MENTAL HEALTH, STRESSFUL LIFE EVENTS, AND ABUSE IN NICARAGUAN WOMEN

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Abstract

The objectives of this article were to analyze the occurrence of stressful life events (SLE), to establish profiles based on the said events by means of classification through cluster analysis, to establish the relationship between the groups obtained and the presence of distress, and to analyze which SLE seem to have had a greater impact on the mental health of 136 women victims of gender violence living in a context of extreme poverty in Nicaragua. The results showed the existence of high levels of depression and anxiety, especially within the group that suffered abuse in their childhood, and that economic problems, the death of people in the family environment and suicide attempts seem to be the SLE that have the greatest influence on the levels reached for the identification of such depressive and anxiety symptoms, above the abuse suffered throughout their lives. In conclusion, learning about SLE in contexts where their occurrence is frequent is essential for intervention with women for whom adversity has become chronic. KEY WORDS: stressful life events, violence based-gender, abuse, illness mental.

Resumen

El presente artículo tuvo como objetivos analizar la ocurrencia de sucesos vitales estresantes (SVE), establecer perfiles en función de dichos sucesos mediante el análisis de grupos (*clusters*), conocer la relación entre los grupos obtenidos y la presencia de distrés, y analizar qué SVE parecen tener un mayor impacto en la salud mental. Participaron 136 mujeres víctimas de violencia de género que viven en contexto de extrema pobreza en Nicaragua. Los resultados mostraron la existencia de altos niveles de depresión y ansiedad, especialmente dentro del grupo que sufrió maltrato en la infancia, y que los problemas económicos, el fallecimiento de personas del entorno familiar y los intentos de suicidio parecen ser los SVE que más influencia tienen en los síntomas depresivos y ansiógenos, por encima del maltrato padecido a lo largo de sus vidas. En conclusión, conocer los SVE en contextos donde su ocurrencia es frecuente es fundamental de cara a la intervención con mujeres sobre quienes la adversidad se ha cronificado.

PALABRAS CLAVE: sucesos vitales estresantes, violencia de género, maltrato, salud mental.

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Introduction

The relationship between stressful life events (SLEs) - specific incidents that increase people's vulnerability to the occurrence of potential threats (Miloyan et al., 2018) - and risk of mental health conditions has been widely documented. SLEs have also been conceptualized as experiences that result in a significant change in the lives of the people who go through them, having a strong impact on their subsequent life trajectory and well-being (Bateson et al., 2011). Serious circumstances, such as the death of a family member or a sexual assault, are examples of SLEs that cause psychological and physiological stress (Grant et al., 2003; Hughes et al., 2017; Rivas-Rivero y Bonilla-Algovia, 2022a). The effects of SLEs are cumulative, with each additional event increasing psychological distress (Cohen et al., 2019). Therefore, the study of SLEs is essential given that well-being is one of the World Health Organization's priorities, being included in the Europe 2020 (Jiménez-Lira et al., 2020) strategy.

Not all SLEs have the same effect on people's health; ones that threaten the identity of the people who experience them seem to be the most serious (Cohen et al., 2016). SLEs can be classified into three groups: (a) interpersonal, (b) those resulting in a loss of social status, and (c) those related to a work context. The first group is considered the most serious or threatening because they involve other people, such as conflicts with significant others in the environment or the loss of a loved one, thus having a more adverse impact and significantly threatening wellbeing and compromising health (Rook, 2014). Likewise, SLEs that continue over time are more harmful than those that are short lived because exposure to the stress is prolonged, thus exerting greater physical wear on the person (Cohen et al., 2007). SLEs related to abuse, sexual assault, or violence, even if they do not last over time, can have a great impact because of the affective response and stress they trigger (Baum et al., 1993). Previous studies have established that one or two SLEs can be compensated (minimised) if there are protective factors in place, such as perceived social support (Bonilla-Algovia et al., 2020; Rivas et al., 2018), although when multiple SLEs converge during a short period of time mental health problems can ensue (Steinhoff et al., 2020).

Suffering as a result of an SLE can affect the development of pathologies that involve the affective sphere, hormones, and the autonomic nervous system, so many diseases could be due to the modulation of or exposure to stressors (Cohen et al., 2019). Some of the most frequently investigated problems related to SLE are depression and anxiety (Lowe et al., 2017). Depression - the set of symptoms associated with feelings of sadness and a state of despondency that affect behavior and can lead to suicide attempts or other maladaptive behaviors - is one of the most prevalent psychological disorders (Usuga-Jerez et al., 2021; World Health Organization, 2014). Depression affects approximately 264 million people of different ages (Abdel-Bakky et al., 2021). According to the Diagnostic and Statistical Manual of Mental Disorders (5th ed.), the depressive disorders include major

depressive disorder, persistent depressive disorder or dysthymia, premenstrual dysphoric disorder, substance- or medication-induced depressive disorder, depressive disorder due to another medical condition, other specified depressive disorders, and nonspecific depressive disorders (APA, 2013; González-Herrero et al., 2019). Some theory-based psychological models have shown that SLEs can predict premorbid symptoms of depression (González-Herrero et al., 2019; Hammen, 2016). It is estimated that people who develop depression are between 2.5 and 9.4 times more likely to have suffered one or more SLEs before the first appearance of depression symptoms; in addition, among people who struggle with depression, SLEs cause more severe symptoms, a longer duration of illness, and a greater chance of relapse (Monroe et al., 2009).

A relationship between SLEs and anxiety has also been reported, and these may play a causal role that increases the vulnerability of people who struggle with anxiety. The prevalence of anxiety disorders is estimated to be 7.3% (Baxter et al., 2013). Certain SLEs can lead to other potential negative situations (Miloyan et al., 2018). According to Lowe et al. (2017), SLE can also lead to economic and social difficulties, which increases the possibility that additional negative events will ensue. In addition, depression and anxiety often coexist, with both disorders highly prevalent (Braam et al., 2014). People of all ages can experience comorbid depression and anxiety that affect their psychosocial environment and quality of life (Braam et al., 2014). Comorbid depression and anxiety also increase the risk of suicide (Liu et al., 2021). From a public health–related approach, reducing SLEs that originate in specific contexts could be more profitable than treating the psychological responses to such events (Cohen et al., 2019). Likewise, underlying SLEs should be considered in clinical interventions to minimize their impact on mental health (Miloyan et al., 2018).

