

Versões Portuguesas de dois instrumentos para  
avaliação do Stress Traumático em contexto laboral

Helena Alexandra de Sousa Barbosa

Dissertação de Mestrado em Psicologia da Saúde e Neuropsicologia

**Orientação:** Professor Doutor José Carlos Rocha

Gandra, Setembro de 2018



**CESPU**  
INSTITUTO UNIVERSITÁRIO  
DE CIÊNCIAS DA SAÚDE

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Helena Alexandra de Sousa Barbosa

Dissertação apresentada no Instituto Universitário de Ciências da Saúde  
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para obtenção do grau de Mestre em Psicologia da Saúde e Neuropsicologia,

sob orientação do

Professor Doutor José Carlos Rocha

Gandra, Setembro de 2018

## **DECLARAÇÃO DE INTEGRIDADE**

Helena Alexandra de Sousa Barbosa estudante do Mestrado de Psicologia da Saúde e Neuropsicologia do Instituto Universitário de Ciências da Saúde, declaro ter atuado com absoluta integridade na elaboração desta dissertação de mestrado.

Confirmo que em todo o trabalho conducente à sua elaboração não recorri a qualquer forma de falsificação de resultados ou à prática de plágio (ato pelo qual um indivíduo, mesmo por omissão, assume a autoria do trabalho intelectual pertencente a outrem, na sua totalidade ou em partes dele).

Mais declaro que todas as frases que retirei de trabalhos anteriores pertencentes a outros autores foram referenciadas ou redigidas com novas palavras, tendo neste caso colocado a citação da fonte bibliográfica.

## **Agradecimentos**

Ao Professor José Carlos Rocha, pela sua orientação, pelo apoio, pela partilha de conhecimentos e pelo incentivo constante.

Aos meus pais, por me proporcionarem a oportunidade de seguir sempre os meus sonhos e acreditarem em mim.

Ao meu namorado, pela compreensão, pela paciência e pelo suporte em todas as ocasiões.

À minha madrinha pela preocupação e presença constante.

E à Diana, pela ajuda e por ser sempre o meu ponto de equilíbrio.

Muito obrigada a todos!!

## **Prefácio**

No decorrer do meu percurso académico, foi-me lecionada uma unidade curricular (UC) nomeada como “Ética e deontologia”, onde no final da UC tínhamos de apresentar um trabalho relacionado com algum dilema ético. Tendo em conta os meus receios em relação à profissão, optei por escolher como tema o Trauma Secundário. Foi a partir daqui e desta primeira investigação que o meu interesse por esta área nasceu.

Com a essencial ajuda e impulso do Prof. Doutor José Carlos Rocha, foi decidido dar início a esta investigação, com foco no tema e na necessidade de o dar a conhecer à população geral. Apesar do seu enorme impacto, as pessoas ainda não estão familiarizadas com o termo, e quando não há conhecimento sobre os assuntos, não é possível protegerem-se dos efeitos adversos que estes lhes podem provocar, daí a sua importância.

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## **Resumo**

**Objetivo:** O desenvolvimento da escala “*Secondary Traumatic Stress Scale*” (STSS) é baseado na necessidade de avaliar de que forma as pessoas são afetadas indiretamente ou secundariamente pelo stress secundário: pós-stress traumático secundário.

Também, considerando o conhecimento dos efeitos de eventos adversos e traumáticos nas crianças, programas importantes têm sido desenvolvidos para melhorar a prestação de serviços a pessoas com histórias de exposição potencialmente traumática através dos cuidados sensíveis ao trauma.

Alguns problemas destes programas estão relacionados com as dificuldades em avaliar os resultados e a eficácia deste esforço, e também existe necessidade de arranjar uma forma de melhorar os programas baseando-os em evidências. Para além disso, a equipa do instituto de stress traumático de *Klingberg Family Centers* em parceria com Courtney N. Baker, desenvolveram a escala “*ARTIC- Attitudes Related to Trauma Informed Care*”.

Assim, pretendemos traduzir, adaptar e caracterizar psicometricamente estas duas escalas: STSS e ARTIC.

**Método:** Após consentimento informado, 176 trabalhadores em contexto social em Portugal preencheram um inquérito sociodemográfico, o ARTIC, o STSS e o “*WPAI- Work Productivity and Activity Impairment*”.

**Conclusão:** Os resultados, em ambos os estudos, demonstram uma consistência interna favorável, de acordo com os valores de Alpha de Cronbach obtidos.

Os valores obtidos através da análise fatorial confirmatória para o STSS demonstram uma boa validade, por outro lado, no ARTIC os valores não vão de encontro ao esperado.

