

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 2009 the ascription model was applied within year, within each of 24 cells, (sex within each of 12 regional classifications). Of the 12,499 respondents in Sample A (Oct 06 to Sept 07), 7,682 completed the leave-behind, product questionnaire and 4,817 did not and required ascription. Of the 12,438 respondents in Sample B (Oct 07 to Sept 08), 6,803 completed the leave-behind, product questionnaire and 5,635 did not and required ascription. The total number requiring ascription is, therefore, 10,452.

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 10,452 requiring ascription, 960 from Sample A and 1,321 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, 103 respondents from Sample A and 133 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 2009 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 2009 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 2009 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 2009 Ascription Variables—Optional Variables: First Run

Sample A: 91.6%	Leave-Behind: Professional/Business Manager		
Sample B: 91.4%	SPBM	Other	
Personal: Professional Business Managers			
SPBM	Y	N	
Other	N	Y	

Sample A: 89.6%	Leave-Behind: Presence Of Children			
Sample B: 90.3%	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: 86.1%	Leave-Behind: Type Of Dwelling	
Sample B: 87.1%	Apartment	Other
Personal: Type Of Dwelling		
Apartment	Y	N
Other	N	Y

Sample A: 80.0%	Leave-Behind: Home Ownership	
Sample B: 79.8%	Own	Other
Personal: Home Ownership		
Own	Y	N
Do Not Own	N	Y

Sample A: 81.6%	Leave-Behind: Marital Status	
Sample B: 82.6%	Married/ Living Together	Other
Personal: Marital Status		
Married/Living Together	Y	N
Other	N	Y

Sample A: 63.5%	Leave-Behind: Education		
Sample B: 65.8%	More	High School Graduate	Less
Personal: Education			
More	Y	N	N
High School Graduate	N	Y	N
Less	N	N	Y

PMB 2009 Ascription Variables—Optional Variables: Second Run

Sample A: 78.0% Sample B: 78.4%	Leave-Behind: Professional/Business Manager	
	SPBM	Other
Personal: Professional Business Managers		
SPBM	Y	N
Other	N	Y

Sample A: 82.4% Sample B: 82.4%	Leave-Behind: Presence Of Children			
	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: 82.6% Sample B: 85.1%	Leave-Behind: Type Of Dwelling	
	Apartment	Other
Personal: Type Of Dwelling		
Apartment	Y	N
Other	N	Y

Sample A: 77.6% Sample B: 79.3%	Leave-Behind: Home Ownership	
	Own	Other
Personal: Home Ownership		
Own	Y	N
Do Not Own	N	Y

Sample A: 77.7% Sample B: 79.0%	Leave-Behind: Marital Status	
	Married/ Living Together	Other
Personal: Marital Status		
Married/Living Together	Y	N
Other	N	Y

Sample A: 67.0% Sample B: 64.7%	Leave-Behind: Education		
	More	High School Graduate	Less
Personal: Education			
More	Y	N	N
High School Graduate	N	Y	N
Less	N	N	Y

PMB 2009 Ascription Variables—Optional Variables: Second Run
(continued)

Sample A: 54.3% Sample B: 56.2%	Leave-Behind: Business Purchase Involvement Any	
	Yes	No
Personal: Business Purchase Involvement		
Any:		
YES	Y	N
NO	N	Y

Sample A: 19.0% Sample B: 18.1%	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 2009**

	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 A
PMB 2009**

	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

**Ascription Cell Configuration & Results: First Run — Sample B
PMB 2009**

	Interviews October 2007 to September 2008							
	Males				Females			
	Total Com- pletions (5664)	With Leave- Behind (2882)	Ascribed Leave- Behind (2062)	Failed (720)	Total Com- pletions (6774)	With Leave- Behind (3921)	Ascribed Leave- Behind (2252)	Failed (601)
Region:								
Atlantic (Total)	280	186	65	29	410	277	105	28
Quebec:								
Montreal (Non French)	259	99	86	74	281	128	104	49
Montreal (French)	930	428	411	91	1103	611	407	85
Chicoutimi/Jonquiere/ Gatineau/Quebec City/ Sherbrooke And Balance Of 100M +	262	155	68	39	322	205	84	33
Balance Under 100M	232	115	85	32	338	210	99	29
Ontario:								
Toronto	1015	600	367	48	1089	706	347	36
Hamilton/Ottawa And Balance Of 100M +	656	304	270	82	719	386	261	72
Balance Under 100M	413	235	132	46	495	319	138	38
Manitoba/Saskatchewan/ Alberta:								
Calgary/Edmonton/ Winnipeg And Balance Of 100M +	546	243	197	106	642	335	226	81
Balance Under 100M	255	138	69	48	392	234	125	33
British Columbia:								
Vancouver	544	254	219	71	615	317	227	71
Balance Of British Columbia	272	125	93	54	368	193	129	46

**Ascription Cell Configuration & Results: Second Run — Sample B
PMB 2009**

	Interviews October 2007 To September 2008					
	Males			Females		
	Total Failed First Run (720)	Ascribed (643)	Failed (77)	Failed First Run (601)	Ascribed (545)	Failed (56)
Region:						
Atlantic (Total)	29	23	6	28	26	2
Quebec:						
Montreal (Non French)	74	64	10	49	44	5
Montreal (French)	91	89	2	85	80	5
Chicoutimi/Jonquiere/ Gatineau/Quebec City/ Sherbrooke And Balance Of 100M +	39	35	4	33	27	6
Balance Under 100M	32	22	10	29	23	6
Ontario:						
Toronto	48	48	0	36	34	2
Hamilton/Ottawa And Balance Of 100M +	82	73	9	72	66	6
Balance Under 100M	46	40	6	38	37	1
Manitoba/Saskatchewan/ Alberta:						
Calgary/Edmonton/ Winnipeg And Balance Of 100M +	106	99	7	81	76	5
Balance Under 100M	48	43	5	33	28	5
British Columbia:						
Vancouver	71	62	9	71	67	4
Balance Of British Columbia	54	45	9	46	37	9