Generally, 95% confidence intervals (CIs, e.g. GARDNER; ALTMAN, 1986) are reported around observed parameters to indicate the precision of estimation of population values. Cronbach’s alpha (CRONBACH, 1951) is used to indicate internal reliability/consistency and Feldt’s methods are used to estimate CIs around Cronbach’s alpha (FELDT; WOODRUFF; SALIH, 1987).

RESULTS

- Participants

A total of 312 Italian and Austrian University students participated: 156 females and 156 males aged between 18 and 24 (M=20.9 years; SD=1.39). The Italian sample consisted of 83 females and 83 males aged 19 to 24 years (M=21.0 years; SD=1.38) and the Austrian sample consisted of 73 females and 73 males aged between 18 and 24 years (M=20.7; SD=1.38). All took part voluntarily with no payment for participation.

INTERNAL RELIABILITY OF THE MEASURES

SAI-R

For the Italian sample Cronbach's Alpha for the SAI-R was .81 (95% CI .76 to .85) congruent with .79 reported by (KIPPER; SHEMER, 2006). The average score on the SAI-R was 57.1 (SD = 8.1); a value that is less than that reported by Kipper; Shemer (M = 66.4, SD = 10.2).

For the Austrian sample, the Cronbach’s alpha was .90 (.90 to .93) higher than both the value in our Italian data and that reported by Kipper; Shemer (2006). The mean total score was 63.7 (SD = 9.8) somewhat
smaller than reported in the literature but greater than the score in the Italian sample. No significant differences by gender were found, contrasting with the finding in the Italian data.

**CORE-OM**

For the Italian and Austrian samples Table 1 shows the Cronbach’s alpha values for each with earlier published UK (EVANS et al., 2002) and Italian (PALMIERI et al. 2009) values.

<table>
<thead>
<tr>
<th>Cronbach alpha (95% CI)</th>
<th>Italian data</th>
<th>Italian Palmieri et al. 2009</th>
<th>UK Evans et al. 2002</th>
<th>Austrian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well-being .68 (.59 to .75)</td>
<td>.75</td>
<td>.77</td>
<td>.63 (.53 to .73)</td>
<td></td>
</tr>
<tr>
<td>Symptoms .85 (.81 to .88)</td>
<td>.86</td>
<td>.90</td>
<td>.88 (.85 to .91)</td>
<td></td>
</tr>
<tr>
<td>Functioning .72 (.65 to .78)</td>
<td>.76</td>
<td>.86</td>
<td>.79 (.73 to .84)</td>
<td></td>
</tr>
<tr>
<td>Risk .61 (.52 to .70)</td>
<td>.74</td>
<td>.79</td>
<td>.60 (.49 to .69)</td>
<td></td>
</tr>
<tr>
<td>All items except risk .90 (.87 to .92)</td>
<td>.91</td>
<td>.94</td>
<td>.92 (.90 to .93)</td>
<td></td>
</tr>
<tr>
<td>All items .90 (.87 to .92)</td>
<td>.92</td>
<td>.94</td>
<td>.92 (.90 to .94)</td>
<td></td>
</tr>
</tbody>
</table>

Tabela 1. Alpha of CORE-OM domains, Italy

The alpha values from these Italian data are smaller than the UK values from larger and more diverse samples; all, with the possible exception of the risk score, are acceptable and the overall and non-risk alpha values are excellent. In general values are also slightly lower than reported by Palmieri et al. (2009) for Italian data though the difference is only statistically significant for the risk score. The Austrian values are also smaller than the UK referential data (internal reliabilities for the German translation have not been published yet). Again, the differences are most marked for the risk score and the overall and non-risk scores show excellent internal reliabilities.

**BDI-II**

For the Italian sample, alpha was .87 (95% CI .83 to .89), greater than .80 reported by Ghisi et al. (2006). For the Austrian sample, the internal consistency was .81 (95% CI .76 to .85). These are very acceptable values.

**CONVERGENT VALIDITY CORRELATIONS BETWEEN SCORES**

One general hypothesis was that SAI-R spontaneity would correlate negatively with distress and psychopathology scores on the CORE-OM.
and BDI-II. Another general hypothesis was that the correlations between the CORE-OM scores and the BDI-II, the more expensive measure, would show strong convergent validity.

Tables 2 and 3 report Pearson correlation coefficients showing SAI-R scores negatively correlated with CORE-OM total and domain scores and with the BDI-II.

These correlations between SAI-R and CORE-OM scores are similar to those reported by Kipper; Hundal (2005) for the SAI against the Friedman Well-Being Scale (FWBS) (FRIEDMAN, 1994) and those by Kipper; Shemer (2007) for the SAI-R and FWBS regarding the relationship between measures of spontaneity and psychological well-being.

<table>
<thead>
<tr>
<th>Spearman rho</th>
<th>Total CORE-OM</th>
<th>Well-being</th>
<th>Problems</th>
<th>Functioning</th>
<th>Risk</th>
<th>Items</th>
<th>NoRisk</th>
<th>SAIR</th>
<th>BDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORE-OM_Total</td>
<td>1</td>
<td>.81**</td>
<td>.92**</td>
<td>.83**</td>
<td>.39**</td>
<td>.99**</td>
<td>-.43**</td>
<td>.65**</td>
<td></td>
</tr>
<tr>
<td>Well-being</td>
<td>1</td>
<td>.71*</td>
<td>.60**</td>
<td>.16*</td>
<td>.82**</td>
<td>-.49**</td>
<td>.55**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Symptoms</td>
<td>1</td>
<td>.61**</td>
<td>.28**</td>
<td>.92**</td>
<td>-.34**</td>
<td>.66**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Functioning</td>
<td>1</td>
<td>.27**</td>
<td>.83**</td>
<td>-.45**</td>
<td>.65**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk</td>
<td>1</td>
<td>.28**</td>
<td>-.07</td>
<td>.20**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item NoRisk</td>
<td>1</td>
<td>-.45**</td>
<td>.65**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAI R</td>
<td>1</td>
<td>-.24**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BDI</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Tabela 2. Correlations, ITALY (N = 166)**