No que diz respeito à validade convergente, através da correlação de Pearson, foram encontrados resultados estatisticamente significativos para a dimensão da auto-eficácia, na produtividade no trabalho, e nas atividades regulares.



Palavras-Chave: Trauma; Trauma Secundário; Stress; Trabalhadores sociais; trabalhadores prestadores de cuidados.

Artigo submetido em revista:

## **Portuguese versions of two instruments for assessment of traumatic stress in work context**

Helena Barbosa, IUCS, CESPU

Elisa Veiga, Universidade Católica do Porto

Mariana Negrão, Universidade Católica do Porto

Célia Rocha, Centro Psicologia do Trauma e do Luto

Emanuel Santos, Centro Psicologia do Trauma e do Luto

Tânia Pires, Centro Psicologia do Trauma e do Luto

José Rocha, IUCS, CESPU

## **Abstract**

**Objective:** The development of STSS was based on the need to evaluate how people are affected indirectly or secondarily by traumatic stress: secondary traumatic stress. Also, considering the knowledge of the effects of adverse and traumatic childhood events and experiences, several programs have been developed to improve provision of services to people with histories of potentially traumatic exposure through trauma-informed care. Some of the problems of such type of programs are related to the difficulties to evaluate their outcome and the efficacy of such endeavor, and also a way of fine tune the manuals based on evidence. Therefore, the team from Traumatic Stress Institute of Klingberg Family Centers in partnership with Courtney N. Baker, developed Attitudes Related to Trauma-Informed Care (ARTIC) scale.

We aim to translate, to adapt and to characterize psychometric adequacy of Secondary Traumatic Stress Scale (STSS) and ARTIC Portuguese versions.

**Method:** After informed consent, 176 workers in social context from Portugal completed a socio-demographical inquiry, ARTIC Portuguese version, Secondary Traumatic Stress Scale and WPAI- Work Productivity and Activity Impairment.

**Conclusion:** Results, in both of the studies, demonstrate a favorable internal consistency, according with Cronbach alpha values obtained. The values obtained through confirmatory factor analysis for STSS demonstrate a good validity, in the other side, in ARTIC the values do not go as expected.

In respect of convergent validity, through Pearson's correlation, was found significant statistically results for the dimension of self-efficacy, productivity on work and in regular activities.

**Key-words:** Trauma; Secondary-trauma; Stress; Social Workers; Care Workers.

## Introduction

There is an increasing awareness on the negative effects of traumatic stress in different contexts: from child development to work environment. As important as traumatic stress was secondary traumatic stress, that is less developed and is a term that mostly people do not know.

But secondary trauma makes social workers change her worldview, and implies similar characteristics and effects that post stress traumatic disorder (PTSD).

Workers are not aware of the term and what it means (Hesse, 2002), so the topic is a priority, to prevent secondary trauma, informing and teaching how to cope with it.

There are no data of prevalence of this in Portugal, but in US studies indicated that between 50% and 70% of the population experienced a trauma exposure at least one time in your lifetime (Kessler, Sonnega, Bromet, Hughes & Nelson, 1995) therefore social workers have to deal with that too. There are no known studies that indicate the prevalence of trauma in social workers too (Michalopoulos & Aparicio, 2012).

To understand what secondary trauma is, it is important in the first plan understand what trauma is and who affects: “a traumatic event typically involves the death or injury to one’s self or others, that cause feelings of fear, helplessness, or horror” (Baldwin, 1995), like violent crimes, childhood sexual abuse, war, genocide, and rape (Pearlman & Ian, 1995).

Although Secondary Traumatic Stress (STS) (also known as Compassion Fatigue or Vicarious Trauma), was defined as “*the natural consequent behaviors and emotions resulting from knowing about a traumatizing event experienced by a significant other- the stress resulting from helping or wanting to help the traumatized or suffering person*” ( Figley, 1993) or by MacCann and Pearlman (1990) “*is a concept that was developed to describe the cumulative, pervasive and damaging effects on the clinicians that occur from chronic exposure to clients traumatic material*”.

Primary care not gave sufficient attention to trauma impact, but trauma exposure predicts mental disorders, medical morbidity, and health costs (Green, Saunders, Power, Brailsford, Schelbert, Giller, Wissow, Hurtado-de-Mendoza, Mete, 2015).

