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Effects of Fear of Crime on Subjective Well-being: A Meta-analytic Review

Laura Alfaro-Beracoechea[a], Alicia Puente[b], Silvia da Costa[b], Norma Ruvalcaba[a], and Darío Páez[b]

[a]University of Guadalajara, Jalisco, Mexico; [b]University of the Basque Country (UPV/EHU), Donostia/San Sebastián, Spain

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ABSTRACT

We analyzed 12 studies from North America, South America, Europe, and Oceania (New Zealand) on the association between fear of crime and subjective well-being. These studies gather data from 39 countries and 407,474 subjects. Heterogeneity was found between the studies. The random effect model showed an average effect of $\bar{r}$ = -.15 (ρ = -.21). Two of the studies estimated fear of crime with a single generic question and five studies assessed subjective well-being through one item of satisfaction with life. Meta-regression showed that the effect was superior in younger samples, with affective measurement of well-being in comparison with cognitive ones, of mono-item (versus multi-items) and in the countries of Latin America, suggesting that in contexts of greater frequency and seriousness of the crime the fear of crime negatively affects subjective well-being. The diffuse or concrete nature of the measure of fear did not show a significant moderator effect. Limitations of the study and proposals for future research are discussed.

Los efectos del miedo al delito en el bienestar subjetivo: revisión metaanalítica

Palabras clave:
Miedo al delito
Metaanálisis
Satisfacción con la vida
Bienestar subjetivo

RESUMEN

Se analizaron 12 estudios de Norteamérica, Latinoamérica, Europa y Oceanía (Nueva Zelanda) con respecto a la asociación entre el miedo al delito y el bienestar subjetivo. Los estudios reúnen información de 39 países y 407,474 sujetos. Se encontró heterogeneidad entre los estudios. El modelo de efectos aleatorios mostró un efecto promedio de $\bar{r}$ = -.15 (ρ = -.21). Dos estudios evaluaron el miedo al delito con una sola pregunta genérica, mientras que cinco estudios midieron el bienestar subjetivo con un ítem de satisfacción con la vida. La meta-regresión mostró que el efecto fue superior en muestras más jóvenes, con medidas afectivas del bienestar subjetivo en comparación con medidas cognitivas de un solo ítem (versus medidas poli-item), y en países de Latinoamérica, sugiriendo que en contextos de mayor frecuencia y severidad del crimen el miedo al delito afecta negativamente al bienestar subjetivo. La naturaleza difusa o concreta de la medida de miedo al delito no mostró un efecto moderador. Se debaten las limitaciones del estudio y las propuestas para futuras investigaciones.

The aim of this research was to carry out a meta-analysis on the studies that incorporate the effects of fear of crime on subjective well-being. Fear of crime (FoC) is defined as the feeling of anxiety about crime or symbols that the person associates with the crime, focused especially on physical damage; it is a primary emotional reaction to criminal acts, perceived as a personal threat (Ferraro, 1995; Garófalo, 1981; Vozmediano, 2010). Studies of FoC have been oriented to the possible explanations of the phenomenon, as well as its consequences at a social and individual level (Hale, 1996; Ruiz, 2014). One of the outstanding topics in this line of research is about the negative effects of FoC on subjective well-being (SWB). SWB is a broad category of phenomena that includes emotional responses, satisfaction areas, and global judgments of life satisfaction (Diener, Suh, Lucas, & Smith, 1999).

A meta-analysis carried out by Collins (2016) about the measurement of FoC and the commonly controlled variables in the studies on the construct (age, race, income level, scholarship, victimization, satisfaction with the police, among others) sheds light on the size of the effect of predictors generally associated with FoC. However, to date there is no critical and meta-analytic reviews on the consequences of FoC in mental health, specifically subjective well-being; therefore, the present study tries to cover the gap that exists in the present literature.

One important line of research refers to the consequences of FoC in protection behavior, in the promotion of stronger punitive measures (Hale, 1996; Morquecho, 2010; Ruiz, 2014), in the deterioration of social relations and in the community, and in the psychological effects of FoC (Hale, 1996). In the field of mental health, studies that

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indicate a higher prevalence of mental disorders (e.g., depression or anxiety) and a decrease in personal well-being associated with FoC have proliferated in the last decade (Adams & Serpe, 2000; Bazargan, 1994; Firdaus, 2017; Fleming, Manning, & Ambrey, 2016). It is the case of research on FoC and its relationship with SWB.

SWB can be separated into an affective component and a cognitive component. The first one includes a higher number of positive affects and fewer negative affects, or a positive emotional balance; the second one refers to the judgment or cognitive evaluation of satisfaction with life and its domains (Diener, 2006; Diener, Emmons, Larson, & Griffin, 1985). The hedonic SWB is related to the emotional experience and the cognitive SWB with the assessment that the individual makes about his own life. Previous studies have emphasized the emotional elements of insecurity such as FoC as factors that impact not only on the perception of the environment but also on the detriment of well-being and quality of life (Adams & Serpe, 2000; Davids & Gaibie, 2011). This aspect led us to examine the relationship between FoC and SWB through literature and the effect size of this relationship, which we expected to be negative.

Hypothesis 1: On average, there is a negative size effect in the relationship between FoC and subjective well-being.

In addition, the social and cultural context can influence how people process fear and its relative weight on well-being (Lloyd-Sherlock, Agrawal, & Minicuci, 2016). Consequently, we expected that in societal contexts where crime is more frequent the relationship between FoC and SWB would be different from societal contexts in which FoC is less frequent. In consequence, this study analyzes whether the geographic location moderated the relationship between FoC and SWB. On the one hand, it could be expected that the results showed a habituation effect. That is, in contexts where there is a lower crime rate, fear affects less to SWB, suggesting that there is a process of cognitive habituation where the frequency and seriousness of the crime are minimized (Taylor & Shumaker, 1990; Vauclair & Bratanova, 2017). On the other hand, in countries with a higher crime rate, there could be a stronger and more concrete threat perception (more concern for security and less satisfaction with the police and justice). Therefore, it can be expected that the association between FoC and SWB would be stronger and more negative in unfavorable societal contexts – as results that show that FoC is lower in ethnic groups of higher social status, such as US caucasians (Collins, 2016; Lorenc et al., 2014), suggest. We characterized this possibility as sensitization. The average effect size will be different and higher in developing areas, such as Latin America and Africa, compared to areas of larger economic and social development, such as Europe and North America, in the sensitization hypothesis case.

Hypothesis 2: The geographical area moderates the relationship between FoC and SWB.

In FoC, it is important to distinguish between general fear and specific fear of crime. Diffuse fear or concerns about crime in general, such as the one reflected in being afraid to walk alone at night, has been differentiated from a concrete fear that refers to the emotional experience of specific crimes (Keane, 1992). Studies showed that general and diffuse measures are more prevalent and less associated with direct victimization experiences (Barker, 2011).