<table>
<thead>
<tr>
<th>Spearman rho</th>
<th>Total CORE-OM</th>
<th>Well-being</th>
<th>Problems</th>
<th>Functioning</th>
<th>Risk</th>
<th>Items</th>
<th>NoRisk</th>
<th>SAIR</th>
<th>BDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORE-OM_Total</td>
<td>1</td>
<td>.85**</td>
<td>.93**</td>
<td>.90**</td>
<td>.50**</td>
<td>1.00**</td>
<td>-.56**</td>
<td>.68**</td>
<td></td>
</tr>
<tr>
<td>Well-being</td>
<td>1</td>
<td>.74*</td>
<td>.76**</td>
<td>.39*</td>
<td>.86**</td>
<td>-.51**</td>
<td>.56**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Symptoms</td>
<td>1</td>
<td>.71**</td>
<td>.42**</td>
<td>.93**</td>
<td>-.50**</td>
<td>.65**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Functioning</td>
<td>1</td>
<td>.43**</td>
<td>.90**</td>
<td>-.57**</td>
<td>.57**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk</td>
<td>1</td>
<td>.46**</td>
<td>-.22*</td>
<td>.31**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item NoRisk</td>
<td>1</td>
<td>-.57**</td>
<td>.67**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAI R</td>
<td>1</td>
<td>-.58**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BDI</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Tabela 3. Correlations, AUSTRIA (N = 146)**
The findings are very similar for both countries. The overall relationship between the three measures when data are pooled across both countries is shown in Table 4.

<table>
<thead>
<tr>
<th></th>
<th>CORE-OM</th>
<th>SAIR</th>
<th>BDI-II</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORE-OM</td>
<td>1</td>
<td>-.55**</td>
<td>.67**</td>
</tr>
<tr>
<td>SAIR</td>
<td></td>
<td>1</td>
<td>-.44**</td>
</tr>
<tr>
<td>BDI-II</td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

GENDER AND COUNTRY EFFECTS

As EMPOWER considers gendered violence and its location in societal and cultural norms we explored gender effects by country using 2x2 ANOVAs (Country x Gender).

For the SAI-R the interaction (gender-country) was not statistically significant \( (F(1, 306) = 3.37, p = .068) \) meaning we can interpret simple effects of gender and country separately: the Italian mean scores were lower than the Austrian \( (F(1, 306) = 43.6, p < .0001) \). Figure 1 gives a notched boxplot of all the data. It can be seen that there is one outlying high (male) Italian SAI-R value but this is lower than the limits for the Austrian men and women. The horizontal reference line is the overall median and the notched “waists” on the boxes show the CIs for the medians for each group showing that both the Austrian men and women have statistically significantly elevated median scores compared to the overall median.

![Figure 1. SAI-R by Gender and Country](image-url)
On the BDI-II (figure 2) there is a strongly statistically significant interaction \( (F(1, 308) = 13.2, p = .0003) \), but also a clear difference between countries \( (F(1, 308) = 16.3, p = .003) \) largely confined to the women: analysing each gender separately significant differences are observed between the two countries only for women than men (Mann-Whitney \( p < .0001 \) for women cf. \( p = .38 \) for men; t-test \( p < .0001 \) vs. \( p = .70 \)).

For the CORE-OM (figure 3) there is also a significant interaction \( (F(1, 308) = 5.10, p = .025) \) though rather less strong than for the BDI-II. The differences between the countries were more marked for women (Mann-Whitney \( p < .0001 \) vs. \( p = .02 \), women vs. men and t-test \( p < .0001 \) vs. .07).

---

Ines Testoni, Alessandra Armenti, Lucia Ronconi, Michael Wieser, Adriano Zamperini, Sibylla Verdi e Chris Evans

---
DISCUSSION

The study aimed to verify the reliability and validity of the measures for the EMPOWER study. The reliabilities were acceptable and broadly congruent with other reported data. The convergent validity of CORE-OM and BDI-II scores were good and their correlations with the SAI-R support theories about the importance of spontaneity for personal well-being replicating findings from other samples and measures (KIPPER, SHEMER, 2006; DAVELAAR et al., 2008; STEIZEL et al., 1994; KIPPER et al., 2005).

SAI-R scores were statistically significantly lower for Italy than for Austria, for both men and women. Similarly, Italian women score higher in levels of general malaise than Italian men and statistically significant country differences on both the BDI-II and CORE-OM were mainly found in the women. Though much more work is needed to show causality, this is in line with Italy being among European countries with a high concentration of mafia (Ministry of Interior, 2007) and a strong traditional culture that keeps women, through maternal education, tied to familial duties and/or emotional sexual role (TESTONI et al., 2009).

There are cautionary notes: the sample sizes are respectable but as endorsement of significant risk problems is low in non-clinical samples reliability figures for the risk scores are based on very low numbers of people with problems so probably underestimate the reliability of the score. The samples are all students with restricted ranges of age and life experience and it will be important to see if similar gender and country effects emerge in larger and more diverse samples.

In conclusion, this work supports the choice of quantitative instruments for the EMPOWER study and supports the initial hypothesis that higher spontaneity is associated with lower distress and psychopathology.
REFERENCES


Ines Testoni, Alessandra Armenti, Lucia Ronconi, Michael Wieser, Adriano Zamperini, Sibylla Verdi e Chris Evans


ARTIGO DE REFLEXÃO