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Abstract

In a lifetime every human experiences moments that alters their perception and comprehension of the environment that surrounds them. There are some events that can altercate a life´s course, especially if they are adverse events that can be potentially traumatic to a person. The consistency of the reports related to these experiences is based on its stability, by analyzing if the same subject recounts the same report on two (or more) time moments without significant changes. The fact that consistency may impact studies that involve reports of adverse events, makes it imperative to comprehend and clarify this phenomenon. As such the focus of this investigation is to analyze the temporal consistency of self-reports, given by a vulnerable sample of adolescents from North Portugal, on the Traumatic Events and Stress Inventory, thus comparing if the reports given in a first moment of evaluation will be consistent with a second moment. Through the analysis of the reports provided by the participants, it was possible to verify temporal consistency, ICC=0.757, 95% CI [0.659-0.830], p = 0.00, and identify which types of trauma (associated with TESI) exhibited more temporal consistency (for example, Traumatic Separation of Primary Caregiver(s) – k = .59, SE = .08, 80.6% agreement).

Keywords: adverse events, retrospective design, Traumatic Events and Stress Inventory, (in)consistency.

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Resumo

No decorrer de uma vida, o ser humano vivencia momentos que alteram a sua perceção e compreensão do ambiente que o rodeia. Existem eventos que podem modificar o curso da sua vida, especialmente se esses eventos forem adversos, visto que estes podem ser potencialmente traumáticos para essa pessoa. O estudo da consistência dos relatos dos indivíduos que experienciaram tais eventos é baseado na sua estabilidade, analisando se um indivíduo relata, mais do que uma vez, o acontecimento da mesma forma sem grandes alterações. O facto de a consistência poder impactar nas conclusões dos estudos que envolvem relatos de experiências adversas, torna imperativo compreender e clarificar este fenómeno. Assim, o objetivo deste estudo é, numa amostra de adolescentes vulneráveis do Norte de Portugal, analisar a consistência temporal dos seus autorrelatos no instrumento Traumatic Events and Stress Inventory, comparando se os relatos fornecidos em dois momentos diferentes são consistentes entre si. Através da análise dos relatos dados pelos participantes, foi possível verificar consistência temporal, ICC=0.757, 95% CI [0.659-0.830], p = 0.00, e distinguir quais os tipos de trauma (associados à TESI) com mais consistência temporal (p.e. e.g., Traumatic Separation of Primary Caregiver(s) – k = .59, SE = .08, 80.6% agreement).

Palavras-chave: experiências adversas, design retrospetivo, Traumatic Events and Stress Inventory, (in)consistência.

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Throughout a person's lifetime, there exist defining moments that profoundly alter our perceptions and understanding of the world and its experiences. Believing that one's journey aligns with everyone else's is a deceptive notion that gradually fades away over time due to life's inevitable twists and turns. In the literature, there exists a constellation of works that delve into the theme of life experiences, examining their impact, influence, and evaluation. Nevertheless, there are still unresolved questions in this domain (Paykel, 2001).

As stated by Azevedo et al. (2016, p.21), the definition of life experiences encompasses "a series of events (such as being born...), conditions (such as living or having lived...), and perceptions (such as feeling or having felt...) that transpire (or do not) over the course of a lifetime. Furthermore, life experiences extend beyond the individual, encompassing their environment, significant individuals, and the interactions among them. The focus of life experiences is personal and incorporates two distinct features: an objective component, pertaining to the occurrence and developmental stage of the experience, and a subjective aspect, relating to its emotional valence and impact." Consequently, we rely on life experiences to shape our beliefs, behaviors, and personality. These experiences allow us to distinguish between mistakes and learning opportunities, to enhance or eliminate certain aspects of our lives, and to differentiate between moments we wish to relive and those we do not.

Each experience imprints its mark upon us, underscoring its significance. However, understanding the impact of an experience is crucial, especially when it results in substantial changes in a person's life. It is also essential to acknowledge that two individuals sharing an experience does not imply that they experienced it in the same way, nor does it mean that the experience held the same significance or impact for both individuals. This distinction is one of the reasons why people lead disparate lives, as experiences vary greatly in terms of their impact, significance, and influence.