Other researchers incorporated cognitive aspects, defined as the perceived probability of being a victim of a crime or worries about it (Lorenc et al, 2014). It has been questioned that the classical measures (i.e., "I am afraid of walking alone at night") do not refer to crime and, that the emotional aspect is not clearly defined by them. Also, it has been argued that FoC as an affective reaction refers to the moments in which this emotion is felt with intensity – for example, when being a victim or witnessing a criminal action in which citizens fear for their lives or property (Farrall, Jackson, & Gray, 2009). Measures of FoC reflect rather diffuse concerns or anxieties about crime and a concern for the evolution of society and the loss of social cohesion (Hough, 2004).

The form of measurement of FoC may affect the effect size on other variables (Collins, 2016; Ferraro, 1995; Hale, 1996, Vozmediano, 2010). It was expected that effect sizes would be higher when measuring fear of specific crimes and experienced emotional reactions rather than generic evaluations or measures of diffuse FoC.

Hypothesis 3: The form of measurement of FoC moderates the relationship between FoC and SWB.

The measurement of this construct derived from the disagreement in conceptualization of FoC. Although global measures (one item) have been criticized for reducing a complex construct in only one question, recent research continues using mono-item measures to assess FoC (Vozmediano, 2010). An example of a diffuse mono-item of FoC is "How safe do you – or would you – feel walking alone in this area after dark?" (Brenig and Proeger, 2016). In this study, whether the measure used had a single item or more than one item (mono-item vs. multi-item) was taken into consideration. It was expected that scales with more items would show a larger effect size because they consider more aspects of a construct (Wanous, Reichers, & Hudy, 1997).

The type of measurement of SWB was also examined. Self-report measures found in previous studies are different (Diener & Ryan, 2009), so there may be variations in the relationship between subjective well-being and experiences of FoC. An example of the use of mono-items is the one of Fleming et al. (2016) who asked "How do you feel about your life as a whole right now?" We assume that mono-item measures (how satisfied with life, or how happy is a person) may be less related to FoC than multi-item measures, which incorporate more elements of subjective well-being (Diener, Lucas, Schimmack, & Helliwell, 2009; Krueger & Schkade, 2008).

Hypothesis 4: The type of measure of FoC or length of the scales (mono vs. multi item) moderates the relationship between FoC and SWB. In the same way, the type of measure of SWB (mono- vs. multi-item) moderates the relationship between FoC and SWB.

SWB includes cognitive aspects that refer to satisfaction with life and affective aspects related to high positive and low negative affectivity (Diener et al., 1985). In addition, previous studies have shown that satisfaction with life is more strongly associated with social and structural variables than emotional well-being (Helliwell, Layard, & Sachs, 2017). Therefore, we consider that there will be a greater impact on cognitive hedonic well-being or satisfaction with life than on the emotional hedonic well-being.

Hypothesis 5: FoC is stronger associated to the cognitive component than to the emotional component of SBW.

In research oriented to explaining FoC, empirical studies showed that women and the elderly feel more vulnerable, believing that their capacity to overcome danger is low, reporting more FoC, especially to violent crimes (Hale, 1996; Pantazis, 2000). Although there are multiple studies which have associated age with FoC (Patel & Mishra, 2016; Qin & Yan, 2014; Varela, 2008), the meta-analysis of Collins (2016) did not find a significant effect size between age and FoC, although being a woman ($\bar{r}$ = .19) was a variable that reinforced the experience of FoC.

In this study, we proposed that, because of higher vulnerability, it can be expected that samples composed mostly of female and elderly people would show a larger association between FoC and SWB (Sacco, 1990).

Hypothesis 6: Sample characteristics moderates the relationship between FoC and SWB.

Method

A meta-analytic methodology was used. Meta-analysis refers to the use of statistical techniques in a systematic review of the literature that integrates the results of previous studies. For the review, we followed the criteria of the Preferred Reporting Items for Systematic

Reviews and Meta-Analyses (PRISMA; Moher, Liberati, Tetzlaff, Altman, & The PRISMA Group, 2009). In order to realize this meta-analysis, inclusion criteria were identified, reviewed, and established in the previously available articles that related FoC with SWB.

Search Strategy

In October 2017 the search was carried out in the Scopus, Web of Science, and Dialnet databases, through the following keywords in English: "fear of crime" AND "subjective well-being" OR "subjective wellbeing" OR "happiness" OR "satisfaction with life"; and in Spanish: "miedo al delito" OR "miedo al crimen" AND "bienestar subjetivo" OR "satisfacción con la vida" OR "felicidad". The search was limited to psychology and social science journals. Complementary research in Portuguese did not revealed studies on FoC and SWB. Search in Spanish and Portuguese allows to include data from South Europe and Latin America.

The inclusion criteria encompassed (a) empirical articles in English and Spanish, (b) whose central theme was FoC and its effects on subjective well-being, which may include satisfaction with life, happiness, or positive affects as variables of interest, and (c) that had the necessary measures to perform the analysis of the relationship between FoC and SWB variables directly.

The initial search resulted in a total of 108 articles (four of them obtained manually) from 1994 to 2017; 14 of the records appeared duplicated in the databases, leaving 94 articles available for the first review (Figure 1).

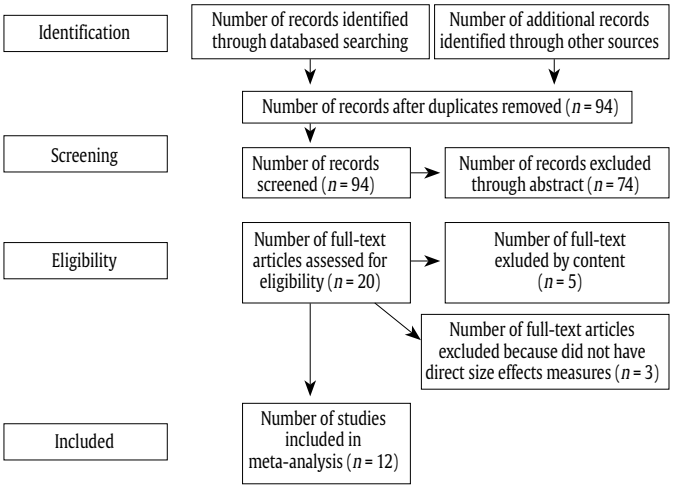

Figure 1. Flow Diagram Based on the PRISMA Statement (Moher et al., 2009).

With the revision of the title, the summary, and the keywords, 3 articles were excluded because they were in Korean and also 71 articles did not include the variables analyzed in this study (for example, they only referred to the FoC, but not to the subjective well-being or vice versa). The full text was reviewed; when the article was not found in the corresponding database, we proceeded to locate it manually in Google Scholar (n = 3) or by Google (n = 1). Once the results of the search were refined, a total of 20 articles from 1994 through 2017 were identified, of which n = 3 were found in Spanish and the rest in English.

