Household Food Insecurity Access Scale (HFIAS)

Overview

The Household Food Insecurity Access Scale (HFIAS) is one of the four experience-based food insecurity scales included in the Guiding Framework, which also contains the Household Hunger Scale [1] (HHS), the Latin American and Caribbean Food Security Scale [2] (ELCSA), and the Food Insecurity Experience Scale [3](FIES). Experience-based indicators are constructed from a short questionnaire that captures households’ behavioral and psychological manifestations of insecure food access, such as having to reduce the number of meals consumed or cut back on the quality of the food due to a lack of resources. Responses to the questionnaire enable the household to be pinpointed on a spectrum that indicates the overall severity of their insecure food access. HFIAS was developed in 2006 by the USAID-funded Food and Nutrition Technical Assistance II project (FANTA) in collaboration with Tufts and Cornell Universities, among other partners. HFIAS has since provided the foundation for the development of the HHS, another household-level experience-based scale, that resulted from cross-country validation of the HFIAS (Ballard et al., 2011 [4]). As compared to HFIAS, HHS focuses only on the hunger-specific experience of food insecurity; ELCSA is only applicable for households in Latin American and the Caribbean; and FIES is typically used as an individual-level indicator.

Method of Construction

The HFIAS module covers a recall period of 30 days, and consists of two types of questions ? nine ?occurrence? and nine ?frequency-of-occurrence? questions. The respondent is first asked if a given condition was experienced (yes or no) and, if it was, then with what frequency (rarely, sometimes, or often). The resulting responses can be transformed into either a continuous or categorical indicator of food security. When calculating as a continuous indicator, each of the nine questions is scored between 0-3, with 3 being the highest frequency-of-occurrence (often). The score for each is then added together. The total HFIAS can range from 0 to 27 indicating the degree of insecure food access. As a categorical variable, households are categorized as food secure, mildly food insecure, moderately food insecure, or severely food insecure (see Table 4 on page 14 in Coates et al., 2007 [5]). Households that respond affirmatively to the more severe behaviors and/or experience them more frequently are classified as more severely food insecure. For more in-depth information on using and interpreting the HFIAS, refer to the guide created by FANTA (Coates et al., 2007 [5]).

Uses

Information gathered from the HFIAS can be used to assess prevalence of household food insecurity of a population as well changes in food insecurity over time. This is useful in the
context of population-level targeting and program monitoring and evaluation of food access-related activities. HFIAS has also been used by the Malnutrition and Enteric Infections: Consequences for Child Health and Development (MAL-ED) Network cohort study to assess relationships between food security and child growth (Psaki et al., 2012 [6]). The HFIAS has also been included among Action Against Hunger’s (ACF) core indicators in program evaluation (ACF, 2011 [7]) and has been used as one of the tools used for rapid Emergency Food Security Assessments conducted by the World Food Programme (WFP, 2009 [8]). In addition, the HFIAS is part of several household surveys (for example an adapted version is used in the publicly available Bangladesh Integrated Household Survey [9]), making it useful for comparability across countries and years.

**Strengths and Weaknesses**

One strength of HFIAS, 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 [10]). Additionally, it has been found to be understandable and applicable across varying contexts, including both urban (Mohammadi et al., 2012 [11]) and rural (Knueppel et al., 2010 [12]) settings. It is also relatively short and can easily be added as a module to other household surveys.

One of the weaknesses of this indicator is that the language used in the HFIAS questionnaire has been found to be culturally specific and/or variable, proving a challenge when using it to compare across sociocultural contexts (Deitchler et al., 2010 [13]). In direct response to this limitation, the HHS was developed, which has a shorter questionnaire and has been validated for cross-country comparison (Ballard et al., 2011 [4]). However, the HFIAS is more comprehensive than HHS, and thus can undergo some basic adaptation of concepts and terms for the context in which it will be used in order to improve its performance (guidance for this process can be found in Section 2 on page 6 of the HFIAS user manual, Coates et al., 2007 [5]). The HFIAS is meant for population level use only, meaning that it should not be used, for instance, to screen households for program eligibility. This indicator does not quantify food consumption or directly assess diet quality; doing so requires other methods such as a quantitative 24-hour dietary recall (to quantify food consumption) or a diet diversity index (to gain a picture of the adequacy aspect of diet quality).

Some weaknesses more generally related to experience-based scales include that these indicators are subject to response bias, as assumed experiences of food insecurity may not coincide with specific cultural or personal perceptions (Jones et al., 2013 [14]). Also, as data are collected at the household level, further bias may derive from the fact that the selected respondent’s perception of their household’s experience is not representative of all other household members (Jones et al., 2013 [14]). Finally, the HFIAS does not quantify food consumption or directly assess diet quality; doing so requires other methods such as a quantitative 24-hour dietary recall (to quantify food consumption) or a diet diversity index (to gain a picture of the adequacy aspect of diet quality).

**Data Source**

The data required to calculate this indicator are collected using the HFIAS module (Coates et al., 2007 [5]), which can be easily integrated into a broader household survey.
Links to guidelines


Links to validation studies

- Gebreyesus et al. (2014). "Is the adapted Household Food Insecurity Access Scale (HFIAS) developed internationally to measure food insecurity valid in urban and rural households of Ethiopia?" [16]
- Knueppel et al. (2010). "Validation of the Household Food Insecurity Access Scale in rural Tanzania" [12]
- Deitchler et al. (2010). "Validation of a Measure of Household Hunger for Cross-Cultural Use" [13]

Links to illustrative analyses

- Becquey et al. (2010). "The household food insecurity access scale and an index-member dietary diversity score contribute valid and complementary information on household food insecurity in an urban West-African setting?" [17]

PDF [20]

Data Sources

- Other

Unit of Observation

- Household

Food Security Components

- Quantity

Food Composition Database Required?

- No
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