

APPENDIX J:

ASCRPTION OF MISSING PRODUCT FIELD DATA

In any survey, researchers are faced with the problem of non-response not only in general, but also to specific parts of an interview. Failure to complete the self-completion PMB Product Field questionnaire could be classified as the latter type of non-response. That is, basic demographic information and readership behaviour are available from all completions, but less than 65% of respondents actually completed the leave-behind questionnaire. (See Appendix D: Completion Rates.)

Non-response of this type is sometimes handled by re-weighting the responders' sample to adjust for differential response rates across major demographic variables. While the results of such weighting are felt to yield reasonable product field data, this re-weighting produces readership data that differ somewhat from those in the original data set. The consequence is two sets of readership information.

As a means of avoiding this problem, non-response to the PMB leave-behind has been handled through ascription or simulation of the missing data employing TNS Canadian Facts' Ascription Model. Essentially, application of this model means that a respondent who has not provided product information is "married" to a similar respondent who has. The success of such programs, therefore, depends on the ability to closely match respondents on key determinants of behaviour. While it is recognized that the ideal simulation model would take into account all demographic, psychographic and relevant motivation variables, within the constraints of the variables included in this survey, and a very large sample, the ideal could not be achieved.

Nevertheless, extensive testing with a number of different variable combinations are carried out. The final controls established were felt to:

- 1) Produce minimal product usage distortion when compared with the weighting method;
- 2) Preserve product class inter-relationships within magazine reader groups.

In PMB 2008 the ascription model was applied within year, within each of 24 cells, (sex within each of 12 regional classifications). Of the 12,466 respondents in Sample A (Oct 05 to Sept 06), 7698 completed the leave-behind, product questionnaire and 4768 did not and required ascription. Of the 12,449 respondents in Sample B (Oct 06 to Sept 07), 7682 completed the leave-behind, product questionnaire and 4767 did not and required ascription. The total number requiring ascription is, therefore, 9535.

The conditions for acceptance within each cell are indicated on the following charts. Each respondent with missing data was randomly matched on each of the listed variables on the following charts to a respondent with no missing data. All conditions (Y) had to be met or an alternate respondent match was sought.

Two blocks of variables were used in this model: a block of mandatory variables where a match in all cases was required at the 100% level; a block of optional variables where a match of at least one was required. Match levels are reported for each of the optional variables.

After completing the initial run, of the 9535 requiring ascription, 943 from Sample A and 960 from Sample B were left unascribed, that is, the conditions for a suitable donor-recipient match were not met. A second ascription attempt was then undertaken after converting two of the mandatory variables, (company size and level of business purchase involvement) to optional variables.

After the second attempt, 121 respondents from Sample A and 103 from Sample B, or 2.3% of those with missing product data, (0.9% of the total sample), could not be matched. Since the following conditions within the defined regional cells were not met for these respondents, they were classified as “not stated” on all relevant product data.

The ascription variables and match levels achieved for both the mandatory and optional variables for each of Sample A and Sample B are detailed on the following pages. As well, the actual number of respondents in each of the ascription cells before and after ascription is provided.

PMB 2008 Ascription Variables—Mandatory

Sample A: 100% Sample B: 100%	Leave-Behind: Age							
	12–14	15–17	18–24	25–34	35–49	50–59	60–64	65 & Over
Personal: Age								
12–14	Y	Y	N	N	N	N	N	N
15–17	Y	Y	Y	N	N	N	N	N
18–24	N	Y	Y	Y	N	N	N	N
25–34	N	N	Y	Y	Y	N	N	N
35–49	N	N	N	Y	Y	Y	N	N
50–59	N	N	N	N	Y	Y	Y	N
60–64	N	N	N	N	N	Y	Y	Y
65 & Over	N	N	N	N	N	N	Y	Y