Subsequently, 4 articles were eliminated because, although they referred to the variables in the abstract, they did not analyze them within the study. We contacted with six authors via email requesting direct effect size measures that were not included in the articles, obtaining a response from three of them (Moore, 2006; Stafford, Chandola, & Marmot, 2007; Vauclair & Bratanova, 2017). Three articles on FoC and SWB in Africa were excluded because they did not report direct effect sizes of the variables and only reported beta coefficients: (1) Davids & Gaibie (2011), β = -.06; (2) Moller (2005), β = -.09; and (3) Sulemana (2015), β = -.08. Finally, this study included 12 articles.

Coding of Studies

The population parameters were estimated as correlations (r). The statistic r represents the relationship between two variables expressed as Pearson's r correlations. A p value > .05 indicates that there is no statistically significant relationship. Estimating r for each study was chosen as a strategy because it is easy to interpret results and the formulas for converting other statistical procedures into an r are easily available (for example, F, t, chi-square) (see Rosenthal, 1984, 1994).

The estimates of r were generated using an Excel macro program written by Wilson (2016), using the formulas included in Lipsey and Wilson (2001). We calculated the sizes of a variety of statistics, including means and standard deviations, F tests (ANOVA), t tests, r values, p values, and proportions and frequencies.

The Comprehensive Meta-Analysis (CMA) program was used to estimate a model of mixed effects (fixed and random) (Field, 2001). The fixed effects allowed estimating the average effect of FoC on SWB, taking into account the differences in the sample sizes of the different studies and assuming that all the studies come from a single population, that is, mankind in this case. The random model estimates that the effects vary according to the studies and that they represent different populations or different national and regional cultures and social structures.

The influence of moderating variables on effect sizes was also estimated, including: 1) continent (related to Hypothesis 2); 2) diffuse/concrete fear (related to Hypothesis 3); 3) type of measurement of FoC (mono-item/ multi -item); 4) type of measure of SWB (mono-item/ multi -item), both related to hypothesis 4; 5) SWL as satisfaction with life/affective elements (related to Hypothesis 5); and 6) age and gender (related to Hypothesis 6). However, most of the studies have similar percentages of men and women (variability was lower) and in some studies we project population percentage to the study (when this data was not present was assigned the one reported by the World Bank, 2016). This is a limitation because most of them did not use representative samples and we opt to exclude gender as a moderator (gender percentages are exposed in Table 1).

Correlations were transformed into Fisher's Z and the error variance (Ev) was calculated. Coefficients were transformed into z values because the sample distribution of the Fischer $Z(r)$ is closer to normality (Field, 2001). Moreover, standardized scores are more adequate when using different measure instruments. In addition, for each correlation it was calculated: a) the confidence interval for the effect, b) the standard error (Se) of each r value, c) Q_w statistic, and d) the correlation attenuated by measurement error (ρ) according to the reliability of the criterion and the predictor. When this data did not exist, the formula of Spearman-Brown was applied to estimate the reliability of the mono-item, being α = .43 for subjective well-being and α = .62 for FoC (Johnson & Eagly, 2014). For mono items it is suggested that test-retest is an index of reliability and for SWB this coefficient is around .70. However, when this coefficient was used results were similar not only for FoC (estimated reliability was close to .70) but also for SWB, and we choose to use Spearman-Brown formula as suggested by one independent reviewer.

The 95% confidence intervals and Se, Q statistics, and the variance component (Ve) are indicators of the validity of the magnitude of the effect or validity of the relationship between two or more variables. The credibility interval (VC) indicates the range in which a randomly drawn effect is likely to be placed in a range of 80%. The CI is useful to assess the degree to which moderators can explain the unexplained variation in effect sizes (Schmith & Hunter, 2015). The value of Q_b

(between the groups) indicates whether the categorical variable adequately explains the variability between the effect sizes. If the variability is explained by the categorical variable (between-group Q_b <.05), the effect sizes of the categories differ significantly. Q_w shows the differences in effect sizes within the same group. It is expected that the intra-group variability will be non-significant and the inter-group variability will be significant. Finally, we examined the relative effects of moderators in a meta-regression analysis, because this procedure allows us to more specifically test the influence of moderators factors, taking into account interrelationships between them (Viechtbauer, 2008).

Results

The analysis of the estimation of independent effects showed a total of 12 estimates effect sizes, one per study. Outliers were detected (Schmith & Hunter, 2015) and one effect size was excluded from the analysis (Ruiz, 2007) (r = -.43, p = .000). Table 1 presents the list of studies and the data of interest used for the meta-analysis, including the kind of measurement of FoC and SWB.

The oldest study dates from 1994 and the most recent one from 2017; 33.3% (n = 4) of articles were published in 2016 and 75% in the last 10 years (n = 9). Regarding to geographical area, 50% of the studies were performed in Europe (n = 6), 25% in Latin America (n = 3), 16.7% in North America (n = 2), and 8.3% in Oceania (New Zealand, n = 1). According to the measurement of FoC, 2 studies (16.7%) were mono-item and the rest were multi-item (n = 10). Regarding the way measurement was codified, 50% (n = 6) were diffuse or generic measures and n = 6 (50%) measured specific fear to particular crimes.

In the measurement of SWB, important variations were found among the studies. Five studies (41.67%) used a single item, while the rest of the studies (58.3%) used scales of life satisfaction and were multi-item (Adams & Serpe, 2000), an index incorporating satisfaction with life and happiness (Vauclair & Bratanova, 2017), emotional climate (Martínez-Zelaya, Muratori, García, Páez, & Zubieta, 2016; Muratori & Zubieta, 2016; Ruiz, 2007), morale (Bazargan, 1994), and quality of life incorporating satisfaction with life in it (Stafford et al., 2007).

The results showed that the effect of FoC on SWB was negative in all studies included (see Table 2). The mean unweighted global correlation was r = -.15 and the weighted correlation r = -.18 (N = 407,474). The correlation corrected or unattended by the error was unweighted ρ = -. 21 and the weighted ρ = -.25.

In all the studies, the calculated Z score was significant in the fixed and random model, with the exception of Martínez-Zelaya et al. (2016), presumably because the sample size was small. The confidence interval (95%) ranged from -.17 to -.11 (random-effect model), and the credibility interval (VC 80%) ranged from -.11 to -.07.

Moderating Effects

We calculated the homogeneity (Q_b) of the total studies (k = 12) to determine the variability between effect sizes through different studies. The studies showed heterogeneous effects (Q_b = 366,635, df = 11, p = .0001, I^2 = 97%, T^2 = .002).

Effect sizes were compared according to possible moderating variables that could explain this heterogeneity and that are linked to the previously described hypotheses: continent, sample type, measurements for dependent variable (SWB), and independent variable (FoC). Gender was excluded because of data limitations (Table 3).