SLEs also have been identified as a long-term predictor of other negative outcomes, including intimate partner violence, mainly when the SLE is linked to exposure to direct and/or indirect violence (Rivas-Rivero & Bonilla-Algovia, 2020). Exposure to SLEs at an early age can lead to later SLEs, which makes violence more likely (Hammett et al., 2020). As has previous studies have shown, the exposure of minors to abuse or violence between parents increases the probability that they will eventually be in an aggressive or hostile relationship; a moderate effect size (r= .30) was estimated between family adversity during childhood and gender-based violence in adulthood (Stith et al., 2000). In this sense, the history of victimization could be associated with the intergenerational transmission of violence such that minors who witness situations of abuse, or suffer from abuse themselves, could develop dysfunctional information-processing mechanisms and learn to normalize the abuse, mainly when such abuse is exercised directly (Greene et al. 2018). Research has shown that women worldwide are at a high risk of being victims of violence perpetrated by people close to them, such as their partner (Villagrán et al., 2022). Recent theoretical approaches posit that a couple constitutes a dynamic system in which each person's behavior is the result of specific developmental characteristics (Hammett et al., 2020). For this reason, gender-based violence in a couple relationship and SLEs may be related and feed off one other, affecting their occurrence and chronicity (Hughes et al., 2017). In this way, said violence could be the result of previous adversity (Hammett et al., 2020).

Likewise, economic difficulties constitute an important risk factor for genderbased couple violence because the scarcity of financial resources increases vulnerability and tension within the couple (Schwab-Reese et al., 2016). These variables could be more relevant in developing countries that experience higher levels of tolerance toward violence against women (Bonilla-Algovia, 2021; Rivas et al., 2020), where the vulnerability of victims increases because of the scarcity of support mechanisms (Haarr, 2010) and where, in some authors' opinion, there has been little or no scientific interest in addressing psychological health problems (Ellsberg & Emmelin, 2014; Verbeek et al., 2015), despite the existence of many risk factors that simultaneously alter the victims' psychological and physical well-being. In Nicaragua it is estimated that around 52% of women have experienced violence of various kinds throughout their lives (Boyce et al., 2016); complicating this is the extreme poverty that is transmitted generationally (Vázquez & Panadero, 2016). For this reason, we had four aims in this study: (a) know the SLE suffered by women in a context of poverty who are victims of gender-based couple violence; (b) identify profiles among the women in the sample based on the SLEs they have suffered throughout their lives; (c) analyses the relationship between SLEs and the development of maladaptive behaviors and mental health problems; and (d) identify which SLEs are most significant, in an attempt to identify treatments that minimize the effect of adversity. Based on the theoretical framework we used, we established the following four hypotheses: (a) SLEs give rise to different profiles among the women in the sample based on their occurrence, (b) SLEs are related to psychological distress, (c) a higher number of SLEs generates psychological health problems, and (d) some SLEs affect psychological distress to a greater extent than gender-based violence perpetrated by a partner.

Method

Participants

The participants in this study were 136 women in situations of extreme poverty who also were victims of gender violence in the municipality of León (Nicaragua), a group that has suffered a particularly serious set of EVS. Among the inclusion criteria were being a woman; over age 18 years; had suffered violence from a partner; and living in a situation of poverty, an aspect valued by the geographical area in which their homes were located. The interviewees had a mean age of 31.67 years (*SD*= 8.92) and had 2.23 children (*SD*= 1.65). More than 56% were married or in a stable de facto union. The education level of the participants was basic education (68.4%). In 43% of the cases, the main person who contributed income in the household, in

which 4.48 people lived on average (SD=2.48), was the spouse or partner, and in 36% of the cases the participant had no income of their own.

Regarding abuse, the participants began living with the aggressor at an average age of 19.91 years (SD= 4.92); had been living together—or had lived—with him for an average of 9.16 years (SD= 6.78); and the situation of abuse had been occurring, on average, 6.25 years (SD= 5.48). Forty-two percent continued to live with the aggressor at the time of the interview. Almost 33% (32.9%) had suffered gender-based violence from previous partners. The first episode of abuse occurred when the participants were a mean of 22.37 years (SD= 5.70). About the last episode of abuse suffered, it had occurred in the month before the interview in 26.1% of cases, between 1 and 3 months in 9%, between 3 and 6 months in 10.3%, more than 6 months in 23.9%, and more than 1 year for 30.6%. In addition, all the interviewees were victims of both psychological and physical violence, and 67% had suffered sexual violence. Partner abuse occurred daily in one out of four cases and several times a week in 45% of the sample. Almost 35% (34.6%) of the participants did not report the partner abuse, and 42.6% of the participants, although they reported it, withdrew the report, or did not pursue it.

Instruments

- a) Ad hoc socio-demographic and abuse questionnaire. We created ad hoc questions to find out the participants' age, number of sons and daughters, and education level. To learn more about the abuse and cohabitation of the women, we asked questions about the time that the violence continued and coded the responses in months. The frequency of abuse was processed on a scale: 1= once a month, 2= every 15 days, 3= several times a week, and 4= daily.
- b) Stressful Life Experiences List (Listado de sucesos vitales estresantes; L-SLE; Vázguez & Panadero, 2016). The L-SLE was created from the List of Threatening Experiences (Brugha & Cragg, 1990) and previous works used in research with groups in social exclusion (Rivas-Rivero & Bonilla-Algovia, 2021; Vázguez et al., 2015). The SLE List consists of 26 items that inquire about 10 events experienced before age 18 and 16 experiences after that age. On the basis of the responses, we identified the variables related to the violence suffered before age 18 (physical abuse, sexual abuse, and exposure to violence suffered by the participant's mother), and the antecedents regarding the substance abuse by the participant's parents, as well as items related to particularly adverse events not related to the partner they had experienced throughout their lives (physical and sexual violence by people other than the partner; the death of people in the close family environment; and circumstances related to the context of poverty, e.g., having or having had major economic and unemployment problems). Each item had a dichotomous response option. The age at which they were produced for the first time is also considered. In

- previous studies, Cronbach's α was .77 (Rivas-Rivero & Bonilla-Algovia, 2021). In the present study, Cronbach's α was .78), with the omega coefficient being slightly lower (ω = .77).
- c) Kessler Scale (K-10; Kessler et al., 1992). The K-10 consists of 10 specific questions about psychological distress related to anxiety and depression. The response options are Likert-type, categorized on a five-level ordinal scale (5= always, 4= almost always, 3= sometimes, 2= almost never, 1= never). The instrument has a unidimensional structure, and the sum of the scores has a minimum of 10 points and a maximum of 50. The instrument categorizes psychological distress into four levels: low (10-15), moderate (16-21), high (22–29), and very high (30–50). Previous studies in the Latin American context have shown that the scale has an accuracy of 78.9% for the prediction of depression and a somewhat lower level for the prediction of anxiety (73.6%). so it seems that the global predictive value of the scale is more consistent for depression (Térrez et al., 2011). In that study, which had a sample of 280 people from Mexico, the Cronbach's α found in the validation of the instrument was .90 (Térrez et al., 2011). Cronbach's α obtained in the present study was .94, the same as the omega coefficient (ω = .94).