The most trivial symptoms of PTSD include intrusive thoughts (often in the form of nightmares and flashbacks, and the traumatic experience was re-experienced), avoidance (the person tries to deny the exposure to the people or things that might elicit painful feelings), and arousal (that includes physiological signs of hypervigilance or increase scare responses) (Baldwin, 1995). Also include a decreased sense of energy, no time for one's self, increased disconnection from loved ones, social withdrawal, increased sensitive to violence, threat or fear, or the opposite (Dane, 2000).

This have an impact in personal and professional well-being of care-workers and in therapeutic relationship (Hesse, 2002; Canfield, 2005; Herman, 1992), what have an important involvement in public health, because it could compromise the hability of social workers to provide a mental health care service with quality (Michalopoulos & Aparicio, 2012).

The literature agrees that working with clients who have been traumatized has inevitable, long-lasting, and often detrimental effects on social workers (Herman, 1992), and have shown that hearing stories of multiple clients of traumatic experiences can cause many of the same symptoms as PTSD (Hodgkinson & Shepherd, 1994; O'Rear, 1992).

Some aspects influence and make differ the reactions of workers to the trauma histories. It depends to the characteristics of the work (nature of the clients, specific facts of the events, organizational factors, and social issues), and of the aspects intrinsic to the individuals (like personality, cognitive schemes, personal history and level of professional development) (Hesse, 2002; Regehr, Hemsworth, Leslie, Howe, & Chau, 2004). Other authors refers that personal trauma history (Hesse, 2002; McCann & Pearlman, 1990; Regehr et al., 2004) make social workers more susceptible to develop secondary trauma.

On the other hand there are things that work like protector factors: social support including family, friends, and other significants might prevent the rupture of self-schemes that occurs by the chronic exposure to the clients trauma) and years of experience, that influence the way that worker perceives the stress of the client and can integrate this (Lerias & Byrne, 2003; Michalopoulos & Aparicio, 2012)

Physical and psychological self-care is key to working with trauma victims, like a way to cope with that (Hesse, 2002), then education too, to raising awareness about what secondary trauma is and how professionals should react with it, this education should ideally begin in programs where trauma workers receive their primary training (Hesse, 2002).

The most important step to prevent secondary trauma is recognizing and accepting that secondary trauma is a normal thing of doing trauma work (Pearlman & Saakvitne, 1995).

Several programs have been developed aiming to improve provision of services to people with histories of potentially traumatic events through trauma-informed care (TIC). However is still difficult to evaluate the outcome and the efficacy of such challenge. There is need for a measure that provides information to fine tune the interventions based on evidence. Therefore, Traumatic Stress Institute of Klingberg Family Centers in partnership with Courtney Baker, developed ARTIC.

In this field, we use two instruments related to this topic in our study: Secondary Traumatic Stress Scale (STSS) and Attitudes Related to Trauma Informed Care (ARTIC).

The objective of these studies is to translate, to adapt and to validate two instruments to Portuguese population, authorized by original authors, presenting the psychometric results. There is need for measures that provide information to fine tune the interventions based on evidence, enabling future research.

## Method

### Participants

The sample has 176 Portuguese speaking professionals from social and health services (table 1), mostly female (77%), with ages between 21 and 63 ( $M=40.7$ ).

The sample was highly educated, were mostly of participants completed graduated school (59%).

### Instruments

The instruments we used were: a) a questionnaire of socio-demographic data (**QDS**) to characterize the samples and evaluate demographic relevant variables- like gender, age, occupation; b) **WPAI**- a validated instrument that have six items, that consists of: overall work productivity loss, absenteeism, presenteeism, and activity impairment (Asami, Goren & Okumura, 2015); c) **STSS** was developed by Brian E. Bride, Margaret Robinson, Bonnie Yegidis and Charles Figley in 2015. The purpose of this instrument was asses intrusion (items 2, 3, 6, 10, 13), avoidance (items 1, 5, 7, 9, 12, 14, 17) and arousal (items 4, 8, 11, 15, 16), the three symptoms referred previously of STS. The original version have 17-items, using pencil and paper and there is a selfreport instrument. The responses was a likert-type format from 1 (never) to 5 (very often) (Bride, Robinson, Yegidis & Figley, 2004). In our version we added two items: 18 and 19, corresponding both to the original subscales, one in intrusion subscale and other in arousal subscale. Scores for the full STSS and each subscales are obtained by summing this items; d) **ARTIC**- The original version of ARTIC, include eight subscales consisting of 75 potential items. These eight subscales, derived directly from extensive mixed methods item-redevelopment process, were intended to fully represent the most central components of attitudes supportive (or unsupportive) of TIC implementation. These subscales included attitudes about (a) underlying causes of problem behavior and symptoms, (b) the impact of trauma, (c) responses to problem behavior and symptoms, (d) on-the-job behavior, (e) self-efficacy at work, (f) reactions to the work, (g) personal support of TIC, and (h) system-wide support for TIC. Items were written to characterize a TIC favorable attitude and were then paired with the opposite attitude, as