We distinguished between (1) Europe, (2) Latin America, (3) North America, and (4) Oceania (New Zealand) continents and there were effect size differences according to the continent. We verified that the average effects found in the studies carried out in North America and Latin America were homogeneous, but not in the case of Europe, indicating that there were differences in the estimates within the studies carried out in European countries. The random effects model confirmed the differences between continents. The studies conducted in Latin America showed higher effects than the rest of studies. There

Table 1. Studies Considered for Meta-analysis

Author and year of publication	Continent	N (S = 407,474)	Female %	Age M (SD)	Type of FoC	Measurement FoC	Type of SWB	Measurement SWB	Size effect (r)
Vauclair and Bratanova (2017)	Europe (29 countries)	56,594	54.4	47.54 (18.50)	Concrete	Multi-ítem (α = .71)	Cognitive-affective	Multi-item (α = .63)	-.21
Martínez-Zelaya et al. (2016)	Latin America (Chile)	143	68.1	21.49 (3.49)	Concrete	Multi-ítem (α = .92)	Cognitive	Multi-item (α = .87)	-.10
Brenig and Proeger (2016)	Europe (34 countries)	285,000	51.0[1]	43.00[1]	Diffuse	Mono-ítem	Cognitive	Mono-item	-.18
Muratori and Zubieta (2016)	Latin America (Argentina)	516	44.0	23.04 (4.08)	Concrete	Multi-ítem (α = .92)	Afective	Multi-item (α = .77)	-.23
Fleming et al. (2016)	Oceania (New Zealand, NZ)	22,727	45.1	37.00[1]	Diffuse	Multi-ítem	Cognitive	Mono-item	-.11
Hanslmaier (2013)	Europe (Germany)	3,245	51.0	51.33 (18.02)	Concrete	Multi-ítem (α = .89)	Cognitive	Mono-item	-.12
Franc et al. (2012)	Europe (Croatia)	4,000	51.0	47.10 (17.23)	Diffuse	Multi-ítem	Cognitive	Mono-item	-.15
Ruiz (2007)	Latin America (Colombia)	202	55.5	27.96 (11.18)	Concrete	Multi-ítem (α = .90)	Afective	Multi -item (α = .73)	-.19
Stafford et al. (2007)	Europe (United Kingdom, UK)	6,944	41.70	40.00[1]	Concrete	Multi-ítem (α = .77)	Cognitive	Multi -item	-.08
Moore (2006)	Europe (24 countries)	25,915	51.0 [a]	43.00[1]	Diffuse	Mono-ítem	Afective	Mono-item	-.12
Adams and Serpe (2000)	North America (USA)	1,816	57.0	41.58 (15.88)	Diffuse	Multi-ítem (α = .76)	Cognitive	Multi -item (α = .78)	-.14
Bazargan (1994)	North America (USA)	372	80.4	73.70	Diffuse	Multi-ítem (α = .84)	Cognitive	Multi -item (α = .82)	-.18

Note. [1]Data from the World Bank (2016) is reported due to lack of data of age and percentage of females in the articles: 43 years for Europe, 40 years for UK, and 37 for NZ.

Table 2. Average Standardized Effects of the Studies Included in the Meta-analysis

	Studies statistics									W
Study (*N* = 12)	*Zr*	*SE*	Ev	IC 95%	*Z*	Sig.	ρ	*SE*ρ	*N*	%
Vauclair and Bratanova (2017)	-.21	.00	.01	[-.22,-.21]	50.71	.000	-.31	.004	56,594	11.36
Martínez-Zelaya et al. (2016)	-.10	.09	.01	[-.27, -.07]	-1.19	.235	-.11	.085	143	2.31
Brenig and Proeger (2016)	-.18	.002	.00	[-.19, -.18]	-97.15	.000	-.35	.002	285,000	11.45
Muratori and Zubieta (2016)	-.23	.04	.00	[-.32, -.15]	-5.30	.000	-.27	.044	516	5.52
Fleming et al. (2016)	-.11	.01	.00	[-.12, -.10]	-16.04	.000	-.18	.007	22,727	11.20
Hanslmaier (2013)	-.12	.02	.00	[-.16, -.09]	-6.87	.000	-.19	.018	3,245	9.80
Franc et al. (2012)	-.15	.02	.00	[-.18, -.12]	-9.30	.000	-.25	.016	4,000	10.08
Ruiz (2007)	-.19	.07	.01	[-.33, -.05]	-2.66	.008	-.23	.071	202	3.03
Stafford et al. (2007)	-.08	.01	.00	[-.10, -.05]	-6.26	.000	-.10	.012	6,944	10.63
Moore (2006)	-.12	.01	.00	[-.13, -.11]	-19.41	.000	-.23	.006	25,915	11.24
Adams and Serpe (2000)	-.14	.02	.00	[-.19, -.10]	-6.00	.000	-.18	.023	1,816	8.79
Bazargan (1994)	-.18	.05	.00	[-.28, -.08]	-3.50	.000	-.21	.052	372	4.59
Fixed	-.18	.00	.00	[-.18, -.17]	-111.96	.000	-.25	.002	407,474	
Random	-.15	.01	.00	[-.18, -.12]	10.21	.000	-.21	.002		

Note. *Zr* = *r* standardized coefficient; *SE* = *Zr* standard error; Ev = error variance; CI 95% = confidence interval, 95%; ρ = the attenuation of correlation; *SE*ρ = ρ standard deviation; *N* = sample size; W = relative weight.