Procedure

We used incidental sampling to recruit our sample, and it was carried out thanks to the collaboration of different associations and public institutions that work with female victims of gender violence in León, including the Nicaraguan National Police's Police Station for Women and Children. Some of the women in the sample had not reported the situation of intimate partner violence and did not resort to anybody to report their situation so, using snowball sampling based on women who had gone to the police station, other women were invited to participate as long as they met the sample inclusion criteria. Information about gender-related violence was obtained through a structured interview that was hetero-applied, lasting between 45 and 80 min over a period of 3 months.

This study was carried out with the support of the National Autonomous University of Nicaragua, based in León, which does not have an ethics committee. However, the project was carried out with the collaboration of the University of Alcalá through the Development Cooperation Projects. We began the interviews by explaining the objectives of the research, and we obtained informed consent from the participants by means of an information sheet. We ensured the anonymity and confidentiality of their responses. The interviewees were permitted to leave the interview if they wished. This circumstance occurred in six cases. Just over half (51.6%) of the women were interviewed in their homes, 38.9% were interviewed in the offices of the Leon police station, and 9.5% were interviewed at the headquarters of various associations. Finally, participants who had not yet been in touch with the comprehensive support network for women victims of gender-based

violence were referred to the Police Station for Women and Children or to another association so that they could receive advice.

Data analysis

Using a quantitative approach and ex post facto design, we compared the dependent variables with respect to the SLEs the women in the sample had endured throughout their lives. Following Muñoz et al. (2005) procedure for the study of SLEs in groups in a situation of social exclusion, we conducted the analyses in three steps. First, we carried out a nonhierarchical cluster analysis through K-means to classify the women with respect to SLEs suffered and to test the structure of three groups found in studies of groups in a situation of social risk (Rivas-Rivero & Bonilla-Algovia, 2022b: Rodríguez et al., 2021). The different SLEs were used as analysis variables (absence of SLE= 0 and presence of SLE= 1), using a maximum of 10 interactions and a minimum of 0 as convergence criteria. Three criteria were used to check whether the correct number of groups had been extracted: (a) the achievement of stability between clusters before 10 interactions, (b) the classification of a sufficient number of participants in each group, and (c) the performance of an analysis of variance (ANOVA) using the cluster membership variable to analyses the agreement between clusters for each SLE. We performed a discriminant analysis, to estimate the probability that a variable belonged to a cluster based on the SLEs as predictor variables. We also performed a discriminant analysis on the SLEs that were significant in the previous cluster analysis. Finally, we conducted a one-way ANOVA for the continuous variables, performing multiple post hoc comparisons through Bonferroni. We used χ^2 for categorical variables with the probability of committing a type I error of p < .05 in order to analyses the characteristics that distinguish the three groups, as well as Pearson's correlation analysis for numerical variables. Finally, we conducted a multiple linear regression analysis to find out which variables are related to levels of anxiety and depression through the forward method. We chose this method because it selects the variables that are most closely related to the dependent variable, highlighting those that have the most partial correlation with it (Berlanga-Silvente & Vilà-Baños, 2014). The data were processed using IBM SPSS Statistics v. 25.

Results

Table 1 shows the SLEs that the participants had experienced. In 40% of the cases, there was a history of substance use in the family of origin before age 18. In addition, about half of the sample suffered physical abuse and witnessed abuse toward their mother at a very early age. Twenty-five percent of the participants were victims of sexual abuse. Regarding SLEs that occurred after age 18, 18% of the participants had experienced the death of one of their children. They also suffered

physical and sexual aggression from people other than their partner (35% and 16%, respectively). Economic difficulties affected more than 70%. Around 45% had problems with alcohol consumption, and 43.4% had made a suicide attempt.

Table 1Stressful life events suffered by the sample of women

| Stressful life events | n | % | M^1 (SD) |
|---|----|------|------------------|
| Before age 18 | | | |
| One of your parents had problems with consumption | 56 | 41.2 | 3.47 (5.32) |
| Suffered physical abuse | 63 | 46.3 | 10.02 (4.76) |
| Suffered sexual abuse | 34 | 25 | 12.92 (2.96) |
| He had to leave home due to family conflicts | 50 | 36.8 | 16.07 (4.53) |
| She was kicked out of her home | 23 | 16.9 | 14.95 (3.78) |
| Her mother suffered abuse from her father or another partner | 69 | 50.7 | 4.22 (5.85) |
| Her parents separated/divorced | 77 | 56.6 | 9.17 (6.91) |
| She was raised by people other than her parents | 35 | 25.7 | 6.32 (4.59) |
| After age 18 | | | |
| One of her parents is deceased | | 18.4 | 25.35 (10.12) |
| One of her children has passed away | 24 | 17.6 | 23.31 (7.44) |
| She has had major financial problems | 99 | 72.8 | 22.0 (12.53) |
| Have you had significant unemployment problems? | 71 | 52.2 | 25.97 (9.39) |
| You have had problems with alcohol use | 61 | 44.9 | 21.81 (6.36) |
| Has had problems with drug use | 14 | 10.3 | 22.29 (8.09) |
| Suffered physical aggression from people other than the partner | 48 | 35.3 | 24.88 (9.52) |
| Suffered sexual assault from people other than the partner | 22 | 16.2 | 24.20 (6.82) |
| Has attempted suicide | 59 | 43.4 | 23.24 (9.08) |

Note: ¹Mean age (years old) at which they suffered from EVS for the first time in their lives.

The list of variables included according to the ANOVA analysis is shown in Table 2. A cluster analysis was performed for these variables using the K-means procedure. Three clusters were obtained on the basis of the structural characteristics of the groups.

Table 2Analysis of variance of the analysed clusters

| Stressful life events | F |
|---|----------|
| Before age 18 | |
| One of your parents had problems with consumption | 18.86*** |
| Suffered physical abuse | 49.02*** |
| Suffered sexual abuse | 60.56*** |
| He had to leave home due to family conflicts | 9.68*** |
| She was kicked out of her home | 21.36*** |
| Her mother suffered abuse from her father or another partner | 11.19*** |
| Her parents separated/divorced | 6.81** |
| She was raised by people other than her parents | 11.98*** |
| After age 18 | |
| One of her parents is deceased | 5.90** |
| One of her children has passed away | 7.33*** |
| She has had major financial problems | 10.31*** |
| Have you had significant unemployment problems? | 7.73*** |
| You have had problems with alcohol use | 31.67*** |
| Has had problems with drug use | 16.05*** |
| Suffered physical aggression from people other than the partner | 41.06*** |
| Suffered sexual assault from people other than the partner | 11.52*** |
| Has attempted suicide | 24.29*** |

Note: *p< .05. **p< .01. ***p< .001.