such, all items utilize a seven-point bipolar Likert scale (Baker, Brown, Wilcox, Overstreet & Arora, 2015). ARTIC Portuguese version has 45 items plus 15 supplemental original items related to grief-informed attitudes. The first 35 items are concerned with several constructs general to sensitive, informed and responsive systems dealing with traumatic stress. The last 10 items are facultative for participants with training in trauma-informed systems.

The Portuguese versions of the instruments were accurate after translation, back translation and consensus version.

## Procedure

We used an informed consent form, for ethical concerns and obtaining institutional authorization to proceed. The data was collected in different institutions, including nursing homes, schools and child institutions.

The **translation process** of the instruments was made using the original version in English: 1. Direct, independent translations to Portuguese by three Psychologists and a professional translator; 2. Back-translation to English; 3. Consensus based on previous versions.

For data analysis, we initiate with descriptive statistics of the scales and then use reliability analysis of the items internal consistency with Cronbach alpha and, finally, proceed with validity studies with Convergent Validity (using Pearson's correlation) and Confirmatory Factor analysis (CFA). We use maximum likelihood parameter estimates with standard errors that are robust to non-normality. It is recommended to use Chi-square ( $X^2$ )- that assess overall fit and the discrepancy between the sample and fitted covariance matrices; root-mean-square error of approximation (RMSEA) with confidence intervals- a parsimony-adjusted index; the standardized root mean residual (SRMR)- The square-root of the difference between the residuals of the sample covariance matrix and the hypothesized model; comparative fit index (CFI)- a revised form of NRI. Not very sensitive to sample size. Compares the fit of a target model to the



fit of an independent, or null, model (Hooper, Coughlan, & Mullen, 2008). The next table represent the cut-offs to fit a considered good model:

<b>Parameters</b>	<b>Cut-off</b>
$\chi^2$	> 0.05
RMSEA	< 0.08
SRMR	< 0.08
CFI	$\geq 0.90$

## Results

### ARTIC Studies

#### General Characteristics of the Scale

The average sum score for Artic-35 is 178 (SD=19) and of the Artic-45 is 219 (SD=24) (Table 2).

#### Reliability analysis

A Cronbach's Alpha of 0.86 was calculated for ARTIC, which is considered a very good value (Table 3).

Between the subscales the alpha values that we got are shown to be weak. A Cronbach's Alpha of .56 was calculated for underlying causes subscale; A Cronbach's Alpha of .68 was calculated for responses subscale; A Cronbach's Alpha of .63 was calculated for behavior subscale; A Cronbach's Alpha of .68 was calculated for self-efficacy subscale; and a Cronbach's Alpha of .40 was calculated for reactions subscale.

#### Validity

##### Convergent Validity

It is expected that attitudes for trauma-informed workplaces would decrease the level of secondary traumatic stress, work and general impairment. In fact, we found negative correlations. These *Pearson* correlations are statistically significant for Self-efficacy dimension, for Work Productivity Impairment Index and for Regular Activities Impairment Index. (Table 4)

## Confirmatory Factor Analysis

For the CFA that we calculated for the ARTIC, the values for  $X^2$  was  $<0.001$ ; a value of RMSEA of 0.08, in the limit of the cut-off; a value of CFI of 0.56; and a SRMR value of 0.11. (Image 1)

## STSS Studies

### General Characteristics of the Scale

The average sum score for STSS is 38.7 ( $SD=11.45$ ). (Table 2)

### Reliability analyses

A Cronbach's Alpha of 0.92 was calculated for STSS, which is considered a very good value. Between the subscales the alpha values that we got were also good. A Cronbach's Alpha of .82 was calculated for intrusion subscale; A Cronbach's Alpha of .78 was calculated for avoidance subscale and a Cronbach's Alpha of .82 was calculated for arousal subscale.(Table 3)

### Validity

#### Convergent Validity

The *Pearson* correlations to STSS are statistically significant for Self-efficacy and personal support dimensions.(Table 4)

## Confirmatory Factor Analysis

For the STSS we calculate a value of  $X^2$  of 0.00; a RMSEA value of .074; a CFI of 0.9; and a SRMR value of 0.055. It was all a good values for a good model fit. (Image 2)

## Discussion and Conclusion

This study has the main purpose to validate this two instruments for assessment of traumatic stress in work context.