Table 3. Moderating Effects within and between Groups

			Fixed								Random							
									Heterogeneity								Heterogeneity	
	K	*N*	*r* (*Se*)	ρ (*Se*)	IC 95%	VC 80%	*Z*	Sig.	Q_w	Sig.	*r*	ρ (*Se*)	CI 95%	VC 80%	*Z*	Sig.	Q_b	Sig.
Continent																		
Europe	6	381,698	-.18 (.00)	-.29 (.00)	[-.18, -.18]	[-.12, -.12]	-110.96	.000	246.92	.000	-.15 (.02)	-.24 (.00)	[-.18, -.11]	[-.12, -.07]	-8.74	.000		
North America	2	2,188	-.15 (.02)	-.19 (.02)	[-.19, -.11]	[-.12, -.07]	-6.91	.000	.52	.470	-.15 (.02)	-.19 (.02)	[-.19, -.11]	[-.12, -.07]	-6.91	.000	13.390	.000
Latin America	3	861	-.20 (.03)	-.24 (.03)	[-.27, -.13]	[-.18, -.08]	-5.88	.000	2.02	.370	-.20 (.03)	-.24 (.03)	[-.27, -.13]	[-.18, -.08]	-5.84	.000		
Oceania	1	22,727	-.11 (.01)	-.18 (.01)	[-.12, -.09]	[-.08, -.06]	-16.04	.000	0.00	.000	-.11 (.01)	-.18 (.01)	[-.12, -.09]	[-.08, -.06]	-16.04	.000		
Total											-.12 (.01)	-.17 (.00)	[-.13, -.11]	[-.08, -.07]	-20.05	.000		
Concrete vs. diffuse fear																		
Concrete	6	67,644	-.19 (.00)	-.25 (.00)	[-.20, -.19]	[-.13, -.12]	-50.56	.000	138.39	.000	-.15(.04)	-.19 (.02)	[-.23, -08]	[-.15, -.05]	-4.09	.000		
Diffuse	6	339,830	-.17 (.00)	-.26 (.00)	[-.18, -.17]	[-.12, -.11]	-100.04	.000	198.93	.000	-.14 (.02)	-.22 (.00)	[-.18, -.10]	[-.12, -.07]	-7.19	.000	0.082	.770
Total											-.15 (.02)	-.21 (.00)	[-.18, -.11]	[-.12, -.07]	-8.27	.000		
Type of measure: fear																		
Multi-item	10	96,559	-.17 (.00)	-.23 (.00)	[-.18, -.16]	[-.12, -.10]	-53.03	.000	274.27	.000	-.15 (.02)	-.20 (.01)	[-.19, -.10]	[-.12, -.07]	-6.14	.000		
Mono-item	2	310,915	-.18 (.00)	-.35 (.00)	[-.18, -.17]	[-.12, -.11]	-98.62	.000	89.55	.000	-.15(.03)	-.29 (.00)	[-.21, -.09]	[-.14, -.06]	-4.94	.000	0.010	.930
Total											-.15(.02)	-.21 (.00)	[-.19, -.11]	[-.12, -.07]	-7.88	.000		
Cognitive vs. affective well-being																		
Cognitive	8	324,247	-.17 (.00)	-.24 (.00)	[-.18, -.17]	[-.12, -.11]	-98.56	.000	204.49	.000	-.13(.02)	-.18 (.00)	[-.17, -.09]	[-.11, -.06]	-6.34	.000		
Cog-afective	1	56,594	-.21 (.00)	-.31(.00)	[-.22, -.21]	[-.14, -.14]	-50.71	.000	0.00	.000	-.21(.00)	-.31 (00)	[-.22, -.21]	[-.14, -.14]	-50.71	.000	15.600	.000
Affective	3	26,633	-.12 (.00)	-.17 (.00)	[-.14, -.11]	[-.09, -.07]	-20.12	.000	7.34	.026	-.17(.04)	-.24 (.00)	[-.26, -.09]	[-.17, -.06]	-3.98	.000		
Total											-.21(.00)	-.29 (.00)	[-.22, -.20]	[-.14, -.13]	-51.11	.000		
Type of measure: SWB																		
Multi-item	7	66,587	-.20 (.00)	-.25 (.00)	[-.20, -.18]	[-.13, -.12]	-50.70	.000	125.67	.000	-.16(.03)	-.20 (.00)	[-.23, -.09]	[-.15, -.06]	-4.61	.000		
Mono-item	5	340,887	-.17 (.00)	-.30 (.00)	[-.18, -.17]	[-.12, -.11]	-100.00	.000	205.59	.000	-.14(.02)	-.24 (.00)	[-.18, -.10]	[-.12, -.07]	-6.53	.000	0.430	.510
Total											-.14(.02)	-.20 (.00)	[-.18, -.11]	[-.12, -.07]	-7.96	.000		
Sample																		
Elderly	2	7,316	-.08 (.01)	-.10 (.01)	[-.10, -.06]	[-.07, -.04]	-6.88	.000	4.00	.050	-.11 (.05)	-.14 (.01)	[-.22, -.02]	[-.14, -.01]	-2.24	.025		
General	10	400,158	-.18 (.00)	-.26 (.00)	[-.18, -.17]	[-.12, -.11]	-112.05	.000	295.65	.000	-.15 (.02)	-.22 (.00)	[-.18, -.13]	[-.12, -.08]	-10.52	.000	0.470	.490
Total											-.15 (.01)	-.21 (.00)	[-.18, -.12]	[-.12, -.08]	-10.74	.000		

Note. *k* = number of studies; *N* = sample size; r = average correlation; *Se* = standard error; ρ = attenuation of correlation; CI 95% = confidence interval at 95%; VC 80% = credibility interval at 80%; Q_w = variability within the studies; Q_b = variability between the studies.
p-values ≤ .05 were significant.

were differences between the studies that had measures categorized as diffuse and those that used specific fear: the effect of the concrete fear was higher and significant. The analyses between groups indicated that the differences between the effect sizes of both groups were not significant, showing that the measurements of FoC, diffuse versus concrete, are not a significant moderator.

Regarding the type of SWB, a study (Vauclair & Bratanova, 2017) that used a combined measure (cognitive-affective) had a greater negative effect on the relationship of FoC and SWB, and the studies that used measures of cognitive type showed greater effects than the measures of affective components. The studies were heterogeneous within categories, and also between the groups, according to the random effects model, so there are differences between the groups.

We also analyzed the differences regarding the measurement of SWB and FoC performed with 1 item (mono-item) or with more than 1 item (multi-item). The weighted average correlation of the studies with a single item was superior in comparison with the multi-item measures in the case of the measure of FoC, but, in the

case of subjective well-being, the multi-item measures showed a major negative effect. There were differences within the groups, although these differences did not turn out to be significant between the different categories of analysis, indicating that the differences in the effect sizes found were not due to the type of measure.

We were also interested in the independent influences of the possible moderators. Potential meta-analytic moderators can sometimes be inter-related with others and this can result in spurious effects and meta-regression allows us to estimate the specific moderator influence controlling for the effects of other moderators (Lipsey, 2003). A multiple meta-regression analysis was used to examine the relative effects of the moderators: continent, sample, type of measure (mono vs multi-item) of FoC, and SWB (see Steel & Kammeyer-Mueller, 2002; Viechtbauer, 2008). We created four dummy variables: continent (2 = Latin America, 1 = other countries), type of well-being (1 = affective, 2 = cognitive, 3 = cognitive-affective), type of measure of FoC (1 = mono-item, 2 = multi -item), and type of measure of SWB (1 = mono-item, 2 = multi -item) and the average age was included. Gender was not used because of limitations of data previously described. We chose these categories for regression analysis because the confidence intervals between them did not overlap and did not produce multi-collinearity problems (Lipsey, 2003).

The meta-regression with a random model showed a Q_{model} (6 *df*) = 1169.97, p = .000, showing that the covariates did explained the differences in effect size found throughout the different studies. According to this, the Q that contrasted the unexplained (residual) variance was of Q_{model} (5 *df*) = 28.8, p = .000, leads to reject the null hypothesis, and shows that a percentage of the variance is not explained by the variables included in the model (T^2 = .0023, I^2 = 82.19%) (Table 4).