Adverse and Potentially Traumatic Experiences

In an individual's life, various experiences unfold, ranging from positive to negative, with the possibility of both coexisting over a lifetime. Notably, there tends to be a bias in research towards examining negative life experiences. Numerous studies yield differing results in this regard; for instance, some suggest a correlation between higher levels of positive experiences and improved quality of life and health (Phillips & Stuifbergen, 2008), while others do not (Evans et al., 1996). Consequently, a substantial portion of research focuses on negative experiences, often referred to as adverse events

(Pinto & Maia, 2012, 2013). These studies aim to assess the impact and consequences of these experiences, whether they occurred during an individual's childhood or adulthood.

Adverse events typically encompass potentially traumatic experiences, which may include personal incidents such as accidents, physical or sexual assaults, illnesses, separations, or the loss of loved ones. They can also extend to experiences like natural disasters, wars, genocide, and others. These events have the potential to profoundly affect an individual's physical and mental well-being, leading to psychological impairments like post-traumatic stress disorder (PTSD), cognitive deficits, and physical impairments such as limb loss, immobility, or illness. Recognizing that potentially traumatic experiences can alter the course of a person's life underscores the significance of such studies, both from a scientific and social perspective.

It's equally vital to acknowledge that many adverse experiences occur during childhood, seemingly intensifying their effects throughout an individual's life (Ball, 2009). The literature demonstrates that the most common effects of child abuse and neglect include depression, isolation, stigma, low self-esteem, distrust, substance abuse, and sexual maladjustment (Browne & Filkenhor, 1986). Beyond the described psychological and physical impairments, potentially traumatic experiences can also impact behavior. Numerous studies have established a link between childhood adverse experiences and subsequent high-risk behaviors such as smoking, alcoholism, drug abuse, school dropout, and more (Anda et al., 1999; Felitti et al., 1998). Additionally, adolescents who have experienced potentially traumatic events appear more susceptible to engaging in high-risk behaviors and experiencing trauma (Nooner et al., 2012).

The Weakness of a Retrospective Design

Given the need to evaluate the impact of experiences throughout a person's life, it becomes essential to track the evolution of that life. Typically, this type of research adopts a retrospective design, involving events that have already occurred. This necessitates an understanding of how reports can be compiled by recollecting moments, feelings, or thoughts that may have transpired years before the present. In essence, this involves "thinking about, remembering, and reporting events that happened in the past" (Grotpeter, 2008, p. 120). However, the scientific community views retrospective designs with some skepticism. Some authors argue that childhood memories may be unreliable, as they are influenced by an individual's clinical state and can be subject to forgetfulness (Fergussonet al., 2000) or even distortion due to traumatic experiences (Dube et al., 2004). Additionally, reporting sensitive adverse events may be challenging due to societal and personal sensitivities, potentially leading to

embarrassment or avoidance. Some individuals may also wish to protect their offenders, especially if they are known or connected to the victim (Widom et al., 2004; Fergusson et al., 2000). Consequently, there exists a general concern regarding the validity and consistency of reports when recalling experiences.

The Importance of Consistency

The validity of a report centers on its accuracy, i.e., whether the subject's description matches the actual truth. However, it's often difficult to verify the veracity of a report because there is no gold-standard method to validate events (Fowler, 1995; Kreuter et al., 2008; Maughan et al., 1997). For instance, Pinto and Maia (2012) compared self-reports of adolescents who had experienced abuse with official records from Child Protective Services, revealing contradictions between the two. On the other hand, consistency focuses on the stability of reports, examining whether the same individual recounts the same information at different time points (Dube et al.2004). Unlike validity, consistency can be investigated through various methods, including changes in data collection techniques or different types of tests, such as test-retest studies with the same or different data collection methods or comparative studies.

The prominence of consistency in studies involving retrospective reports underscores the necessity of understanding and elucidating this phenomenon. Furthermore, given the increasing research on life experiences and their influence, consistency remains a critical topic within the scientific community, evolving with new information and analytical techniques. Recognizing the importance of consistency in reports, it becomes crucial to understand the reasons behind the variations in reports over time, as these insights can inform psychological evaluations, interventions, and offer valuable information about the meanings and perceptions individuals attach to the inconsistencies in their reports.