Because the increasing of the numbers of the services that need psychological support should provide a trauma informed care, like we accurate in our results this could influence the reactions to secondary trauma in different domains.

ARTIC is an instrument with value for characterization of attitudes toward Trauma-informed workplaces and as a possible outcome measure for interventions.

The small sample for such a seven levels Likert scale is an actual limitation, however it paves the way for new research in this area, increasing the sample power. This aspect may provide a better factorial definition.

Comparing the results with the English original version, we found a Cronbach alpha a bit lower and the general results for ARTIC are lower in our sample. The first aspect seems to be related to items with the word “affected” which in Portuguese (afetado) is interpreted as having a more negative personal impact.

A relevant observation with possible future impact is the connection with trauma-informed attitudes and productivity impairment. This could be clarified with another research approach based on multiple regression.

At this stage, we have a good instrument to proceed with large scale implementation in Portuguese speaking samples.

In case of STSS, Pearson’s correlation demonstrate a significant correlation between secondary stress with self-efficacy and personal support.

All values that we obtained through CFA, shows good values for instrument validity, it seems that was a good measure for secondary traumatic stress.

STSS seems like an important instrument and contribution for the knowledge of the effects of secondary traumatic stress on social workers and consecutively for their clients.

Results, in both of the studies, demonstrate a favorable internal consistency, according with Cronbach alpha values obtained. The values obtained through confirmatory factor analysis for STSS demonstrate a good validity, in the other side, in ARTIC the values do not go as expected, because the reasons that we said before.

In further studies we should get a big sample and get a better tradution for the term “affected” to have better results, specially in the ARTIC study. Additional studies could be replicate this studies with different populations too.

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# **Tables and Figures**

*Table 1*

Occupations distribution of Participants

Occupation	%
Teachers	29%
Other institution workers	21%
Psychologists	17%
Health care workers(doctors, nurses,therapists)	13%
Social Educators	13%
Social Assistants	7%

*Table 2*

Descriptive Values of the General Characteristics of the Scales

	Number of Items	Mean	Std. Deviation
Artic35	35	178	19
Artic45	45	219	24
STSS	19	38.7	11.45

*Table 3*

Cronbach's alpha of internal consistency of the scales and between the subscales

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	Cronbach's alpha
ARTIC	0.86
STSS	0.92
ARTIC- Underlying Causes	0.56
ARTIC - Responses	0.68
ARTIC - Behavior	0.63
ARTIC - Self-efficacy	0.68
ARTIC - Reactions	0.40
STSS- Intrusion	0.82
STSS- Avoidance	0.78
STSS-Arousal	0.82

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Table 4

Pearson's Correlation values between every ARTIC domains vs. STSS and WPAI

	Underlying Causes	Responses	On the job behavior	Self-efficacy	Reactions	Personal Support	System Support	Artic35
STSS	-0.019	-0.034	-0.068	-.377**	-.031	-.284*	-.164	-.162
WPAI- Work Productivity Impairment	-.048	-.169*	-.154	-.208**	-.104	-.037	-.339**	-.191*
WPAI- Regular Activities Impairment	-.059	-.118	-.145	-.185*	-.184*	-.001	-.232	-.174*