Table 4. Meta-regression Analysis

Variable	*B*	*SE* (*B*)	IC 95%	*Z*	Sig. (2 tails)
Intercept	-0.140	0.040	[-.21, -.07]	-3.45	.00
Latin America: 1	0.280	0.040	[.21, .35]	7.11	.00
Age	-0.000	0.000	[-.01, - .00]	-3.52	.00
Cognitive well-being: 2	-0.120	0.000	[-.14, - .11]	-17.84	.01
Cognitive and affective well-being: 3	15.000	4.360	[7.82, 22.17]	3.44	.00
FoC measurement: 1	-0.160	0.000	[-.17, -.14]	-22.24	.00
SWB measurement: 1	-0.070	0.010	[-.09, -.06]	-6.31	.01

Note. R^2 = .84

The analysis showed that there were significant differences between the studies, Q (11 *df*) = 1,600.96, p = .000, explaining 84% of the variance. The model explains 87% more than the null model (T^2 = 0.0052, I^2 = 99.31%). Studies that were conducted in Latin America, lower ages in the sample, the affective measures of well-being, and mono-item measures of FoC and SWB (although see the discussion) showed a larger effect size compared to the rest of the studies.

Discussion

A negative association of FoC with SWB was found with an average size of r = -.15, similar to the effect size found in studies about victimization and FoC. These results are similar to the effect size found in social psychology studies of r = -.18. This effect size is, as usual, much lower than the collective association, r = -.67 (Vauclair & Bratanova, 2017), due to collective correlations that reflect grouped processes are more stable than the individual ones, and because the scores of errors are cancelled at a collective level, and their reliability is usually higher (Ostroff, 1993).

The first hypothesis was confirmed. There is a negative effect between FoC and SWB. The effect size was located between the two large European studies with massive samples that found an effect of r = -.15 and r = -.14. The confidence interval excluded zero and the credibility interval shows that these results are generalizable. In addition, the indicator of heterogeneity suggests that there is more than one global effect of FoC on SWB. There are different effects depending on the nation and different social populations.

The results confirmed hypothesis two on sensitization, since the size of the average effect of FoC in SWB was higher in areas of less economic and social development, such as Latin America, in relation to Europe, Oceania, and North America. However, there was not enough information about Africa that could shed light on other contextual conditions. The analysis of moderators found that the studies conducted in Latin America showed an average higher effect than the rest of the studies, although it was a younger population. This result is contrary to the hypothesis of habituation or that frequent contact with aversive stimuli decrease reactions (in this case that FoC and SWB are less associated in social contexts of high crime) and reinforces the idea that in contexts of frequent threat and where negative reinforcements predominate, people's FoC strongly impacts their SWB. In the same way, considering that in Central and South America the reported rates for every 100,000 inhabitants of intentional homicide (27.41) and robbery with violence (337.33) are higher than in any other part of the world (United Nations Office on Drugs and Crime - UNODC, 2016), it can be assumed that the sensitization hypothesis makes sense in the larger effect presented in Latin America[1].

Hypothesis three, which proposed that the size of the average effect of FoC on SWB is higher when the measure is focused on specific fears over the measures of diffuse fear, was not supported by the data. The results of the moderation analyzed showed the opposite, although in a limited way, that diffuse fear is associated more strongly with low SWB, suggesting that global measures imply a negative generic view of the environment, influencing well-being more strongly than specific threats. However, this variable did not significantly moderate the differences in effect sizes.

Regarding hypothesis four, which postulated that measures of FoC considering a single item would show a lower effect size on SWB than multi-item measures, the results did not support this idea. Contrary to expectations, less reliable or mono-item measures were more strongly associated with low SWB, showing that simple measures of FoC operate as well as measures with major complexity and reliability. It is noteworthy that the studies that included a single item to measure FoC are also the studies that used samples from several countries (Brenig & Proeger, 2016; Moore, 2006), so the contextual variability must be taken into account, as well as the sizes of the samples, which were superior to 20,000 people. On the other hand, the number of items with which SWB was measured did not moderate the strength of the association with FoC, being similar in both. This result also questions hypothesis four, which stated that the size of the average effect of FoC on subjective well-being would be higher when measures of major reliability or multi-item are used than when a global item is used.

However, as in the previous case, this variable did not significantly moderate the differences in effect sizes in the bivariate moderation analyses, but the multivariate coefficient was significant in meta-regression, showing that mono-item measures predicted a higher effect size than measures with several items and supposedly more reliable. A possible explanation could have to do with this alleged inferiority in reliability. On the one hand, it is true that some mono-item measures, such as well-being measures, clearly show a lower reliability than those with several items (.50 the former compared to .70 or more the latter evaluated by test-retest) although this does not occur in the case of other indicators such as income or subjective social class (Diener et al., 2009). That is, it is not clear that the low reliability of the mono-item measures is true in general.

On the other hand, large samples compensate for the low reliability of mono-item measurements, since an indicator of low reliability with twenty thousand subjects works in a similar way to one of high reliability with two thousand (Diener et al, 2009). The two studies that measured

subjective wellbeing as well as FoC with mono-items included more than tens of thousands of subjects and 24-34 nations. This suggests a compensatory effect that explains the higher effect size of mono items measures, because large samples enhance reliability. Finally, we should remember that the analysis was carried out on unweighted by error correlations and that the average reliability was assigned to the mono-item indicators in this case. All in all, we think that it is more reasonable to think that big samples, in particular the study by Brenig and Proeger (2016), show a stronger, more accurate score, and with a lower estimation error for the size of the sample, rather than for being a mono-item. According to this interpretation, this is why in the case of mono vs. multi-item measures this paradoxical superiority of the simplest measure over the most reliable one did not occur.

Regarding the fifth hypothesis, that asserted that the effect size of FoC on SWB would be higher when the measurement of SWB is oriented to life satisfaction over affectivity, we found that cognitive measures of evaluation or global judgment about life are less associated with FoC, against the hypothesis, so affectivity seems to be more sensitive to FoC. Other studies suggest that emotional reactions, more related to experienced hedonic wellbeing, are strongly related to corruption and social problems, while satisfaction with life, more related to remembered wellbeing, is strongly related to positive social factors (see Helliwell et al., 2017).

The results did not support the last hypothesis about the influence of age on the effect size, which suggested that the more elderly in the samples, the stronger the association between FoC and SWB. The age of the samples did not show to be a moderator that would significantly explain differences in effect size. However, the multivariate coefficient was significant in the meta-regression, showing that the younger age predicted a higher effect size. The global results question that older people are more reactive to FoC and is consistent with the meta-analysis by Collins (2016) that did not find a significant relationship between age and greater FoC. It must be said, however, that the variability in age ranges was limited and there were several representative samples of the population with an assigned mean of 37-40 years.

Considering the limitations of inferring results of the non-rejection of the null hypothesis, it can be inferred that the content and reliability of the measurement of FoC and SWB do not affect the negative association of the former with the latter. In contrast, the lower the age of the samples, the more affective and mono-item measures favor stronger estimates of the negative association between FoC and SWB. It must be said that the studies that used mono-item were also often the ones with the largest sample sizes and this may partly explain this association.