We conducted a discriminant analysis (Table 3) that revealed three groups were revealed. Group 1 is made up of 25 women (18.4% of the sample) and is characterized by the presence of SLEs related to abuse suffered in childhood and the presence of conflicts in the family of origin. Little consumption of substances was noted in this group, although some did occur in the family environment. This group had a greater presence of SLEs related to the death of people in the family environment. Group 2 is made up of 40 women (29.4%). This group is characterized by having experienced a large number of negative events related to violence throughout their lives and by conflicts in the family environment, as well as by having consumed substances (alcohol and drugs) in excess and having made suicide attempts. Group 3 consists of 71 women (52.2%) and can be characterized as having experienced a lower number of SLEs, having had economic and/or unemployment problems to a lesser extent, not having used substances, and not having suffered domestic violence directly or indirectly.

Figure 1 represents the canonical discriminant functions and depicts the three groups based on the SLEs. An average of 100% of the grouped cases were correctly classified with the help of two functions using Wilk's λ (Table 4).

Table 3 Final clusters by discriminant analysis

| Stressful life events | | Cluster | Cluster |
|---|-----|---------|---------|
| | 1 | 2 | 3 |
| Before age 18 | | | |
| One of your parents had problems with consumption | .51 | .81 | .23 |
| Suffered physical abuse | .70 | .96 | .19 |
| Suffered sexual abuse | .29 | .81 | .03 |
| He had to leave home due to family conflicts | .35 | .70 | .25 |
| She was kicked out of her home | .19 | .51 | .03 |
| Her mother suffered abuse from her father or another partner | .67 | .77 | .34 |
| Her parents separated/divorced | .74 | .74 | .43 |
| She was raised by people other than her parents | .54 | .29 | .12 |
| After age 18 | | | |
| One of her parents is deceased | .38 | .11 | .12 |
| One of her children has passed away | .38 | .18 | .08 |
| She has had major financial problems | .87 | .96 | .58 |
| Have you had significant unemployment problems? | .74 | .66 | .38 |
| You have had problems with alcohol use | .19 | 1.00 | .35 |
| Has had problems with drug use | .06 | .37 | .02 |
| Suffered physical aggression from people other than the partner | .61 | .77 | .10 |
| Suffered sexual assault from people other than the partner | .06 | .44 | .10 |
| Has attempted suicide | .64 | .81 | .21 |

Note: 0= did not occur; 1= occurred.

Figure 1Canonical discriminant functions

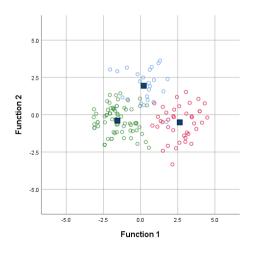




Table 4Summary of canonical discriminant functions

| | Wilk's λ Eig | Eigenvalue | Rcanonical | Groups of centroids of each function | | | |
|------------|--------------|-------------|------------|--------------------------------------|-----------|-----------|--|
| | | Ligerivalue | | Cluster 1 | Cluster 2 | Cluster 3 | |
| Function 1 | 0.12*** | 3.38 | 0.87 | 0.21 | 2.63 | -1.55 | |
| Function 2 | 0.53*** | 0.87 | 0.68 | 1.94 | -0.51 | -0.39 | |

Note: *p< .05. **p< .01. ***p< .001.

Statistically significant differences ($\gamma^2 = 31.05$, p< .000) were found among the three groups in regard to alcohol consumption, which had occurred in a higher percentage of participants in Group 2 (80%), compared with Group 1 (16%) and Group 3 (35.2%). Cramer's V indicated a moderate effect size (V= 0.47). Differences were also found in terms of excessive drug use (χ^2 = 30.29, p< .000), with a higher prevalence in Group 2 (32.5%), compared with the other groups (Group 1= 0%, Group 3 = 1.4%). The effect size was the same as that for binge drinking (V= 0.47). Finally, statistically significant differences were noted about suicide attempts (χ^2 = 26.91, p< .000), with higher percentages in Group 2 (70%) and Group 1 (60%) compared with Group 3 (22.5%), with a moderate effect size for this relationship (V= 0.44). Regarding violence perpetrated by the partner, statistically significant differences were observed among the three profiles depending on the duration or time that the abuse was maintained (F=3.28, p=.041). In Group 1, a mean of 68.33 months (SD= 60.46) was maintained, in Group 2, the situation of abuse was maintained for a mean of 97.10 months (SD= 63.29), and in Group 3 it was maintained a mean of 64.38 months (SD= 66.82). Regarding the frequency with which episodes of violence occurred, statistically significant differences were also found among the three groups (F=16.04, p=.000), occurring more frequently in Group 1 (M= 3.56, SD= 0.58), than in Group 2 (M= 2.90, SD= 0.59) and Group 3 (M=2.55, SD=0.97).

We analyzed the levels of anxiety and depression among the women with the K-10 scale. Based on the ranges established by the scale, 5% of the sample scored at a low level, 19% scored at a moderate level, 25.6% reached high levels, and 50.4% scored with very high levels of anxiety and depression. We made post hoc comparisons to contrast the K-10 items and the profiles based on SLEs. The homogeneity of variance test indicated that the assumption of homoscedasticity was met (p< .05), so we used the Welch method when performing multiple post hoc comparisons (Table 5). As can be seen from the results, the differences in each of the K-10 indicators were between Group 1 and Groups 2 and 3. Differences were found between Groups 2 and 3 only with respect to the last of the items related to feelings of worthlessness.

At a global level, statistically significant differences were also found in the comparison between the groups (MGroup 1= 34.60; SD= 10.35; MGroup 2= 27.54; SD= 5.54; MGroup 3= 26.32; SD = 7.72) based on the total sum of the K-10 Scale

(F= 9.78; p< 0.000; η = 0.14). Those who belonged to Group 1 presented a higher mean in anxiety and depression.

Table 5Differences between profiles in terms of psychological distress (K-10) with the post-hoc test through Welch