Although not all studies yield identical results concerning the validity and consistency of reports, research has attempted to uncover the reasons behind discrepancies in reports made over extended periods (Dube et al., 2004; Fergusson et al., 2000; Hardt & Rutter, 2004; Monteiro & Maia, 2010; Widom et al., 2004; Yancura & Aldwin, 2009). These investigations have identified factors such as social demographic characteristics, cultural, ethnic, or racial beliefs, the nature of abuse (including its severity and duration), substance abuse, memory issues, denial of the past, shame, fear of judgment, social desirability, resilience, physical and mental health, the individual's emotional state at the time of the report, motivation, empathy with the researcher, and the precision of the questions posed.

The Present Study

In pursuit of augmenting existing knowledge and providing further clarity on the topic of (in)consistency, this study aims to contribute additional insights by examining an adolescent sample from North Portugal who completed the Traumatic Events and Stress Inventory (TESI). The TESI assesses potentially traumatic experiences that can occur over a lifetime, such as car accidents, natural disasters, and emotional, physical, or sexual abuse, among others. This study analyzes the consistency of reports provided by individuals who completed the TESI at two distinct moments, with at least six months separating the two assessments. The primary objective is to assess whether the time elapsed between reports influences their consistency. Accordingly, we hypothesize that the reports will demonstrate consistency across the two separate assessments.

Method

Participants

This study encompasses participants drawn from three distinct settings in Northern Portugal: Child Protective Services (CPS), Vocational Schools (VS), and Foster Care Institutions (FCI). The selection of these institutions stems from the fact that they cater to adolescents at a higher risk due to various factors. CPS is informed by the regular educational system if adolescents are engaged in high-risk behaviors, such as chronic absenteeism, truancy, or dropout (Pinto et al., 2017). Furthermore, VS are renowned in Portugal for accommodating adolescents with low academic achievement, often linked to risk behaviors (as previously described) or struggles with the academic curriculum. The study sample comprises a total of 98 participants aged between 12 and 17 years old (M = 15.35, SD = 1.37), with a distribution of 65.3% (n = 64) female and 34.7% (n = 34) male. Regarding their education, 93.9% (n = 92) of participants reported currently attending school, with the majority attended (n = 21; 21.4%) the 10th grade. A small proportion (3.1%, n = 3) identified themselves as student workers. In terms of living arrangements, most participants reported residing either with both parents (38.8%, n = 38) or in institutionalized settings (39.8%, n = 39). However, there are also those who live with at least one of their parents (12.2%, n = 12). Additionally, a subset of the participants (n = 36; 36.7%) disclosed a history of involvement with Child Protective Services (CPS) at some point in their lives, with a portion of them (n = 28; 28.6%) currently having an active CPS case. Table 1 provides an overview of the participants' characteristics.

Table 1

Participants' Socio-Demographics

Variables		n	%	M (SD); [Min-Max].
Age (years)				15.35 (1.37); [12-17]
Sex				
	Female	64	65.3	
	Male	34	34.7	
Education				
	5th year	4	4.1	
	6th year	9	9.2	
	7th year	7	7.1	
	8th year	11	11.2	
	9th year	13	13.3	
	10th year	21	21.4	
	11th year	15	15.3	
	12th year	4	4.1	
Household				
	Living with both parents	38	38.8	
	Living with their mother	11	11.2	
	Living with their father	1	1	
	Living in an institution	39	39.8	
	Lives with a family member	1	1	
	Other	8	8.2	
Occupation				
	Student	92	93.9	
	Student Workers	3	3.1	
Household income				
	<250€	1	1	
	251 to 500€	11	11.2	
	501 to 750€	13	13.3	
	751 to 1000€	9	9.2	
	1001 to 1500€	15	15.3	
	1501 to 2000€	5	5.1	
	>2000€	2	2	

Identified to CPS (at any moment)			
	Yes	36	36.7
	No	57	58.2
Signalized by CPS (at this moment)			
	Yes	28	28.6
	No	52	53.1

Procedure

This research constitutes a segment of an extensive, ongoing longitudinal investigation that focuses on studying the ramifications of complex trauma experienced by teenagers in Northern Portugal. The study received ethical approval from the University of Minho's ethics committee, and all research procedures adhered to the ethical standards outlined by the American Psychological Association (APA). Subsequently, contact was established with seven Child Protective Services (CPS), 58 Vocational Schools (VS), and 54 Foster Care Institutions (FCI) in Northern Portugal. From these institutions all the invited CPS agreed to participate in the study, as well as 11 VS and 12 FCI consented to be involved.