With respect to limitations of this study, first, it is important to be aware that large areas, like Africa and Asia, were absent. Second, underreporting is suspected to be an important source of systematic bias (fear is probably under-reported because it is a sign of weakness in most of cultures), as well as over-reporting (because well-being is a desirable state, probably is over-reported; Arce, Fariña, Seijo, & Novo, 2015). Third, social and psychological measures of wellbeing were not included. Future meta-analytic studies may consider the effect sizes of FoC on eudemonic well-being (Ryff, 1989; Keyes, 1998) and incorporate variables such as victimization and crime rates, which exceeded the scope of the present study.

Conflict of Interest

The authors of this article declare no conflict of interest.

Note

[1]We point out that the African studies found did not indicate the bivariate correlations, so they were excluded from the analysis considering the inclusion and exclusion criteria of the present study. The mean betas in Africa were .075 suggesting a habituation effect, although we could not assure this since the control of other variables may have lowered this association. In the study by Franc, Prizmic-Larsen, and Lipovean (2012), the correlation was $\bar{r}$ = -.15 and the beta was β = - .17, so in this case the partial correlation was higher than the bivariate one. If this were the case, in Africa the hypothesis of sensitization would be questioned.

References

References marked with an asterisk indicate studies included in the meta-analysis.

*Adams, R., & Serpe, R. (2000). Social integration, fear of crime, and life satisfaction. *Sociological Perspectives, 43*, 605-629.

Arce, R., Fariña, F., Seijo, D., & Novo, M. (2015). Assessing impression management with the MMPI-2 in child custody litigation. *Assessment, 22*, 769-777. https://doi.org/10.1177/1073191114558111

Barker, A. (2011). Peur du crime et insécurité: Quelques réflexions sur les tendances de la recherche anglo-américaine. *Médicine & Hygiène, 35*, 59-91. https://doi.org/10.3917/ds.351.0059

*Bazargan, M. (1994). The effects of health, environmental, and socio-psychological variables on fear of crime and its consequences among urban black elderly individuals. *International Journal of Aging and Human Development, 38*, 99-115. https://doi.org/10.2190/FHQY-5T3L-GADM-PUD0

*Brenig, M., & Proeger, T. (2016). Putting a price tag on security: Subjective well-being and willingness-to-pay for crime reduction in Europe. *Journal of Happiness Studies, 278*. https://doi.org/10.1007/s10902-016-9814-1

Collins, R. (2016). Addressing the inconsistencies in fear of crime research: A meta-analytic review. *Journal of Criminal Justice, 47*, 21-31. https://doi.org/10.1016/j.jcrimjus.2016.06.004

Davids, Y., & Gaibie, F. (2011). Quality of life in post- apartheid South Africa. *Politikon: South African Journal of Political Studies, 38*, 231-256. https://doi.org/10.1080/02589346.2011.580124

Diener, E. (2006). Guidelines for national indicators of subjective well-being and ill-being. *Journal of Happiness Studies, 7*, 397-404. https://doi.org/10.1007/s10902-006-9000-y

Diener, E., Emmons, R., Larsen, R., & Griffin, S. (1985). The satisfaction with Life Scale. *Journal of Personality Assessment 4*, 71-75. https://doi.org/10.1207/s15327752jpa4901_13

Diener, E., Lucas, R., Schimmack, U., & Helliwell, J. (2009). *Wellbeing for public policy*. Oxford, UK: Oxford University Press.

Diener, E., & Ryan, K. (2009). Subjective well-being: A general overview. *South African Journal of Psychology, 39*, 391-406. https://doi.org/10.1177/008124630903900402

Diener, E., Suh, E., Lucas, R., & Smith, H. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin, 125*, 276-302. https://doi.org/10.1037/0033-2909.125.2.276

Farrall S., Jackson J., & Gray E. (2009). *Social order and the fear of crime in contemporary times*, Oxford, UK: Oxford University Press.

Ferraro, K. (1995). *Fear of crime: Interpreting victimization risk*. New York University. New York.

Field, A. P. (2001). Meta-analysis of correlation coefficients: A Monte Carlo comparison of fixed- and random-effects methods. *Psychological Methods, 6*, 161-180.

Firdaus, G, (2017). Built environment and health outcomes: Identification of contextual risk factors for mental well-being of older adults. *Ageing International, 42*, 62-77. https://doi.org/10.2174/1745017901410010103

*Fleming, C., Manning, M., & Ambrey, C. (2016). Crime, greenspace and life satisfaction: An evaluation of the New Zealand experience. *Landscape and Urban Planning, 149*, 1-10. https://doi.org/10.1016/j.landurbplan.2015.12.014

*Franc, R., Prizmic-Larsen, Z., & Lipovean, L. (2012). Personal security and fear of crime as predictors of subjective well-being. In D. Webb & E. Wills-Herrera (Eds.), *Subjective well-being and security* (Social Indicators Research Series, vol. 46, pp. 45-67). Dordrecht, The Netherlands: Springer. https://doi.org/10.1007/978-94-007-2278-1

Garófalo, J. (1981). The fear of crime: Causes and consequences. *The Journal of Criminal Law and Criminology, 72*, 839-857.

Hale, C. (1996). Fear of crime: A review of the literature. *International Review of Victimology, 4*, 79-150. https://doi.org/10.1177/026975809600400201

*Hanslmaier, M. (2013). Crime, fear and subjective well-being: How victimization and street crime affect fear and life satisfaction. *European Journal of Criminology, 10*, 515-533. https://doi.org/10.1177/1477370812474545

Helliwell, J., Layard, R., & Sachs, J. (2017). *World Happiness Report 2017*. New York, NY: Sustainable Development Solutions Network. Retrieved from: https://s3.amazonaws.com/happiness-report/2017/HR17.pdf

Hough, M. (2004). Worry about crime: Mental events or mental states? *International Journal of Social Research Methodology, 7*, 2, 173-176. https://doi.org/10.1080/1364557042000194559

Johnson, B. T., & Eagly, A. H. (2014). Meta-analysis of social-personality psychological research. In H. Reis & C. Judd (Eds.), *Handbook of*

research methods in social and personality psychology (2nd ed., pp. 675-707). London, UK: Cambridge University Press. Retrieved from: http://digitalcommons.uconn.edu/chip_docs/35

Keane, C. (1992). Fear of crime in Canada: An examination of concrete and formless fear of victimization. *Canadian Journal of Criminology,* 34, 215-224.

Keyes, C. (1998). Social well-being. *Social Psychology Quarterly, 61,* 121-140. https://doi.org/10.2307/2787065

Krueger, A., & Schkade, D. (2008). The reliability of subjective well-being measures. *Journal of Public Economics, 92,* 1833-1845. https://doi.org/10.3386/w13027

Lipsey, M. (2003). Those confounded moderators in meta-analysis: Good, bad, and ugly. *The Annals of the American Academy of Political and Social Science, 587*, 69-81. https://doi.org/10.1177/0002716202250791

Lipsey, M., & Wilson, D. (2001). *Practical meta-analysis* (Vol. 49). Thousand Oaks, CA: Sage publications, Inc.