\*\*correlation is significant at 0.01 level

\*correlation is significant at 0.05 level

Figure 1

Confirmatory Factor Analysis for ARTIC

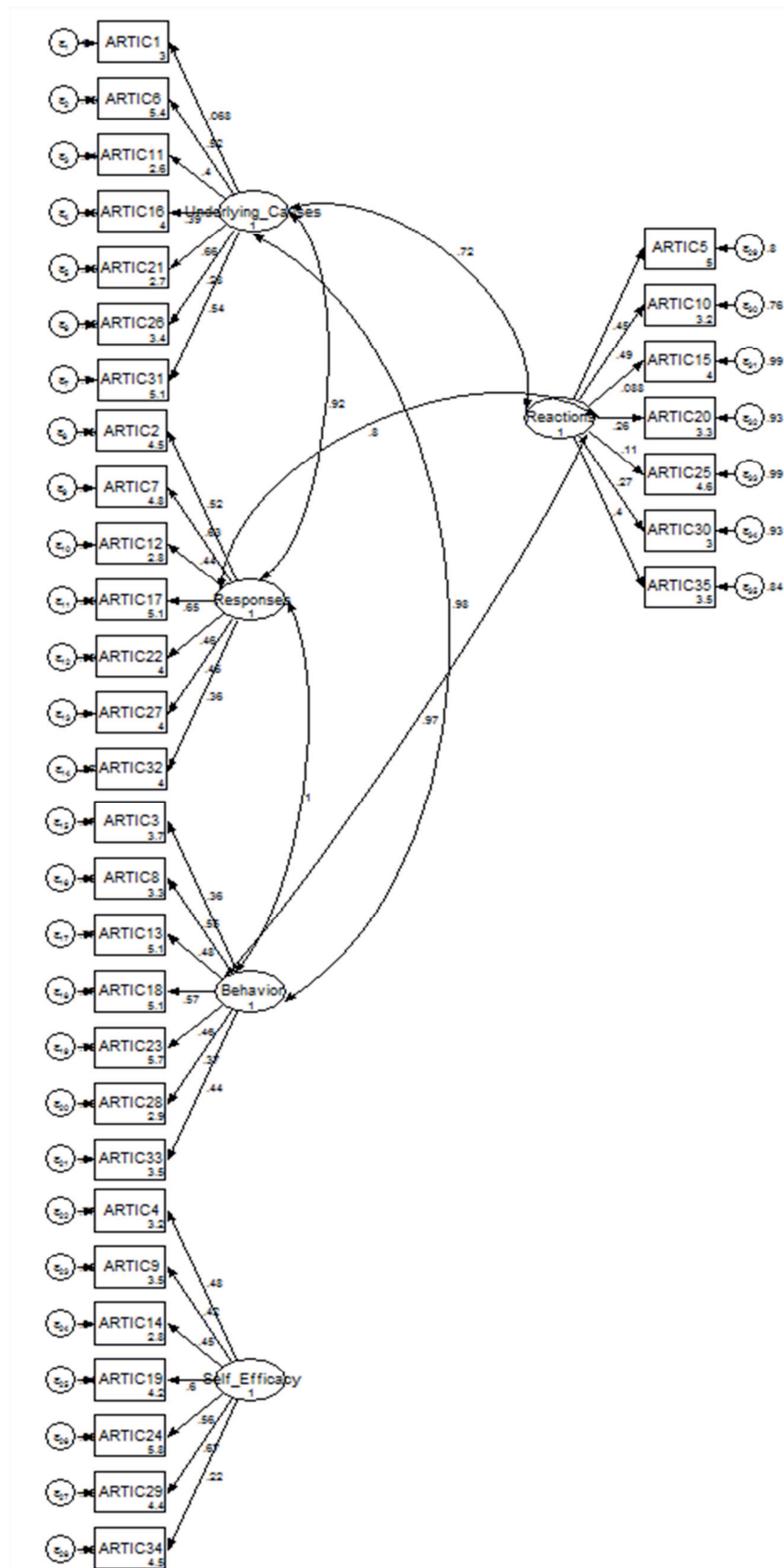
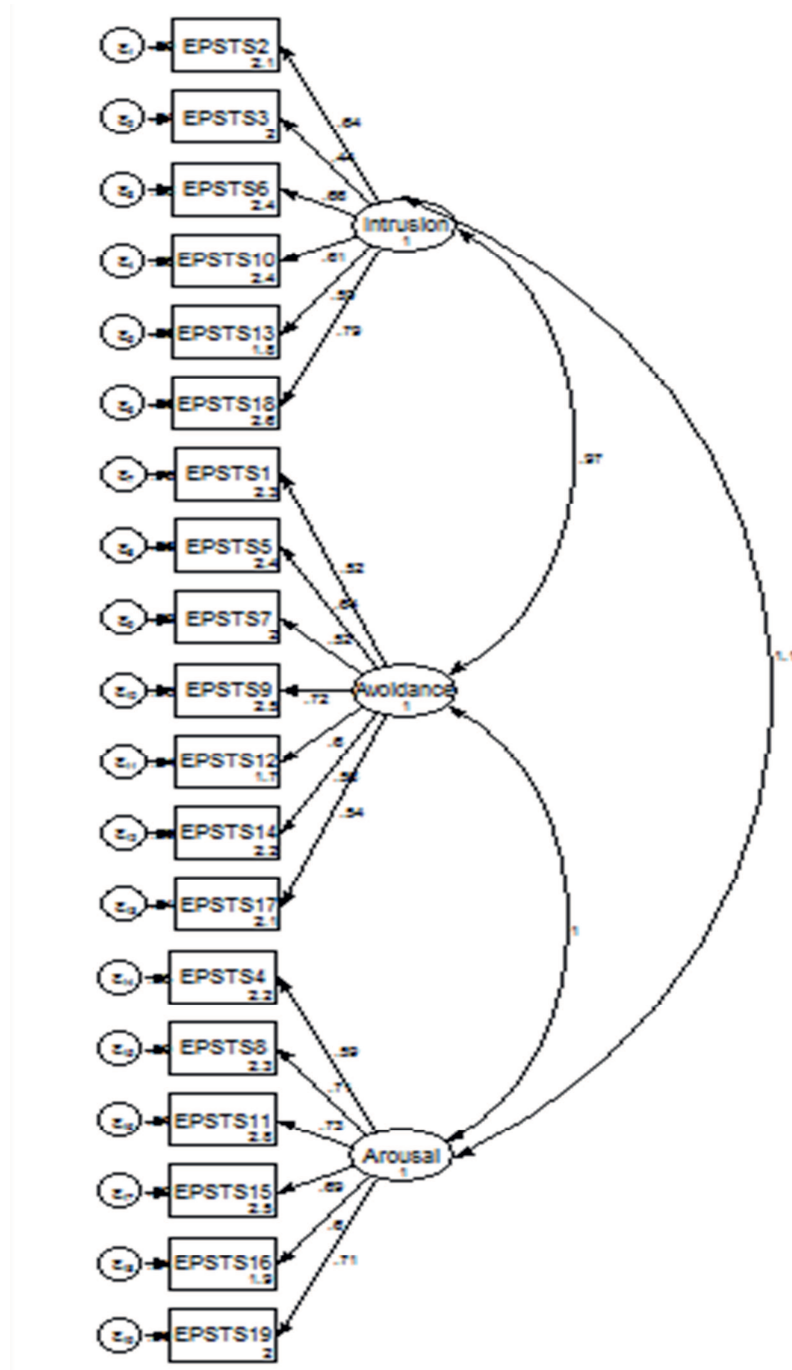


