Latin American and Caribbean Food Security Scale (ELCSA)

Overview

The Latin American and Caribbean Food Security Scale (ELCSA) is one of the four experience-based food insecurity scales included in the Data4Diets platform, which also contains the Household Hunger Scale [1] (HHS), the Household Food Insecurity Access Scale [2] (HFIAS), and the Food Insecurity Experience Scale [3] (FIES). The ELCSA was released in 2010 during a United Nations sponsored summit to create an experience-based scale specifically for the Latin America and Caribbean context (Ballard et al., 2013 [4]). It was adapted from two existing scales used in Brazil (Perez-Escamilla et al., 2004 [5]) and Colombia (Alvarez et al., 2006 [6]), as well as from the US Household Food Security Survey Module (US HFSSM [7]) and the HFIAS (Ballard et al., 2013 [4]). It has subsequently been used by the Food and Agriculture Organization (FAO) in the Latin American and Caribbean region, and served as one basis for developing the FIES.

Method of Construction

This scale uses a set of 15 questions, with yes/no response categories, seven of which are for households with children. Each question asks the respondent whether he/she or any other household member has experienced a certain manifestation of food insecurity in the previous three months. A raw score is constructed by assigning a weight of ‘1’ to each question with an affirmative answer (‘yes’). Total raw scores range from 0 to 8 (for households without children) or 0 to 15 (for households with children).

Households can be classified as mildly, moderately, or severely food insecure according to the following categorization algorithm (FAO, 2012 [8]):

- **For households with minors**: ‘household food secure’ (score=0), ‘mild household food insecurity (score=1-5), ‘moderate household food insecurity’ (score=6-10), ‘severe household food insecurity’ (score=11-15).
- **For households with members above the age of 18**: ‘household food secure’ (score=0), ‘mild household food insecurity’ (score=1-3), ‘moderate household food insecurity’ (score=4-6), ‘severe household food insecurity’ (score=7-8) (Shamah-Levy et al., 2016 [9]).

A detailed manual on construction and use of ELCSA is available in Spanish from FAO (2012 [8]). To view the questionnaire in English, refer to Table 1 in the following paper published in the Journal of Nutrition (Perez-Escamilla et al., 2009 [10]).

Uses

This indicator can be used to provide information about the distribution and severity of insecure food access in the population. If additional demographic and socioeconomic data are collected along with the ELCSA, it can be used to better understand the location and characteristics of those who are most affected by food insecurity (Dallmann et al., 2015 [11]). This information can be used to develop targeted policies, inform the allocation of resources, evaluate programmatic impacts, and build political will to combat food insecurity. Additionally, validation studies have shown
ELCSA’s effectiveness for use in various Latin American and Caribbean countries (Perez-Escamilla et al., 2008 [12]; Munoz-Astudillo et al., 2010 [13]), making it an obvious choice to use in these contexts.

Like the other experience-based food insecurity scales, ELCSA does not quantify food consumption or assess diet quality; doing so requires other methods and indicators, such as a quantitative 24-hour Dietary Recall [14] to quantify food consumption to calculate the Mean Adequacy Ratio [15] (MAR) or a diet diversity index to determine the Minimum Dietary Diversity Score for Women [16] (MDD-W) in order to gain a picture of the ‘adequacy’ aspect of diet quality.

Strengths and Weaknesses

One strength of ELCSA, and other experience-based food insecurity scales, is that it is uniquely able to detect aspects of food insecurity involving decreased access to a sufficient quantity or quality of food and also the psychosocial manifestations of anxiety and uncertainty around food access, which can also affect health and wellbeing (Ballard et al., 2013 [4]). It is also relatively short and can easily be added as a module to other household surveys.

On the other hand, when data are collected at the household level, the selected respondent, usually the primary food preparer, may not always be in a position to accurately represent the experience of all household members in considering responses to the questionnaire. That said, if any member of the household is reported as experiencing a food insecurity condition on the questionnaire, the entire household is classified as having experienced it too. This means that the indicator could potentially overestimate the number of individuals in households that are food insecure, while providing an accurate count of households with at least one member experiencing food insecurity. Relatedly, bias may be introduced from the fact that the selected respondent’s perception of their household’s experience is not representative of all other household members (Coates et al., 2010 [17]).

Data Source

The source of data for this indicator is household survey data collected via interview with the household member who is primarily responsible for the household’s food provisioning.

Links to guidelines

- Perez-Escamilla et al., (2011). "Are the Latin American and Caribbean Food Security Scale (ELCSA) items comparable across countries?" [18]

Links to validation studies

Links to illustrative analyses

- Shamah-Levy et al., (2016). "Food assistance programmes are indirectly associated with anaemia status in children <5 years old in Mexico" [9]
- Perez-Escamilla et al., (2009). "Household food insecurity is associated with childhood malaria in rural Haiti" [21]

Expert review conducted by:

- Dr. Anne Kepple, Consultant, Food and Agriculture Organization

Food Security Dimensions

- Secure access to food of sufficient quantity [23]

Data Collection Levels

- Household [24]

Data Sources and Methods

- Experience-Based Scales

Requires Food Composition Database

- No [25]