| K-10's items | Group I | Group J ₁ | I-J ₁ | Group J ₂ | I-J ₂ |
|---|------------|-------------------------|------------------|-------------------------|------------------|
| How often did you feel tired for no | 1 | 2 | 0.77** | 3 | 0.81** |
| How often did you feel tired for no reason? | 2 | 1 | -0.77** | 3 | 0.03 |
| Teason! | 3 | 1 | -0.81** | 2 | -0.03 |
| | 1 | 2 | 0.77* | 3 | 0.62 |
| How often did she feel nervous? | 2 | 1 | -0.77* | 3 | -0.15 |
| | 3 | 1 | -0.62 | 2 | 0.15 |
| How often did she feel so nervous | 1 | 2 | 0.48 | 3 | 0.57 |
| that nothing could calm her down? | 2 | 1 | -0.48 | 3 | 0.09 |
| that nothing could call the down? | 3 | 1 | -0.57 | 2 | -0.09 |
| How often did she feel handers? | 1 | 2 | 0.73 | 3 | 0.89** |
| How often did she feel hopeless? | 2 | 1 | -0.73 | 3 | 0.15 |
| | 3 | 1 | -0.89** | 2 | -0.15 |
| How often did she feel restless or | 1 | 2 | 0.85** | 3 | 0.78* |
| restless? | 2 | 1 | -0.85** | 3 | -0.07 |
| restiess? | 3 | 1 | -0.78* | 2 | 0.07 |
| I I a after alial also feel as westless | 1 | 2 | 0.59 | 3 | 0.79** |
| How often did she feel so restless that she couldn't sit still? | 2 | 1 | -0.59 | 3 | 0.20 |
| that she couldn't sit still? | 3 | 1 | -0.79** | 2 | -0.20 |
| How often did she feel depressed? | 1 | 2 | 0.86* | 3 | 0.78* |
| How often did she feel depressed? | 2 | 1 | -0.86* | 3 | -0.07 |
| | 3 | 1 | -0.78* | 2 | 0.07 |
| | 1 | 2 | 0.90** | 3 | 1.20*** |
| How often did she feel so down that | 2 | 1 | -0.90** | 3 | 0.29 |
| nothing could cheer her up? | 3 | 1 | - 1.20*** | 2 | -0.29 |
| | 1 | 2 | 0.85** | 3 | 1.08*** |
| How often did you feel that | 2 | 1 | -0.85** | 3 | 0.23 |
| everything cost you an effort? | 3 | 1 | 1.08*** | 2 | -0.23 |
| How often did she feel useless? | 1 | 2 | 0.22 | 3 | 0.72 |
| | 2 | 1 | -0.22 | 3 | 0.49* |
| | 3 | 1 | -0.72 | 2 | -0.49* |
| | 1 | 2 | 7.06** | 3 | 8.28** |
| Total score | 2 | 1 | -7.06** | 3 | 1.22 |
| | 3 | 1 | -8.28** | 2 | -1.22 |

Notes: K-10= Kessler Scale; $I-J_1$ and $I-J_2$ = Means difference between groups. *p< .05; **p< .01; ***p< .001.

To examine the relationship between the circumstances of violence (duration of abuse and frequency with which it occurred) and levels of anxiety and depression, we conducted a correlation analysis. Neither duration of maltreatment (r= .03, p= .695) nor frequency of maltreatment (r= .21, p= .096) appeared to be related to K-10 scores.

We carried out multiple linear regression analyses (method: forward) to study which SLEs influenced most levels of anxiety and depression (Table 6). The dependent variable was the score on the K-10 scale. The independent variables are the SLEs. The results of the analyses indicated that the death of people in the family environment, major economic problems, and suicide attempts were significantly related to levels of anxiety and depression (R^2 = 0.40; F= 6.32, p< .001).

Table 6Relationship of psychological distress as measured (K-10) according to stressful life events

| | В | SE | B standardised | t | р | FIV |
|--------------------------------------|-------|------|----------------|-------|------|------|
| Constant | 23.17 | 2.75 | | 8.40 | .000 | |
| One of her parents is deceased. | -6.97 | 2.62 | 36 | -2.65 | .013 | 1.02 |
| One of his children has passed away. | 8.13 | 2.43 | .48 | 3.34 | .002 | 1.12 |
| He has had major financial problems | 7.35 | 2.67 | .38 | 2.75 | .010 | 1.05 |
| He has attempted suicide | -3.83 | 1.68 | 32 | -2.27 | .031 | 1.07 |

Note: FIV= variance inflation factor.

Discussion

Gender-based violence is associated with a high incidence of serious mental health problems, which can be severe and acute (Aguerrebere et al., 2021; Alonso Del Hierro et al., 2023), a problem that increases when SLEs occur throughout the life cycle (Hughes et al., 2017; Rivas et al., 2020; Rivas-Rivero y Bonilla-Algovia, 2022a). For this reason, in this study, we analyzed the SLEs suffered by women in a context of poverty who were victims of gender violence. We identified profiles among the women in our sample based on the SLEs experienced throughout their lives, analyzed the relationship between these profiles and the development of maladaptive behaviors and psychological disorders (depression and anxiety), and, finally, identified the SLEs that could have been more significant in the women's mental health to undertake treatments that minimize the effect of adversity. Knowing the profiles and their characteristics can provide relevant, helpful information to guide psychosocial interventions (Cohen et al., 2019; Franklin & Ludermir, 2017).

We should note that, among the main SLEs suffered by the women in the sample, that, there was a history of substance use in the family of origin (40%) before age 18. In addition, about half of the women had suffered physical abuse and/or witnessed abuse toward their mother at a very young age. Twenty-five percent of the interviewees were victims of sexual abuse. These results seem to indicate that there is a high prevalence of interpersonal SLEs suffered in childhood, which are especially serious and threatening to psychological well-being (Cohen et al., 2016; Miloyan et al., 2018). Regarding those that occurred after age 18, 18% of the women had endured the death of one of their children. They also had suffered physical and sexual assaults from people other than their partner. Economic difficulties affected more than seven out of 10 women, around half had problems with alcohol consumption, and 43% had made a suicide attempt. The data seem to indicate the convergence of multiple SLEs that for most of the women occurred in a short period of time, taking into account the average age of the participating women; thus, these could have influenced the development of health problems according to previous studies (Steinhoff et al., 2020) and the generation of maladaptive responses in which they tended to tolerate and normalize the violence exerted against them (Cohen et al., 2019; Rivas-Rivero & Bonilla-Algovia, 2020).

Other data from this study that must be taken into account are the profiles or groups that were found on the basis of the SLEs. Group 1 was characterized by the presence of SLEs related to the abuse suffered in childhood and the presence of conflicts in the family of origin, low consumption of substances (although this circumstance did occur in the family environment), and SLEs related to the death of people in the family environment. Group 2 was characterized by having experienced a large number of SLEs related to violence throughout their lives and by conflicts in the family environment, as well as having consumed substances (alcohol and drugs) in excess and having attempted suicide. Finally, Group 3 had experienced a lower number of SLEs, had had economic and/or unemployment problems to a lesser extent, had not used substances, and had not experienced direct or indirect violence throughout their lives. These results seem to coincide with those of a previous study that found three profiles that varied depending on the SLEs suffered in the context of social exclusion in Spain (Muñoz et al., 2005; Rivas-Rivero & Bonilla-Algovia, 2022b; Rodríguez et al., 2021). However, in the present study there seem to be similarities in the severity of the SLEs experienced by the women in Groups 1 and 2, although with differences in behaviors linked to substance use and suicide attempts, which occurred in Group 2 in a higher frequency, suggesting that this group would show a greater deterioration in health status due to the development of these highly harmful behaviors. However, in both groups there seemed to be chronicity in terms of suffering from SLEs and the accumulation of situations of abuse and violence, which could have had a great impact due to the affective response that such events trigger (Baum et al., 1993).