Following this initial contact and institutional consent, the potential participants were duly informed about the study. Legal consent forms were obtained from parents or legal guardians to permit the adolescents' participation. Additionally, adolescents themselves provided their assent by signing relevant forms. Subsequent to the collection of these consent and assent forms, the questionnaire was administered. Participants completed the questionnaire in a private setting to ensure confidentiality. They were accompanied by a trained psychologist who could offer assistance in case of questions or if participants experienced intense emotions or a need to discuss certain issues. The research team also provided the adolescents with the project's email address, affording them the opportunity to access their results or reach out to the researchers if necessary. The data collection process spanned from November 2018 to December 2020, with the initial phase commencing following institutional authorization. The first data collection phase occurred from November 2018 to November 2019, while the second phase spanned from June 2019 to December 2020. Given the extended durations of both data collection phases, it's important to highlight that the time interval between the initial and subsequent assessments varied between 7 and 13 months.

Measures

Socio-Demographic Questionnaire. The questionnaire allowed us to know and classify the participants by age, sex, education, occupation, living arrangements, household income, and if they have ever been identified to Child Protective Services.

Traumatic Events and Stress Inventory – TESI (TESI-C/SR; Portuguese version: Correia-Santos et al., 2021). This instrument enables the assessment of the presence or absence of 24 potentially traumatic events in the lives of adolescents aged 11 to 18 years. The measure comprises questions that explore both interpersonal and non-interpersonal experiences, spanning a wide array of themes including physical and emotional abuse, sexual abuse (whether experienced, witnessed, or learned about), serious accidents, natural disasters, domestic violence, community violence, and death. Responses were recorded as either 'yes,' 'no,' or 'pass.' Subsequently, if the response was 'yes,' a series of additional items would appear. These additional items sought information regarding the participant's age at the time of the first/last experience of the event, the age at which the most severe event occurred, and details about those involved, whether as victims or perpetrators. The original instrument has shown test-retest reliability (Daviss et al., 2000; Ford et al., 2000). The reliability of the present measure is the purpose of this study. For this study, we will analyze the main questions from the TESI questionnaire, omitting specific queries related to event details, the participant's age of onset or last report, and the parties involved. Some examples items are: "Have you ever been in a really bad accident where someone could have been (or actually was) badly injured or killed?" "Have you ever been in a natural disaster (like a tornado, hurricane, flood, fire, earthquake) where someone could have been (or actually was) badly hurt or killed, or where your family had to leave their home?"; "Has someone close to you ever died, not counting someone who was old and died naturally?"; "Have you ever been so sick that you or the doctor thought you might die?" "Have you ever been separated from someone who you depend on for love or security for more than a few days? "Has someone close to you ever tried to kill or hurt himself/herself really badly on purpose?"; "Has someone ever physically (bodily) attacked you, like hitting, pushing, choking, shaking, biting, or burning you?". The 24 main questions were grouped into categories, resulting in 14 trauma types. These types of trauma are Severe Accidents; Illness; Non-Interpersonal Violence; Traumatic Loss of Primary Caregiver(s); Traumatic Loss of Significant Others; Traumatic Separation of Primary Caregiver(s); Traumatic Separation of Significant Others; Primary Caregiver(s) Impairment due to Behavioral Problems; Peer-Related Adversity; Physical Abuse or Assault; Sexual Abuse or Assault; Community Violence; Family Violence and Severe Neglect.

Data Analysis

Data analysis was conducted using IBM Statistical Package for Social Sciences (IBM SPSS; version 28 for Windows). Initially, a descriptive analysis was performed on all variables relevant to the study. Subsequently, the Intraclass Correlation Coefficient (ICC) was computed to assess the agreement between responses at T1 and T2, employing a continuous outcome measure. ICC values indicate agreement levels, ranging from poor to fair (≤ .40), moderate (.41–.60), good (.61–.80), to excellent (.81–1.00). Single Measures ICC assesses the reliability of ratings provided by a typical single rater for the subject or item, it helps us understand how consistent one specific rater is in their assessments. On the other hand, Average Measures ICC examines the reliability of ratings when multiple raters are involved, and their ratings are averaged together, this provides an indication of the overall consistency across different raters' assessments.