Lloyd-Sherlock, Agrawal, S., & Minicuci, N. (2016). Fear of crime and older people in low and middle income countries. *Aging and Society, 36,* 1083-1108. https://doi.org/10.1017/S0144686X15000513

Lorenc, T., Petticrew, M., Whitehead, M., Neary, D. Clayton, S., Wright, K., … Renton, A. (2014). Crime, fear of crime and mental health: Synthesis of theory and systematic reviews of interventions and qualitative evidence. *Public Health Research, 2*(2). https://doi.org/10.3310/phr02020

*Martínez-Zelaya, G., Muratori, M., García, F., Paez, D., & Zubieta, E. (2016). Victimización y miedo al delito: relaciones con el bienestar y la percepción del contexto social y el clima emocional. Un estudio con estudiantes universitarios de la ciudad de Concepción. In A. Mendiburo, J. Oyanedel, & D. Páez (Eds.) *La felicidad de los chilenos: estudios sobre bienestar* (Vol. 2, pp. 165-186). Santiago de Chile, Chile: RIL Editores.

Moher, D., Liberati, A., Tetzlaff, J., Altman D., & The PRISMA Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Med 6*(7), e1000097. https://doi.org/10.1371/journal.pmed1000097

Moller, V. (2005). Resilient or resigned? Criminal victimisation and quality of life in South Africa. *Social Indicators Research, 72*, 263-317. https://doi.org/10.1007/s11205-004-5584-y

*Moore, S. (2006). The value of reducing fear: An analysis using the European Social Survey. *Applied Economics, 38*, 1115-117. https://doi.org/10.1080/00036840500368094

Morquecho, A. (2010). *Miedo al delito. Un acercamiento al imaginario social sobre la inseguridad urbana.* Guadalajara, México: CUCI ediciones.

*Muratori, M., & Zubieta, E. (2013). Miedo al delito y victimización como factores influyentes en la percepción del contexto social y clima emocional. *Boletín de Psicología, 109,* 7-18.

Pantazis, C. (2000). Fear of crime, vulnerability and poverty. *The British Journal of Criminology, 40*, 414-436. https://doi.org/10.1093/bjc/40.3.414

Patel, A., & Mishra, A. (2016). Fear of crime amongst elders in India. *Working with Older People, 20*, 36-45. https://doi.org/10.1108/WWOP-07-2015-0011

Ostroff, C. (1993). Comparing correlations based on individual-level and aggregated data. *Journal of Applied Psychology, 78*, 569-582. https://doi.org/10.1037/0021-9010.78.4.569

Qin, N., & Yan, E. (2014). Prevalence and psychosocial correlates of the fear of crime in older Chinese. *The Journal of Adult Protection, 16*, 264-275. https://doi.org/10.1108/JAP-12-2013-0048

Rosenthal, R. (1984). *Meta-analytic procedures for social research* (2nd ed.). Newbury Park, CA: Sage.

Rosenthal, R. (1994). Parametric measures of effect size. In H. Cooper & L. V. Hedges (Eds.), *The handbook of research synthesis* (pp. 231-244). New York, NY: Sage.

*Ruiz, J. (2007). Procesos sociales relacionados con el miedo al crimen, la satisfacción con la policía y la victimización: el caso de la cultura ciudadana. *International E-Journal of Criminal Sciences, 1*, 1-29. Retrieved from: http://www.ehu.eus/ojs/index.php/inecs/article/view/17/19

Ruiz, J. (2014). *Psicología social y justicia.* Bogotá, Colombia: Editorial Universidad Nacional de Colombia.

Ryff, C. (1989). Happiness is everything, or is it? Exploration on the meaning of psychological wellbeing. *Journal of Personality and Social Psychology, 57,* 1069-1081. https://doi.org/10.1037/0022-3514.57.6.1069

Sacco, V. (1990). Gender, fear and victimization: A preliminary application of power-control theory. *Sociological Spectrum, 10*, 485-506. https://doi.org/10.1080/02732173.1990.9981942

Schmith, F., & Hunter, J. (2015). *Methods of meta-analysis: Correcting error and bias in research findings* (third edition). Thousand Oaks, CA: SAGE Publications Inc.

*Stafford, M., Chandola, T., & Marmot, M. (2007). Association between fear of crime and mental health and physical functioning. *American Journal of Public Health, 97*, 2076-2081. https://doi.org/10.2105/AJPH.2006.097154

Steel, P. D., & Kammeyer-Mueller, J. D. (2002). Comparing meta-analytic moderator estimation techniques under realistic conditions. *Journal of Applied Psychology, 87*, 96-111. https://doi.org/10.1037/0021-9010.87.1.96

Sulemana, I. (2015). The effect of fear of crime and crime victimization on subjective well-being in Africa. *Social Indicators Research, 121,* 849-872. https://doi.org/10.1007/s11205-014-0660-4

Taylor, R., & Shumaker, S. (1990). Local crime as a natural hazard: Implications for understanding the relationship between disorder and fear of crime. *American Journal of Community Psychology, 18*, 619-641. https://doi.org/10.1007/BF00931234

United Nations Office on Drugs and Crime - UNODC. (2016). *UNDOC statistics: Crime and criminal justice.* Retrieved from: https://data.unodc.org

Varela, C. (2008). La cuestión de la "sensación de inseguridad" en adultos mayores de la ciudad de Buenos Aires: posibilidades de apropiación de los espacios públicos desde una perspectiva etaria. *Ponto Urbe, 2,* 1-13. Retrieved from: http://pontourbe.revues.org/1910. https://doi.org/10.4000/pontourbe.1910

*Vauclair, C., & Bratanova, B. (2017). Income inequality and fear of crime across the European region. *European Journal of Criminology, 14*, 221-241. https://doi.org/10.1177/1477370816648993

Viechtbauer, W. (2008). Analysis of moderator effects in meta-analysis. In J. Osborne (Ed.), *Best practices in quantitative methods.* Thousand Oaks, CA: SAGE Publications.

Vozmediano, L. (2010). Percepción de inseguridad y conductas de autoprotección: propuestas para una medición contextualizada del miedo al delito. *EGUZKILORE, 24*, 203-237.

Wanous, J., Reichers, A., & Hudy, M. (1997). Overall job satisfaction: How good are single item measures? *Journal of Applied Psychology, 82,* 247-252.

Wilson, D. B. (2016). *Practical meta-analysis effect size calculator.* George Mason University. Retrieved from http://www.campbellcollaboration.org/escalc/html/EffectSizeCalculator-SMD-main.php

World Bank. (2016). *World Bank Open Data.* Retrieved from https://data.worldbank.org