Regarding the circumstances of violence perpetrated by the partner, we found statistically significant differences among the three groups depending on the

duration of the situation of abuse or the time that it happened. The women in Group 2 suffered partner abuse for a longer period of time, although we also observed statistically significant differences regarding the frequency with which this violence occurred, with a greater occurrence among the women in Group 1. Although the circumstances of partner violence differentiated both profiles, in both groups the history of previous victimization could have played a crucial role, leading the women to normalize the abuse (Greene et al., 2018) and there being feedback between adversity and the partner violence suffered (Hammett et al., 2020; Hughes et al., 2017).

Regarding the levels of anxiety and depression found among the women, two of the most frequently studied mental health problems (Lowe et al., 2017), only 5% indicated having low levels, 19% had moderate levels, 25.6% had high levels, and 50.4% scored as having very high levels. The prevalence and comorbidity of these disorders among the women demonstrate their relationship with SLEs, in agreement with the results of previous studies that have shown a relationship between these conditions with the negative circumstances suffered (Hammen et al., 2016; Monroe et al., 2009). Post hoc comparisons indicated differences in each of the K-10 items in Group 1 with respect to Groups 2 and 3. However, in the total sum of the K-10 scale, the women Group 1 presented with greater average levels of anxiety and depression. We should note that neither the frequency nor the duration of the situations of abuse perpetrated by the partner seem to be related to the K-10 scores. which could be the result of the normalization of partner violence gender in the couple in a country like Nicaragua, which has very high levels of inequality. Previous studies have found that more than half of Nicaraguan women have suffered abuse throughout their lives (Boyce et al., 2016). These data seem to indicate that the different episodes of violence and abuse suffered by the women in Group 2 are more related to maladaptive behaviors (substance use and suicide attempts) than to levels of anxiety and depression, and the SLEs found in Group 1 (e.g., death of people from the family environment) a more relevant role in the development of these pathologies because of the loss of social support that would act as a protective factor against the accumulation of negative events (Bonilla-Algovia et al. 2020; Rivas et al., 2018). We should add that Group 2, whose members experienced numerous SLEs, suicide attempts and substance use, although it is related to a lesser extent with the K-10 scores, seems to present a notable deterioration in well-being because of the experiences suffered. This could be because the scale is not able to detect more serious psychological health problems, although the relationship between suicide and depression has been reported, and the risk of suicide is 30 times higher for people with mood disorders (González-Herrero et al., 2019). Given Group 2's history of abuse and victimization, this history could either have led to other, more serious disorders not detectable by K-10, or past SLEs psychologically prepared women to deal with states of depression and anxiety.

Finally, the multiple linear regression analysis showed that suicide attempts, major economic problems, and the death of people in the family environment were

significantly related to participants' levels of anxiety and depression. The results coincide with those reported in previous studies regarding the relationship between these disorders and suicide attempts (Lui et al., 2021; Usuga-Jerez et al., 2021), although economic precariousness seems to also play a relevant role, more so than the violence experienced throughout their lives. This may be due to the normalization of this given that this precariousness increases the vulnerability and dependence of the victims, locking them in a spiral of violence that has greater tolerance in a country like Nicaragua (Boyce et al., 2016), where the level of gender inequality is high (Bonilla-Algovia, 2021). Likewise, the death of people in the family environment seems to have had great relevance to the development of the women's psychological health, not only because of the loss of social support but also because the death of family members leads to suffering that can be severe and irreversible (Cohen et al., 2019).

From the point of view of interventions with women who are victims of intimate partner violence, a wide range of therapies can be used that focus on cognition, motivation, and behavior to alleviate the psychological discomfort or deterioration that abuse and SLEs cause. Behavioral therapy, cognitive-behavior therapy, psychodynamic therapies, integrative therapies, and systemic therapy can all help reduce anxiety and depression and address other needs that have been detected in these types of women, such as reductions in exposure to violence, social support, and increased safety (Hameed et al., 2020). For Group 2, it would be necessary to analyze the possibility of other specific disorders co-occurring because of exposure to trauma and to assess the suitability of a particular intervention. Some studies have reported the potential benefits of changing the strategy in the treatment of psychological distress, modifying the symptom-oriented approach to a more rehabilitation-oriented one (Ribeiro et al., 2018). However, even though the legislation in a country like Nicaragua contemplates comprehensive interventions for victims, there is a lack of resources and a political determination to eliminate the discrimination and violence suffered by women and girls in this country (Boyce et al., 2016; Rivas et al., 2020). Furthermore, Nicaragua is a developing country, so, from a psychosocial perspective, there are few resources for the many problems the country faces. It should be added that the country is going through a generalized human rights crisis at the social level and, more acutely, in the economic and health spheres (Huete-Pérez, 2019).

This research has some limitations. The sample was not representative, and the sample size would have to be increased before the results can be generalized. Future research would be enriched by incorporating a mixed-methods study, including the qualitative perspective and the voice of women who have suffered a serious set of SLEs, to find out how such circumstances have influenced their lives. We should also note that some of the SLEs occurred at a very early age and that the memory of the event may have varied over time and perhaps been influenced by SLEs that occurred later. Likewise, it would be interesting if future research included variables related to resilience capacity and protective factors that play a regulatory and compensatory

role in adversity so interventions could be tailored accordingly. All in all, this study makes visible the adverse circumstances and mental health problems in a group of women on whom few studies have focused and can thus help set guidelines to help victims in developing countries, where inequity and inequality hinder the exercise of justice for women and girls. The identification of profiles based on the SLEs, and the analysis of which events may have been more influential while participants were in good psychological health could pave the way for therapeutic interventions that will help improve victims' well-being and ameliorate the damage that SLEs have caused in their lives.