Furthermore, Cohen's Kappa was computed to evaluate the agreement between T1 and T2 responses for the categorical data, considering the types of potential traumatic exposure assessed by the TESI. Following the guidelines established by Landis and Koch (1977), the values obtained from this test are categorized as poor if <.00, slight if .00-.20, fair if .21-.40, moderate if .41-.60, substantial if .61-.80 and almost perfect if .81-1.00.

Results

Regarding the temporal reliability for the total number of traumatic events, as can be seen in Table 2, there is a moderate agreement in the participants' reports (ICC=0.757, 95% CI [0.659-0.830], p = 0.00).

Table 2. *Intraclass Correlation Coefficients for Total Number of Trauma Types*

	ICC	95% CI		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	0.757	0.659	0.830	7.289	97	97	<0.001
Average Measures	0.862	0.794	0.907	7.289	97	97	<0.001

Note. ICC = Intraclass Correlation Coefficient. CI = Confidence Intervals

Considering the item's agreement from T1 to T2, the consistency ranged from slight (e.g., "Has anyone ever abducted you or someone close to you? - k = .16, *SE* = 0.17; 98.1% agreement) to substantial

(e.g., "Have you ever been separated from a loved one for more than a few days?" - k = .77, SE = .07, 88.8% agreement). Reliability and agreement information for all the items can be seen in Table 3.

Table 3. *Temporal Reliability for Individual Items*

Items	Temporal reliability parameters			
	N	%Agre	K	SE
1. Have you ever been in a really bad accident?	94	79.6	.397	.110
2. Have you ever seen a really bad accident (that didn't happen to you)?	96	63.3	.254	.098
3. Have you ever been in a natural disaster?	95	80.6	.232	.126
4. Has someone close to you been so injured or sick that he/she almost died or had to go to the hospital?	94	65.3	.282	.098
5. Has someone close to you ever died (not counting natural causes)?	94	70.4	.405	.090
6.Have you ever been so sick that you or doctor thought you could die?	95	77.6	.375	.109
7. Have you ever been separated from a loved more than a few days?	95	88.8	.770	.065
8. Has someone close to you tried to kill or hurt himself/herself on purpose?	96	75.5	.373	.104
9. Has someone ever physically attacked you?	94	84.7	.673	.075
10. Has someone ever said/acted like they were going to hurt you or kill you?	95	80.6	.540	.093
11. Has someone ever mugged you or someone close to you?	94	79.6	.372	.114
12. Has anyone ever kidnapped you or someone close to you?	95	91.8	.159	.174
13. Have you ever been attacked by a dog or other animal?	96	82.7	.609	.085
14. Have you ever witnessed violent physical altercations within your family?	94	79.6	.561	.087
15. Have you ever saw or heard people in your family act like they were going to kill or hurt each other?	93	86.7	.584	.103
16. Have you ever had a family member who was arrested or put in jail/prison?	96	88.7	.700	.084

	N	%Agre	k	SE
17. Have you ever seen or heard people outside your family fighting/shooting or attacking each other in your school or neighborhood?	96	69.4	.389	.092
18. Have you ever been in a war or terrorist attack?	94	100	[a]	[a]
19. Have you ever seen real wars or terrorist attacks on the TV?	91	69.4	.325	.099
20. Have you ever had a time in your life when you did not have the right care?	93	86.7	.474	.125
21. Has someone ever made you see or do something sexual?	94	93.9	.467	.185
22. Have you ever seen or heard someone else being forced to sex acts?	96	87.8	.193	.146
23. Have you ever been told repeatedly that you were no good?	94	81.6	.455	.109
24. Have you ever watched people using drugs, like smoking drugs or using needles?	96	54.1	.551	.086

Note. % Agre = percentage of agreement. κ = Cohen's kappa. SE = standard error.

[a] No statistics were computed because the variable was a constant or the crosstabs were empty

Table 4 described that various types of trauma exhibit varying levels of agreement. The reliability of the traumatic types also ranges from slight (e.g., Illness – k = .26, SE = .10, 67.3% agreement) to substantial (e.g., Traumatic Separation of Primary Caregiver(s) – k = .59, SE = .08, 80.6% agreement).