Sample A: 100% Sample B: 100%	Leave-Behind: Household Income						
	Under \$20M	\$20M To \$34M	\$35M To \$49M	\$50M To \$74M	\$75M To \$100M	Over \$100M	
Household Income							
Under \$20M	Y	Y	N	N	N	N	
\$20M–\$34M	Y	Y	Y	N	N	N	
\$35M–\$49M	N	Y	Y	Y	N	N	
\$50M–\$74M	N	N	Y	Y	Y	N	
\$75M–\$100M	N	N	N	Y	Y	Y	
Over \$100M	N	N	N	N	Y	Y	

Sample A: 100% Sample B: 100%	Leave-Behind: Household Size			
	1	2	3	4 +
Personal: Household Size				
1	Y	Y	N	N
2	Y	Y	Y	N
3	N	Y	Y	Y
4 Or More	N	N	Y	Y

PMB 2008 Ascription Variables—Mandatory (Continued)

Sample A: 100% Sample B: 100%	Leave-Behind: Occupation					
	Profes- sional	Senior Managers/ Owners	Other Managers	Tech./ Sales/ Teaching/ Other White/ Cler./Sec.	Skilled/ Unskilled/ Primary	Other

Personal: Occupation

Professionals	Y	Y	N	N	N	N
Senior Managers/Owners	Y	Y	Y	N	N	N
Other Managers	N	Y	Y	Y	N	N
Technical/Sales/Teaching/ Other White/Clerical/Secretarial	N	N	Y	Y	Y	N
Skilled/Unskilled/Primary	N	N	N	Y	Y	Y
Other	N	N	N	N	Y	Y

Sample A: 100% Sample B: 100%	Leave-Behind: Principal Grocery Shopper		
	Yourself	Other Household Member	Yourself & Other Equally

Personal: Principal Grocery Shopper

Yourself	Y	N	Y
Other Household Member	N	Y	N
Yourself & Other Equally	Y	N	Y

Sample A: 100% Sample B: 100%	Leave-Behind: Personal Income				
	Under \$20M	\$20M To \$34M	\$35M To \$49M	\$50M To \$74M	\$75M & Over

Personal: Income

Under \$20M	Y	Y	N	N	N
\$20M–\$34M	Y	Y	Y	N	N
\$35M–\$49M	N	Y	Y	Y	N
\$50M–\$74M	N	N	Y	Y	Y
\$75M & Over	N	N	N	Y	Y

PMB 2008 Ascription Variables—Mandatory (Continued)

Sample A: 100% Sample B: 100%	Leave-Behind: Business Purchase Involvement Any	
	Yes	No
Personal: Business Purchase Involvement¹		
Any:		
YES	Y	N
NO	N	Y

Sample A: 100% Sample B: 100%	Leave-Behind: Company Size						Not Ap- plicable
	Under 10	10–49	50–99	100–499	500–999	1000 +	
Personal: Company¹ Size							
Under 10	Y	Y	N	N	N	N	N
10–49	Y	Y	Y	N	N	N	N
50–99	N	Y	Y	Y	N	N	N
100–499	N	N	Y	Y	Y	N	N
500–999	N	N	N	Y	Y	Y	N
1000 +	N	N	N	N	Y	Y	N
Not Applicable/DK	N	N	N	N	N	N	Y

¹ After the initial run, these variables became optional for the remaining 1200 respondents who were left unascribed.

PMB 2008 Ascription Variables—Optional Variables: First Run

Sample A: 91.1%	Leave-Behind: Professional/Business Manager		
Sample B: 91.6%	SPBM	Other	
Personal: Professional Business Managers			
SPBM	Y	N	
Other	N	Y	

Sample A: 89.1%	Leave-Behind: Presence Of Children			
Sample B: 89.6%	Under 2	2-5	6-11	12-17
Personal: Presence Of Children				
Under 2	Y	Y	N	N
2-5	Y	Y	Y	N
6-11	N	Y	Y	Y
12-17	N	N	Y	Y

Sample A: 85.3%	Leave-Behind: Type Of Dwelling	
Sample B: 86.1%	Apartment	Other
Personal: Type Of Dwelling		
Apartment	Y	N
Other	N	Y

Sample A: 78.8%	Leave-Behind: Home Ownership	
Sample B: 80.0%	Own	Other
Personal: Home Ownership		
Own	Y	N
Do Not Own	N	Y