References

- Abdel-Bakky, M., Amin, E., Faris, T. M., & Abdellatif, A. A. H. (2021). Mental depression: Relation to different disease status, newer treatments and its association with COVID-19 pandemic (Review). *Molecular Medicine Reports, 24*, 839. doi: 10.3892/mmr.2021.12479
- Aguerrebere, M., Frías, S., Smith, M., López, R., & Raviola, G. (2021). Intimat partner violence types and symptoms of common mental disorders in a rural community of Chiapas, Mexico: Implications for global mental-health practice. *PlosOne, 16*, e0256850. doi: 10.1371/journal.pone.0256850
- Alonso Del Hierro, T., Peña-Fernández, M. E. y Andreu-Rodríguez, J. M. (2023). Analysis of psychopathological symptoms and aggressive expressive and instrumental behavior based on the risk of violence in criminals. *Behavioral Psychology//Psicología Condcutual, 31*(1), 93-109. doi: 10.51668/bp.8323106s
- American Psychiatruc Association (2013). *Diagnostic and statistical manual of mental disorders (dsm-5)*. American Psychiatric Association.
- Bateson, A., Brilot, B., & Nettle, D. (2011). Anxiety: An evolutionary approach. *Canadian Journal of Psychiatry*, *56*(12), 707-715. doi: 10.1177/070674371105601202
- Baum, A., Cohen, L., & Hall, M. (1993). Control and intrusive memories as possible determinants of chronic stress. *Psychosomatic Medicine*, *55*, 274-286. doi: 10.1097/00006842-199305000-00005
- Baxter, A. J., Scott, K. M., Vos, T., & Whiteford, H. A. (2013). Global prevalence of anxiety disorders: A systematic review and meta-regression. *Psychological Medicine*, 43, 897-910. doi: 10.1017/S003329171200147X
- Berlanga-Silvente, V., & Vilà-Baños, R. (2014). Cómo obtener un Modelo de Regresión Logística Binaria con SPSS [How to obtain a binary logistic regression model with SPSS]. Revista d'Innovació i Recerca en Educació, 7, 105-118.
- Bonilla-Algovia, E. (2021). Aceptación del sexismo ambivalente en docentes en formación en España y países de América Latina [Acceptance of ambivalent sexism in trainee teachers in Spain and Latin American countries]. *Anales de Psicología, 37,* 253-264. doi: 10.6018/analesps.37.2.441791
- Bonilla-Algovia, E., & Rivas-Rivero, E. (2020). Impact of gender-based violence on psychological distress and happiness in León (Nicaragua). *Health Care for Women International*, 41, 673-689. doi: 10.1080/07399332.2020.1764564
- Braam, A. W., Copeland, J. R., Delespaul, P. A., Beekman, A. T., Como, A., Dewey, M., Fichter, M., Holwerda, T. J., Lawlor, B. A., Lobo, A., Magnússon, H., Prince, M. J., Reischies, F., Wilson, K. C., & Skoog, I. (2014). Depression, subthreshold depression and comorbid anxiety symptoms in Ider Europeans: Results from the EURODEP concerted action. *Journal of Affective Disorders*, 155, 266-272. doi: 10.1016/j.jad.2013.11.011

- Boyce, S., Zeledón, P., Tellez, E., & Barrington, C. (2016). Gender-specific jealousy and infidelity norms as sources of sexual health risk and violence among young coupled Nicaraguans. *American Journal of Public Health, 106,* 625-632. doi: 10.2105/AJPH.2015.303016
- Brugha, T.S., & Cragg, D. (1990). The List of Threatening Experiences: The reliability and validity of a brief life events questionnaire. *Acta Psychiatrica Scandinavica*, 82, 77-81.
- Cohen, S., Janicki-Deverts, D., & Miller, G. E. (2007). Psychological stress and disease. *JAMA*, 298, 1685-1687. doi: 10.1001/jama.298.14.1685
- Cohen, S., Mulphy, M. L. M., & Prather, A. C. (2019). Ten surprising facts about stressful life events and disease risk. *Annual Review of Psychology, 4,* 577-597. doi: 10.1146/annurev-psych-010418-102857
- Ellsberg, M., & Emmelin, M. (2014). Intimate partner violence and mental health. *Global Health Action*, *7*. doi: 10.3204/gha.v7.25658
- Franklin, M., & Ludermir, A. B. (2017). Inimate partner violence and incidence of common mental disorder. *Revista de Saúde Pública, 51*, 32. doi: 10.1590/S1518-8787.2017051006912
- González-Herrero, V., Ramos, N., & Ferragut, M. (2019). Trastornos depresivos [Depressive disorders]. In M. Ortiz-Tallo (Ed.), *Psicopatología clínica* (pp. 53 61). Pirámide.
- Grant, K. E., Compas, B. E., Stuhlmacher, A. F., Thurm, A. E., McMahon, S. D., & Halpert, J. A. (2003). Stressors and child and adolescent psy-chopathology: Moving from markers to mechanism of risk. *Psychological Bulletin, 129*(3), 447-466. doi: 10.1037/0033-2909.129.3.447
- Greene, C., Chan, G., McCarthy, K., Wakschlag, L., & Briggs-Gowan, M. (2018). Psychological and physical intimate partner violence and young children's mental health: The role of maternal posttraumatic stress symptoms and parenting behaviors. *Child Abuse & Neglect*, 77, 168-179. doi: 10.1016/j.chiabu.2018.01.012
- Hameed, M., O'Doherty, L., Gilchrist, G., Tirado-Muñoz, J., Taft, A., Chondros, P., Feder, G., Tan, M., & Hegarty, K. (2020). Psychological therapies for women who experience intimate partner violence. *The Cochrane database of systematic reviews*, 7(7), CD013017. doi: 10.1002/14651858.CD013017.pub2
- Hammen, C. (2016). Depression and stressful environments: Identifying gaps in conceptualization and measurement. *Anxiety Stress Coping*, *29*, 335-351. doi: 10.1080/10615806.2015.113488
- Hammett, J. F., Karney, B. R., & Bradbury, T. N. (2020). Adversechildhood experiences, stress, and intimate partner violence among newlywed couples living with low incomes. *Journal of Family Psychlogy, 34,* 436-447. doi: 10.1037/fam0000629
- Haarr, R. N. (2010). Suicidality among battered women in Tajikistan. *Violence Against Women, 16,* 764-788. doi: 10.1177/1077801210374409
- Huete-Pérez, J. A. (2019). Nicaragua's human rights crisis requires international response. *Plos Neglected Tropical Disease*, *13*(3), e0007119. doi: 10.1371/journal.pntd.0007119
- Hughes, K., Bellis, M. A., Hardcastle, K. A., Sethi, D., Butchart, A., Mikton, C., Jones, L., & Dunne, M. P. (2017). The effect of multiple adverse childhood expériences on health: A systematic review and meta-analysis. *The Lancet*, *2*(8), 356-366. doi: 10.1016/S2468-2667(17)30118-4
- Jiménez-Lira, C., Peinado, J., Solano-Pinto, N., Ornelas, M., & Blanco, H. (2020). Relaciones entre autoconcepto y bienestar psicológico en universitarias mexicanas [Relationships between self-concept and psychological well-being in Mexican university students]. Revista Iberoamericana de Diagnóstico y Evaluación, 55, 59-70. doi: 10.21865/RIDEP55.2.05