Table 4. *Temporal Reliability for Types of Trauma*

Items	Temporal			
	N	%Agre	k	SE
Severe Accidents	98	68.4	.359	.095
Illnesses	98	67.3	.258	.102
Non-Interpersonal Violence	98	84.7	.314	.135
Traumatic Loss of Primary Caregiver(s)	98	94.9	.709	.122
Traumatic Loss of Significant Oher(s)	98	76.5	.446	.097
Traumatic Separation of Primary Caregiver(s)	98	80.6	.594	.083

Traumatic Separation of Significant Oher(s)	98	84.7	.612	.090
Primary Caregiver(s) Impairment due to Behavioral Problems	98	92.9	.629	.127
Peer Related Adversity	98	62.2	.246	.098
Physical Abuse or Assault	98	81.6	.632	.078
Sexual Abuse or Assault	98	84.7	.314	.135
Community Violence	98	71.4	.392	.093
Family Violence	98	79.6	.578	.084
Severe Neglect	98	86.7	.474	.125

Note. % Agre = percentage of agreement. κ = Cohen's kappa. SE = standard error.

Discussion

The exposure to potentially traumatic events and its impact on an individual's life have been extensively studied, especially when these events occur during childhood and adolescence, often resulting in significant and long-lasting effects (Monnat & Chandler, 2015). This study represents a pioneering effort, being part of an ongoing longitudinal investigation that focuses on examining the repercussions of complex trauma using the TESI questionnaire. Given the relatively recent introduction of the TESI questionnaire, it becomes even more critical to explore questions related to its use and applicability in various contexts. To address these questions, this study is based on a social-demographic characterization and the administration of the TESI questionnaire to a vulnerable sample of adolescents in North Portugal. The primary objective is to investigate whether the time elapsed between reports has an impact on consistency of their responses.

In the examination of results, it can be seen that the temporal reliability for the total number of traumatic events reported by participants, the Intraclass Correlation Coefficient (ICC) proved to be a valuable metric. Our analysis revealed a moderate agreement in the participants' reports. This finding suggests that, overall, participants' responses to questions about traumatic events exhibited a moderate level of consistency over time (De Vet et al., 2006).

However, delving deeper into the assessment of individual traumatic events over time, a nuanced picture emerges. The reliability of these events ranged from slight to substantial, indicating variations in

the degree of agreement. Observing the data, it becomes evident that the majority of the items exhibited either moderate or fair agreement levels, with fewer items showing slight or substantial agreement. Out of the 24 items assessed, 8 displayed moderate agreement values, 9 exhibited fair agreement values, 2 demonstrated slight agreement values, and the remaining 4 items fell into the substantial agreement values. Notably, one item ("Have you ever been in a war or terrorist attack?") did not yield any values due to non-responses from all participants.

Upon analyzing each questionnaire item, it becomes apparent that some questions are more likely to apply to a person's life experiences. For instance, questions like "Have you ever been in a severe accident?" and "Has someone close to you been so seriously injured or ill that they nearly died or required hospitalization?" are more commonly affirmed when compared to other items such as "Have you ever experienced a natural disaster?" or "Have you ever witnessed or heard individuals outside your family engage in fights, shootings, or attacks within your school or neighborhood?". Therefore, it's essential to consider the characteristics of the participant sample, particularly given that many adolescents from North Portugal, for example, may not have experienced natural disasters or a high level of community violence.

Some items in the questionnaire appear to have the potential to evoke more traumatic experiences, especially those where the events involve either the participant themselves or someone else. This distinction is, for example, noticeable in the items 'Have you ever been in a severe accident?' and 'Have you ever witnessed a severe accident (not involving yourself)?', being that the sole difference between these questions lies in the individual to whom the accident occurs, and as a result, the values of kappa increase when the question pertains to the person directly involved. Specifically, for the question directed at the person themselves, the kappa value is k=0.397 (SE=0.110, 79.6% agreement), whereas for the question regarding witnessing the accident, the kappa value is k=0.254 (SE=0.098, 63.3% agreement). Nevertheless, the fact that some of these items are more directly involved does not imply that experiences that happened to someone close or not to the participant do not exhibit good kappa values. For instance, 'Have you ever had a family member who was arrested or put in jail/prison?' presents substantial agreement levels (k=0.700, SE = 0.084, 88.7% agreement) and it is not an event that occurred directly with the participant but rather involved a person from his/her family.