Figure 2

Confirmatory Factor Analysis for STSS



# **ANEXOS**



# **Scientific Presentations**

1. Oral Presentation, 2018, 2nd to 5th October- Eusarf 2018 Porto - XV International Conference

### **Residential Care Professionals: Evaluation of Attitudes and Needs for Trauma-Sensitive Systems**

Elisa Veiga, José Carlos Rocha, Helena Barbosa, Emanuel Santos and Mariana Negrão

#### **Abstract**

Despite the global pressure for the deinstitutionalization of children in care across Europe, and recent changes in national legislation, Portugal remains a country with very high prevalence of residential care amongst at risk children (87,4% - ISS, 2016). These children have been exposed to multiple traumatic events that can disrupt their emotional, relational and psychological development. In this context, front line residential care workers play a critical role to effectively respond to this children and youth needs, which frequently has severe impact on professionals' role and wellbeing. Trauma-sensitive or trauma-informed, practices aim to increase awareness of the effects of traumatic events in children, enabling the best care for these children, providing a safe and healthy environment. Simultaneously, building skills among residential care workers will contribute to the development of assessment and timely referral for treatment. However, there is lack of evidence of the differential effect that trauma-sensitive attitudes may have on desired outcomes, like preventing vicarious traumatic stress or reducing known health impairment in such relevant and at risk group of professionals.

This study aims 1) to evaluate relevant attitudes towards Trauma-informed care in residential care workers, 2) to evaluate correlations with secondary traumatic stress symptoms; and 3) to correlate trauma-sensitive attitudes with productivity impairment.

After informed consent, residential care workers are asked to complete a socio-demographical inquiry, ARTIC (Attitudes Related of Trauma-Informed Care) Portuguese version, Secondary Traumatic Stress Scale and WPAI (scale of productivity impairment). The sample is composed by 101 care workers, 75.2% women, 74.3% with university degree, mostly Psychology and Social Work.

The results clarify the reliability of ARTIC scale and show negative correlations with Secondary Traumatic Stress symptoms ( $r=-.41$ ) and Productivity Impairment ( $r=-.27$ ). The most relevant effect was found on the Self-efficacy at work with Traumatized populations.

Discussion focuses the elements required to address residential care worker's needs in training and supervision regarding the implementation of a trauma-sensitive system.