Sample A: 81.5%	Leave-Behind: Marital Status	
Sample B: 81.6%	Married/ Living Together	Other
Personal: Marital Status		
Married/Living Together	Y	N
Other	N	Y

Sample A: 63.6%	Leave-Behind: Education		
Sample B: 63.5%	More	High School Graduate	Less
Personal: Education			
More	Y	N	N
High School Graduate	N	Y	N
Less	N	N	Y

PMB 2008 Ascription Variables—Optional Variables: Second Run

Sample A: 79.4%	Leave-Behind: Professional/Business Manager	
Sample B: 78.0%	SPBM	Other

Personal: Professional Business Managers

SPBM	Y	N
Other	N	Y

Sample A: 84.1%	Leave-Behind: Presence Of Children			
Sample B: 82.4%	Under 2	2-5	6-11	12-17

Personal: Presence Of Children

Under 2	Y	Y	N	N
2-5	Y	Y	Y	N
6-11	N	Y	Y	Y
12-17	N	N	Y	Y

Sample A: 84.5%	Leave-Behind: Type Of Dwelling	
Sample B: 82.6%	Apartment	Other

Personal: Type Of Dwelling

Apartment	Y	N
Other	N	Y

Sample A: 78.6%	Leave-Behind: Home Ownership	
Sample B: 77.6%	Own	Other

Personal: Home Ownership

Own	Y	N
Do Not Own	N	Y

Sample A: 77.6%	Leave-Behind: Marital Status	
Sample B: 77.7%	Married/ Living Together	Other

Personal: Marital Status

Married/Living Together	Y	N
Other	N	Y

Sample A: 65.5%	Leave-Behind: Education		
Sample B: 67.0%	More	High School Graduate	Less

Personal: Education

More	Y	N	N
High School Graduate	N	Y	N
Less	N	N	Y

PMB 2008 Ascription Variables—Optional Variables: Second Run
(continued)

Sample A: 54.3% Sample B: 54.3%	Leave-Behind: Business Purchase Involvement	
	Yes	No
Personal: Business Purchase Involvement		
Any:		
YES	Y	N
NO	N	Y

Sample A: 19.7% Sample B: 19.0%	Leave-Behind: Company Size						Not Ap- plicable
	Under 10	10–49	50–99	100–499	500–999	1000 +	
Personal: Company Size							
Under 10	Y	Y	N	N	N	N	N
10–49	Y	Y	Y	N	N	N	N
50–99	N	Y	Y	Y	N	N	N
100–499	N	N	Y	Y	Y	N	N
500–999	N	N	N	Y	Y	Y	N
1000 +	N	N	N	N	Y	Y	N
Not Applicable/DK	N	N	N	N	N	N	Y

**Ascription Cell Configuration & Results: First Run — Sample A
PMB 2008**

	Interviews October 2005 to September 2006							
	Males				Females			
	Total Com- pletions (5657)	With Leave- Behind (3342)	Ascribed Leave- Behind (2315)	Failed (481)	Total Com- pletions (6809)	With Leave- Behind (4356)	Ascribed Leave- Behind (2453)	Failed (462)
Region:								
Atlantic (Total)	283	204	79	25	406	321	85	17
Quebec:								
Montreal (Non French)	223	115	108	44	273	138	135	38
Montreal (French)	963	545	418	44	1117	677	440	68
Chicoutimi/Jonquiere/ Gatineau/Quebec City/ Sherbrooke And Balance Of 100M +	272	196	76	24	337	227	110	37
Balance Under 100M	213	110	103	32	321	212	109	25
Ontario:								
Toronto	1030	641	389	37	1089	717	372	44
Hamilton/Ottawa And Balance Of 100M +	632	397	235	55	744	485	259	52
Balance Under 100M	412	252	160	33	506	322	184	29
Manitoba/Saskatchewan/ Alberta:								
Calgary/Edmonton/ Winnipeg And Balance Of 100M +	539	286	253	54	648	409	239	43
Balance Under 100M	280	161	119	37	399	280	119	19
British Columbia:								
Vancouver	529	294	235	53	618	369	249	47
Balance Of British Columbia	281	141	140	43	351	199	152	43

