

## ANALYSIS

Editing and coding, data input and tabulations are carried out by Ipsos MORI.

### Weighting

For 2009, the following weights are applied.

- a) Pre-weights to correct for disproportional sample selection by ACORN Type Category.
- b) Pre-weights for household size.
- c) Pre-weights for 60 area groupings
- d) Social grade smoothing to produce exponentially smoothed estimates of target proportions for social grade within sex. The factors applied to the current quarter's figures/previous estimates are 0.25/0.75.
- e) Rim-weighting by sex within age group, sex within area grouping and sex within social grade. At this weighting stage the 15-24 age group was split into 15-17 and 18-24 age groups.

Further details of the weighting procedures are available from Ipsos MORI.

### Ascription Procedure for National Daily Newspapers

Commencing in July 1994 an ascription procedure has been applied to National Daily Newspapers.

The tables show results as follows:

#### *Monday-Friday average issue readership (5 day AIR)*

These are based on the "yesterday" readership claims of the Tuesday-Saturday sample which was reweighted to the total universe. AIR claims for respondents interviewed on Sundays and Mondays were ascribed so that the totals confirm to the claims made by Tuesday-Saturday informants. Thus the Monday-Friday AIR levels may be regarded as being obtained by a direct measure.

#### *Saturday issue readership (Saturday AIR)*

These are obtained from a specific question on the readership of Saturday issues of national daily newspapers, initially included experimentally in the NRS in 1993 and applied to the Survey's full sample from April 1994.

#### *Monday-Saturday average readership (6 day AIR)*

These are consistent with the 5 day and Saturday AIRs as published. They are essentially based on the 'yesterday' claims of the full sample, involving the modelling of AIR claims affecting some informants, so that totals within sex, social grade and reading frequency conform as far as possible to the following formula:

"6 day AIR" = ("5 day AIR" x 5) + ("Saturday AIR"), this total divided by 6.

## Reading Probabilities

The questions for Newspapers Supplements are only “when last read” questions and do not include frequency questions. To allow the calculation of cumulative readerships and of schedules, an alternative method of calculating probabilities has been derived. It is a segmentation technique using 14 demographic variables and frequency of parent newspapers.

Each informant has, for each supplement, an individual 5-digit probability code ranging from zero to one (e.g. 0.8563 or 0.2566 etc.). These probabilities do not correspond to the standard frequency codes of other publications.

Summary codes of the probabilities are provided and are defined as follows:

- High           0.6667-1.0000
- Medium       0.3334-0.6666
- Low           0.0001-0.3333

## Adjustment for Circulation Loss

In addition to the demographic weighting, results are adjusted for the effects of circulation loss where there has been interruption of normal publication. The adjustment procedure involves changing the codes of some informants from ‘non-reader’ to ‘reader’ for a relevant title.

Details of the current adjustment procedures, which have been applied since January 1988, can be obtained from Ipsos MORI.

Estimates of circulation loss are based on data reported to the NPA or PPA by each publisher together with ABC information concerning National Newspapers. Non-members of the NPA and PPA report directly to Ipsos MORI. The completeness and accuracy of these data is thus beyond NRS Ltd’s direct control.

## 24 Month Base Procedure

The 24 month base procedure allows smaller titles to have NRS published estimates. The procedure is applied to titles falling below the annual threshold of 175 unweighted average issue readers (AIR) required for publication of estimates, but achieving an unweighted AIR of 225 or more over a 24 month period.

The procedure combines data from the quarter in which the publication qualifies for adjustment with the corresponding quarter of the previous year, to calculate the combined penetration of each of the recent reading and frequency of reading claims in the total population. These penetrations are then applied to the total population for the current quarter to set targets for adjustment. This may have the effect of adjusting read past year (RPY) as well as AIR.

A summary of the procedure for adjustment is as follows:

- 1) On an annual basis, identify and specify publications that qualify for this procedure.
- 2) Combine audiences for the most recent quarter and the same quarter from the previous year.
- 3) Calculate new AIR and RPY targets from the combined population penetrations for frequency and recent reading.
- 4) Adjust weighted data for the current quarter, according to the targets. Randomly select respondents to add from the 'non-reader' population, or to remove from the reading population. Selection is based on a target demographic profile, created from the combined quarters' data.

### **Publications with Frequency Changes**

The published readership estimates for titles that change their publication frequency are calculated in the following way:

The average issue readership comprising qualifying recency codes from the new frequency are added to the average issue readership comprising qualifying recency codes from the old frequency.

Publications that have changed their publication frequencies are given the publication symbol F to denote that the estimates are calculated using data collected from more than one publication frequency.