To further enhance the completeness of these results, the results illustrate that most types of trauma exhibit fair levels of kappa, aligning with the individual item findings. Out of the 14 types of trauma assessed using TESI, 6 items showed a fair level of agreement, 4 items exhibited moderate agreement,

and 4 displayed substantial agreement. In contrast to the outcomes of individual items, no types of trauma demonstrated slight results, indicating that despite some individual items showing low kappa values, the types of trauma maintain good consistency across reports.

To gain a deeper understanding of why certain types of trauma show higher levels of agreement, it is essential to consider that some types of trauma have a more profound impact on a person's life than others. Additionally, various factors associated with the event can influence the degree of exposure to trauma. For instance, severe accidents can be potentially traumatic experiences, but their impact can vary significantly depending on several factors, such as the accident's severity, whether anyone was injured or lost their life, and whether the accident occurred recently or in the more distant past (Schnyder et. al (2001). These factors can also exert a similar influence on other types of trauma, such as illness. The impact of illness depends on various variables, including the severity of the illness, whether the affected individual is the person themselves or someone close to them, whether the disease is terminal, the duration and frequency of illness episodes, and whether hospitalization was necessary, along with the length of hospital stays (Tedstone & Tarrier,2003). Considering that non-intentional violence can encompass accidents, natural disasters, animal attacks, and other incidents, there are also factors that can influence the exposure to trauma. For instance, in the case of a natural disaster, the impact depends on the specific type of disaster, its duration, the extent of damage, the number of casualties, and whether the individual or someone close to them suffered severe injuries or even loss of life (Arnberg et al., 2013). Similar factors come into play in the context of animal attacks, including the type of animal involved, the duration and intensity of the attack, the presence of injuries, and related aspects (Ji et al., 2010). Similar factors can be anticipated in the context of community violence trauma. Depending on the nature of the violence, its frequency, duration, the presence of firearms, and whether the individual or someone close to them is injured or killed by the violence (Aisenberg et al., 2008), various factors can influence the type and extent of trauma experienced.

Then, there's interpersonal violence, which, for example, can be attributed to peer-related adversity. The impact of such violence may depend on factors like who the perpetrators are, the number of individuals exerting peer pressure, the frequency of these incidents, when they first began, and the nature of the pressure applied (Murphy et al., 2014). The experience of physical or sexual abuse and assault can also depend on various factors. These factors include whether the abuse occurred personally or to someone close or known to the individual, the identity of the perpetrator, the duration and frequency of the assault, whether it was spontaneous or ongoing, and whether it resulted in serious injuries, among other considerations (Dunmore et al., 2001). It is essential to note that the closer the relationship

between the victim and the perpetrator, the higher the likelihood of trauma exposure. The traumatic loss or separation from primary caregivers or significant others already highlights one of the factors that depend on the relationship between the person experiencing the trauma and the one who is lost or separated. It is important to note that the closer the relationship, the greater the probability of becoming a traumatic experience. Additionally, it is worth noting that loss generally results in more significant exposure than separation (Atwoli et al., 2017). For these types of trauma, other factors come into play, such as when the loss or separation occurred, whether it was planned or spontaneous, in the case of separation, whether it was initiated by others, and in case of loss, the type of death of the person lost, among other considerations (Atwoli et.al, 2017, Hibberd et al., 2010). Moreover, there are various factors that can significantly influence trauma exposure, especially when examining family violence. These factors encompass the nature of the violence, the identity of the perpetrator(s), whether the violence was spontaneous or continuous, the duration over which it occurred, the living situation (including whether the person resides with the perpetrator), and many other relevant considerations (Becker & Freyd, 2005). Finally, in the case of Primary Caregiver(s) Impairment due to Behavioral Problems, several factors come into play. These factors include whether the perpetrator is affected by substance or alcohol abuse or has a mental or physical disability. Such impairments can lead to neglect, resulting in another type of trauma known as Severe Neglect. The extent of trauma related to Severe Neglect depends on various factors, such as the type and severity of neglect, the presence of significant physical or psychological effects, the duration over which the neglect occurred, the identity of the perpetrator, and the relationship between the perpetrator and the individual experiencing neglect, among other factors (DeBellis et al., 2009).