**Ascription Cell Configuration & Results: Second Run — Sample A
PMB 2008**

	Interviews October 2005 To September 2006					
	Males			Females		
	Total Failed First Run (481)	Ascribed (417)	Failed (64)	Failed First Run (462)	Ascribed (405)	Failed (57)
Region:						
Atlantic (Total)	25	21	4	17	13	4
Quebec:						
Montreal (Non French)	44	29	15	38	29	9
Montreal (French)	44	43	1	68	62	6
Chicoutimi/Jonquiere/ Gatineau/Quebec City/ Sherbrooke And Balance Of 100M +	24	20	4	37	33	4
Balance Under 100M	32	25	7	25	22	3
Ontario:						
Toronto	37	33	4	44	41	3
Hamilton/Ottawa And Balance Of 100M +	55	50	5	52	44	8
Balance Under 100M	33	27	6	29	25	4
Manitoba/Saskatchewan/ Alberta:						
Calgary/Edmonton/ Winnipeg And Balance Of 100M +	54	53	1	43	39	4
Balance Under 100M	37	32	5	19	15	4
British Columbia:						
Vancouver	53	47	6	47	44	3
Balance Of British Columbia	43	37	6	43	38	5

**Ascription Cell Configuration & Results: First Run — Sample B
PMB 2008**

	Interviews October 2006 to September 2007							
	Males				Females			
	Total Com- pletions (5734)	With Leave- Behind (3360)	Ascribed Leave- Behind (2374)	Failed (550)	Total Com- pletions (6715)	With Leave- Behind (4322)	Ascribed Leave- Behind (2393)	Failed (410)
Region:								
Atlantic (Total)	285	214	71	21	428	325	103	20
Quebec:								
Montreal (Non French)	252	116	136	51	267	147	120	37
Montreal (French)	979	527	452	77	1065	604	461	72
Chicoutimi/Jonquiere/ Gatineau/Quebec City/ Sherbrooke And Balance Of 100M +	264	179	85	31	294	224	70	19
Balance Under 100M	223	116	107	40	374	245	129	27
Ontario:								
Toronto	999	654	345	38	1076	736	340	30
Hamilton/Ottawa And Balance Of 100M +	665	392	273	49	750	479	271	33
Balance Under 100M	396	240	156	31	509	339	170	25
Manitoba/Saskatchewan/ Alberta:								
Calgary/Edmonton/ Winnipeg And Balance Of 100M +	563	344	219	52	603	381	222	37
Balance Under 100M	274	128	146	55	409	274	135	21
British Columbia:								
Vancouver	568	305	263	57	586	350	236	52
Balance Of British Columbia	266	145	121	48	354	218	136	37

**Ascription Cell Configuration & Results: Second Run — Sample B
PMB 2008**

	Interviews October 2006 To September 2007					
	Males			Females		
	Total Failed First Run (550)	Ascribed (488)	Failed (62)	Failed First Run (410)	Ascribed (369)	Failed (41)
Region:						
Atlantic (Total)	21	20	1	20	18	2
Quebec:						
Montreal (Non French)	51	44	7	37	30	7
Montreal (French)	77	69	8	72	68	4
Chicoutimi/Jonquiere/ Gatineau/Quebec City/ Sherbrooke And Balance Of 100M +	31	29	2	19	18	1
Balance Under 100M	40	28	12	27	25	2
Ontario:						
Toronto	38	35	3	30	29	1
Hamilton/Ottawa And Balance Of 100M +	49	49	—	33	32	1
Balance Under 100M	31	27	4	25	23	2
Manitoba/Saskatchewan/ Alberta:						
Calgary/Edmonton/ Winnipeg And Balance Of 100M +	52	48	4	37	30	7
Balance Under 100M	55	44	11	21	19	2
British Columbia:						
Vancouver	57	52	5	52	47	5
Balance Of British Columbia	48	43	5	37	30	7