2. Poster presentation, ISPCAN 2018, Prague

**Psychometric studies of the Portuguese version of attitudes related to trauma-Informed care**

José Carlos Rocha, Helena Barbosa, Emanuel Santos, Célia Rocha, Mariana Negrão and Elisa Veiga

Objectives: Considering the actual knowledge of the relevant effects of adverse childhood experiences, traumatic events and grief on health and academic outcomes, several programs have been developed to improve provision of services to people with histories of potentially traumatic exposure through trauma-informed care (TIC). Some of the problems of such type of programs are related to the difficulties to evaluate their outcome and the efficacy of such endeavour, and also a way of fine tune the manuals based on evidence. Therefore, the team from Traumatic Stress Institute of Klingberg Family Centers in partnership with Courtney N. Baker, developed ARTIC. This study aims to translate, to adapt and to characterize ARTIC Portuguese version.

Method: After informed consent, 101 residential care workers and teachers from Portugal completed a socio-demographical inquiry, ARTIC Portuguese version, Secondary Traumatic Stress Scale and WPAI scale of productivity impairment. ARTIC Portuguese version has 45 items plus 15 supplemental original items related to grief-informed attitudes. The translation process was made using the original version in English: 1. Direct, independent translations to Portuguese by three Psychologists and a professional translator; 2. Back-translation to English; 3. Consensus based on previous versions.

Results: The dataset was explored to include general description of the scale and the items, reliability analysis (Cronbach alpha=.86), Exploratory factor analysis and external validity using Pearson's correlations.

Discussion: The relevance of supplemental items and the adjustment they provide are discussed envisioning a broader concept of trauma and grief-informed care. Also ARTIC Portuguese version enables future research evaluating the outcome of TIC training.

3. Poster presentation, ESTSS 2017- Odense, Denmark

**Portuguese version of attitudes related to trauma-Informed care: translation and psychometric studies**

José Carlos Rocha, Helena Barbosa, Teresa Pires, Célia Rocha

Considering the actual knowledge of the relevant effects of adverse childhood experiences, traumatic events and grief on health and academic outcomes, several programs have been developed to improve provision of services to people with histories of potentially traumatic exposure through trauma-informed care (TIC). Some of the problems of such type of programs are related to the difficulties to evaluate their outcome and the efficacy of such endeavour, and also a way of fine tune the manuals based on evidence. Therefore, the team from Traumatic Stress Institute of Klingberg Family Centers in partnership with Courtney N. Baker, developed ARTIC. This study aims to translate, to adapt and to characterize ARTIC Portuguese version.

Method: After informed consent, 50 teachers and social care institutions from Portugal completed a socio-demographical inquiry, ARTIC Portuguese version, Secondary Traumatic Stress Scale and Maslach Burnout Inventory. ARTIC Portuguese version has 45 items plus 15 supplemental original items related to grief-informed attitudes. The translation process was made using the original version in English: 1. Direct, independent translations to Portuguese by three Psychologists and a professional translator; 2. Back-translation to English; 3. Consensus based on previous versions.

Results: The dataset was explored to include general description of the scale and the items, reliability analysis (Cronbach alpha), Exploratory factor analysis and external validity using Pearson's correlations.

Discussion: The relevance of supplemental items and the adjustment they provide are discussed envisioning a broader concept of trauma and grief-informed care. Also ARTIC Portuguese version enables future research evaluating the outcome of TIC training.

4. Poster presentation, ICGB 2017, Lisbon

**Portuguese version of attitudes related to trauma-Informed care scale: translation and psychometric studies**

Helena Barbosa and José Carlos Rocha

Considering the actual knowledge of the relevant effects of adverse childhood experiences, traumatic events and grief on health and academic outcomes, several programs have been developed to improve provision of services to people with histories of potentially traumatic exposure through trauma-informed care (TIC). Some of the problems of such type of programs are related to the difficulties to evaluate their outcome and the efficacy of such endeavour, and also a way of fine tune the manuals based on evidence. Therefore, the team from Traumatic Stress Institute of Klingberg Family Centers in partnership with Courtney N. Baker, developed ARTIC. This study aims to translate, to adapt and to characterize ARTIC Portuguese version.

Method: After informed consent, 50 social care professionals from Portugal completed a socio-demographical inquiry, ARTIC Portuguese version and Secondary Traumatic Stress Scale. ARTIC Portuguese version has 45 items plus 15 supplemental original items related to grief-informed attitudes. The translation process was made using the original version in English: 1. Direct, independent translations to Portuguese by three Psychologists and a professional translator; 2. Back-translation to English; 3. Consensus based on previous versions.

Results: The dataset was explored to include general description of the scale and the items, reliability analysis (Cronbach alpha), Exploratory factor analysis and external validity using Pearson's correlations.

Discussion: The relevance of supplemental items and the adjustment they provide are discussed envisioning a broader concept of trauma and grief-informed care. Also ARTIC Portuguese version enables future research evaluating the outcome of TIC training.

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