Taking into account all the factors that can influence trauma exposure, it can be concluded that the participants in this study exhibit good consistency in their reports regarding trauma related to Traumatic Separation of Significant Others (k=0.612, SE=0.090, 84.7% agreement), Impairment of Primary Caregiver(s) due to Behavioral Problems (*k*=0.629, *SE*=0.127, 92.9% agreement), Physical Abuse or Assault (k=0.632, SE=0.078, 81.6% agreement), and Traumatic Loss of Primary Caregiver(s) (k=0.709, SE=0.122, 94.9% agreement). According to the existing literature, these types of trauma are among those most likely to lead to the development of trauma-related symptoms or disorders, such as PTSD (Atwoli et.al, 2017; Dunmore et al., 2001; Hibberd et al., 2010). However, there are other types of trauma that also carry a risk of developing such symptoms and disorders, with Sexual Abuse or Assault being one of the highest-risk categories (Dunmore et al.2001). It is noteworthy from the results that there is a lower kappa value associated with this type of trauma. This can be attributed to the lack of positive responses from the participants, as many either answered 'no' or did not respond at all to items related

to sexual acts. Additionally, some types of trauma may present low values of kappa due to the unlikelihood of their occurrence in Portugal, such as natural disasters that translate into Non-Interpersonal Violence (k=0.314, SE=0.135, 84.7% agreement).

In summary, all the results obtained in this study have shown highly favorable outcomes that support the research hypothesis. Therefore, it can be reasonably assumed that there is demonstrated consistency across two separate assessment points in the reports provided by a vulnerable sample of adolescents using the TESI questionnaire. This achievement allows us to fulfill the primary objective of the study and provides an answer to the central research question: 'Is there temporal consistency in the TESI questionnaire in a sample of vulnerable adolescents?'. Furthermore, this success encourages the continuation of the ongoing longitudinal investigation, which aims to explore the consequences of complex trauma using the TESI questionnaire. This research contributes valuable insights into the applicability of the TESI instrument.

However, the study has some limitations that should be carefully considered. First, it relies on self-reports to measure each construct, which could be supplemented with additional information obtained from parents or legal guardians or through the use of clinical interviews. It's also crucial to acknowledge the potential for reporting bias, particularly given that the study's sample consists of vulnerable adolescents (Pinto & Maia, 2014). Furthermore, there is the possibility that some participants may respond to the questionnaire arbitrarily, as the level of traumatic exposure can strain their attention span (Dixit et al., 2019). Lastly, the study faced challenges related to the timing of data collection, as it did not occur as originally planned by the researchers. This discrepancy in the timing of data collection may have influenced the accuracy of the reported consistency.

In future studies, it would be essential to apply this research to a more diverse and heterogeneous sample, including participants from various geographical locations and individuals with different cultural backgrounds. Additionally, it would be intriguing to shift the focus beyond the general questions in the TESI and delve into more detailed inquiries regarding event specifics, the participant's age at the time of onset or last report, and the parties involved. Conducting a more comprehensive study of this nature could shed light on factors that can influence trauma reporting. By examining aspects such as the identity of those perpetrating the event, the participant's age, or the event-related details, we can gain a deeper understanding of the complexities of trauma exposure.

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Universidade do Minho

Conselho de Ética

Conselho de Ética - Ciências Sociais e Humanas

<u>Identificação do documento</u>: CE.CSH 080/2018

<u>Título do projeto</u>: *Funcionamento Global de Jovens: Um estudo longitudinal com adolescentes sinalizados às Comissões de Proteção de Crianças e Jovens (CPCJ)*

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PARECER

O Conselho de Ética analisou o processo relativo ao projeto de investigação acima identificado, intitulado *Funcionamento Global de Jovens: Um estudo longitudinal com adolescentes sinalizados às CPCJ.*

Os documentos apresentados revelam que o projeto obedece aos requisitos exigidos para as boas práticas na investigação com humanos, em conformidade com as normas nacionais e internacionais que regulam a investigação em Ciências Sociais e Humanas.

Face ao exposto, o Conselho de Ética nada tem a opor à realização do projeto, emitindo o seu parecer favorável.

Braga, 7 de janeiro de 2019.

A Presidente do CEUMinho

Anexo: Formulário de identificação e caracterização do projeto