- Kessler, R., Andrews, G., Cople, L., & Hiripi, E. (1992). Short screening scales to monitor population prevalence and trend in non-specific psychological distress. *Psychological Medicine*, *32*, 959-976.
- Liu, Q., Wangqing, P., Baima, Y., Wang, S., Shen, Z., Zhou, J., Song, H., Liu, Y., Liu, X., Luo, P., & Zhao, X. (2021). Comorbid depressive and anxiety symptoms and their correlates among 93,078 multiethnic adults in Southwest China. *Frontiers in Public Health, 9,* 783687. doi: 10.3389/fpubh.2021.783687
- Lowe, S. R., Joshi, S., Galea, S., Aiello, A. E., Uddin, M., Koenen, K. C., & Cerdá, M. (2017). Pathways from assaultive violence to post-traumatic stress, depression, and generalized anxiety symptoms through stressful life events: Longitudinal mediations models. *Psychological Medicine*, *47*(14), 2556-2566. doi: 10.1017/S0033291717001143
- Miloyan, B., Bienvenu, O.J., Brilot, B., & Eaton, W. W. (2018). Adverse life events and the onset of anxiety disorders. *Psychiatry Research*, *259*, 488-492. doi: 10.1016/j.psychres.2017.11.027
- Monroe, S. M., Slavich, G.M., & Georgiades, K. (2009). The social environment and life stress in depression. In I. H. Gotlib, & C. L. Hammen (Eds.), *Handbook of depression* (pp. 340-360). Guilford.
- Muñoz, M., Panadero, S., Pérez, E., & Quiroga, M.A. (2005) Role of stressful life events in homelessness: An intragroup analysis. *American Journal of Community Psychology, 35*, 35-47. doi: 10.1007/s10464-005-1888-6
- Ribeiro, A., Ribeiro, J. P., & Doellinger, O. (2018). Depression and psychodynamic psychotherapy. *Brazilian Journal of Psychiatry, 40*(1), 105-109. doi: 10.1590/1516-4446-2016-2107
- Rivas, E., Bonilla, E., & Vázquez, J. J. (2020). Consequences of the exposure of abuse in family of origin among victims of intimate partner violence in Nicaragua. *American Journal of Orthopsychiatry*, 90, 1-8. doi: 10.1037/ort0000374
- Rivas, E., Panadero, S., Bonilla, E., Vásquez, R., & Vázquez, J. J. (2018). Influencia del apoyo social en el mantenimiento de la convivencia con el agresor en víctimas de violencia de género de León (Nicaragua) [Influence of social support in the maintenance of coexistence with the aggressor in victims of gender violence of León (Nicaragua)]. Informes Psicológicos, 18, 145-165. doi: 10.18566/infpsic.v18n1a08
- Rivas-Rivero, E., & Bonilla-Algovia, E. (2020). Influencia del historial de victimización en mujeres nicaragüenses en la transmisión interngeneracional de la violencia [Influence of the victimization history in Nicaraguan women in the intergenerational transmission of violence]. *Psychologia, 14,* 61-73. doi: 10.21500/19002386.4298
- Rivas-Rivero, E., & Bonilla-Algovia, E. (2021). Adverse childhood events and substance misuse in men who perpetrated intimate partner violence. *International Journal of Offender Therapy and Comparative Criminology*, 1-20. doi: 10.1177/0306624X211013519
- Rivas-Rivero, E. y Bonilla-Algovia, E. (2022a). Violence in the family of origin and socialization in male perpetrators of intimate partner abuse. *Behavioral Psychology/Psicología Condcutual*, *30*, 533-548. doi: 10.51668/bp.8322212s
- Rivas-Rivero, E., & Bonilla-Algovia, E. (2022b). Stressful life events: Typology of aggression and mistreatment in male perpetrators of gender-based violence. *Scandinavian Journal of Psychology*. doi: 10.1111/sjop.12853
- Rodríguez-Moreno, S., Panadero, S., & Vázquez, J. J. (2020). The role of stressful life events among women experiencing homelessness: An intragroup analisys. *American Journal of Community of Psychology*, 1-12. doi: 10.1002/ajcp.12480
- Rook, K. S. (2014). The health effects of negative social exchanges in later life. *Generations*, 38, 15-23.

- Schwab-Reese, L. M., Peek-Asa, C., & Parker, E. (2016). Associations of financial stressors and physical intimate partner violence perpetration. *Injury Epidemiology, 3,* 6. doi: 10.11867s40621-016-0069-4
- Steinhoff, A., Bechtiger, L. Ribeaud, D., Eisner, M., & Shanahan, L. (2020). Stressful life events in different social contexts are associated with self-injury from early adolescence to early adulthood. *Frontiers in Psychiatry*, 11, 487200. doi: 10.3389/fpsyt.2020.487200
- Stith, S. M., Rosen, K. H., Middleton, K. A., Busch, A. L., Lundeberg, K., & Carlton, R. P. (2000). The intergenerational transmission of spouse abuse: A meta-analysis. *Journal of Marriage and the Family, 62*, 640-654. doi: 10.1111/j.1741-3737.2000.00640.x
- Térrez, B. E., Villamil, V., Rodríguez, C., Pérez, J., & Cortés, J. (2011). Validación de la escala Kessler 10 en la detección de depresión y ansiedad en el primer nivel de atención. Propiedades psicométricas [Validation of the Kessler 10 scale in the detection of depression and anxiety in the first level of care. Psychometric properties]. Salud Mental, 34. 323-331.
- Usuga-Jerez, A., Lemos-Ramírez, N., Pinzón-Ardila, J., Pérez-Rivera, P., & Uribe-Rodríguez, A. F. (2021). SVE, ansiedad y depresión en estudiantes de una universidad privada de Bucaramanga [SLE, anxiety and depression in students of a private university in Bucaramanga]. *Informes Psicológicos*, 21(2), pp. 61-74. doi: 10.18566/infpsic.v21n2a04
- Vázquez, J. J., & Panadero, S. (2016). Chronicity and pseudo inheritance of social exclusion: Differences according to the poverty of the family of origin among trash pickers in León (Nicaragua). *Human Rights Quarterly, 38,* 379-390. doi: 10.1353/hrq.2016.0037
- Vázquez, J. J., Panadero, S., & Rivas, E. (2015). Happiness among poor women victims of intimate partner violence in Nicaragua. *Social Work in Public Health, 30,* 18-29. doi: 10.1080/19371918.2014.938389
- Verbeek, T., Arjadi, R., Vendrik, J. J., Burger, H., & Berger, M. Y. (2015). Anxiety and depression during pregnancy in Central America: A cross-sectional study among pregnant women in the developing country Nicaragua. *BMC Psychiatry*, 15, 292. doi: 10.1186/s12888-015-0671-v
- Villagrán, A., Martín-Fernández, M., Gracia, E., & Lila, M. (2022). Validación de la Escala de aceptabilidad de la violencia de pareja contra la mujer (A-IPVAW) en población ecuatoriana [Validation of the Scale of Acceptability of Intimate Partner Violence Against Women (A-IPVAW) in the Ecuadorian population]. Revista Iberoamericana de Diagnóstico y Evaluación, 62, 67-81. doi: 10.21865/RIDEP62.1.06
- World Health Organization. (2014). *Preventing suicide: A global imperative*. Washington, DC: World Health Organization.

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