

Patron Views of Food Service
at the
Castle Deli and the Castle Commons

INSTITUTIONAL STUDIES



Smithsonian
Institution



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at the
Castle Deli and the Castle Commons**

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Preface

This study of patrons at the two food serveries located in the Smithsonian Castle, The Commons Dining Room and the Castle Deli, a.k.a., the Boiler Room was conducted in July 1999 for the Smithsonian Institution Concessions. Exiting patrons were personally interviewed by professional interviewers, rather than filling out questionnaires themselves.

The report reflects the efforts of several individuals who deserve acknowledgement. Jeanne Sheldon, Food Service Concessions Manager, initiated the study and provided assistance and advice throughout. In the Institutional Studies Office, Kerry R. DiGiacomo participated in the questionnaire development, ably trained interviewers, and made many helpful suggestions in the course of the study. David A. Karns designed the study, conducted the analysis and wrote this report. The survey was administered by Shugoll Research. The high response rates, 92% in the Commons Dining Room and 81% among Deli patrons, reflect the efforts of their interviewers. Juan Sandoval, Castle General Manager for Sodexo Marriott, facilitated the work in the Castle.

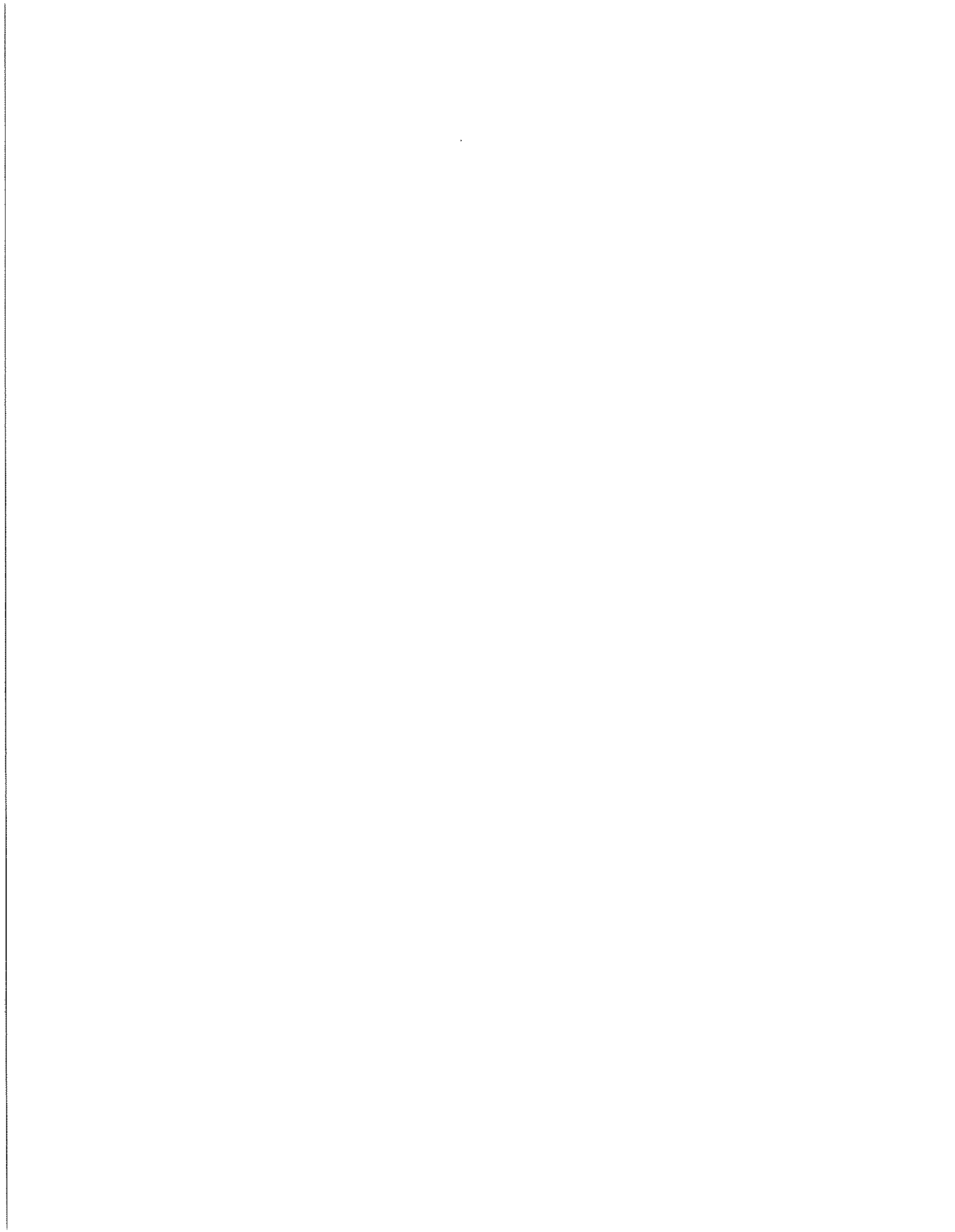
Clearly, without the enthusiastic co-operation of Smithsonian visitors and staff, this study could not have been conducted.

Zahava D. Doering, Director
Institutional Studies Office



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Patron Views of Food Service at the Castle Deli and the Castle Commons

SUMMARY

The Institutional Studies Office conducted a scientific survey of patrons at the two food serveries in the Smithsonian Castle, the Commons Dining Room and the Castle Deli, as a follow-up to a survey administered in 1998. Data were collected in July 1999. Since different questions were asked, and different interviewing procedures were used, the 1999 survey is not a replication of the 1998 survey.¹

The Commons Dining Room serves a valuable member and public relations function for the Smithsonian Institution. It is open for lunch to Smithsonian Contributing Members, Resident Associate Program members, and staff on weekdays. The Commons is also open to non-members for Saturday lunch and Sunday brunch.

Nearly half of the Commons patrons are eating there for the first time. Approximately one-third of the patrons are members of the Resident Associate Program, one-third are general public non-members, and the remaining third are Contributing Members and Smithsonian staff. About two-thirds purchase the full buffet eating option, while the rest reported choosing the soup and salad buffet. Patrons of the Castle Commons Dining Room are generally very satisfied with their eating experience. Approximately 40% to 50% of the surveyed patrons said that they were "delighted" with various attributes of their food service experiences.

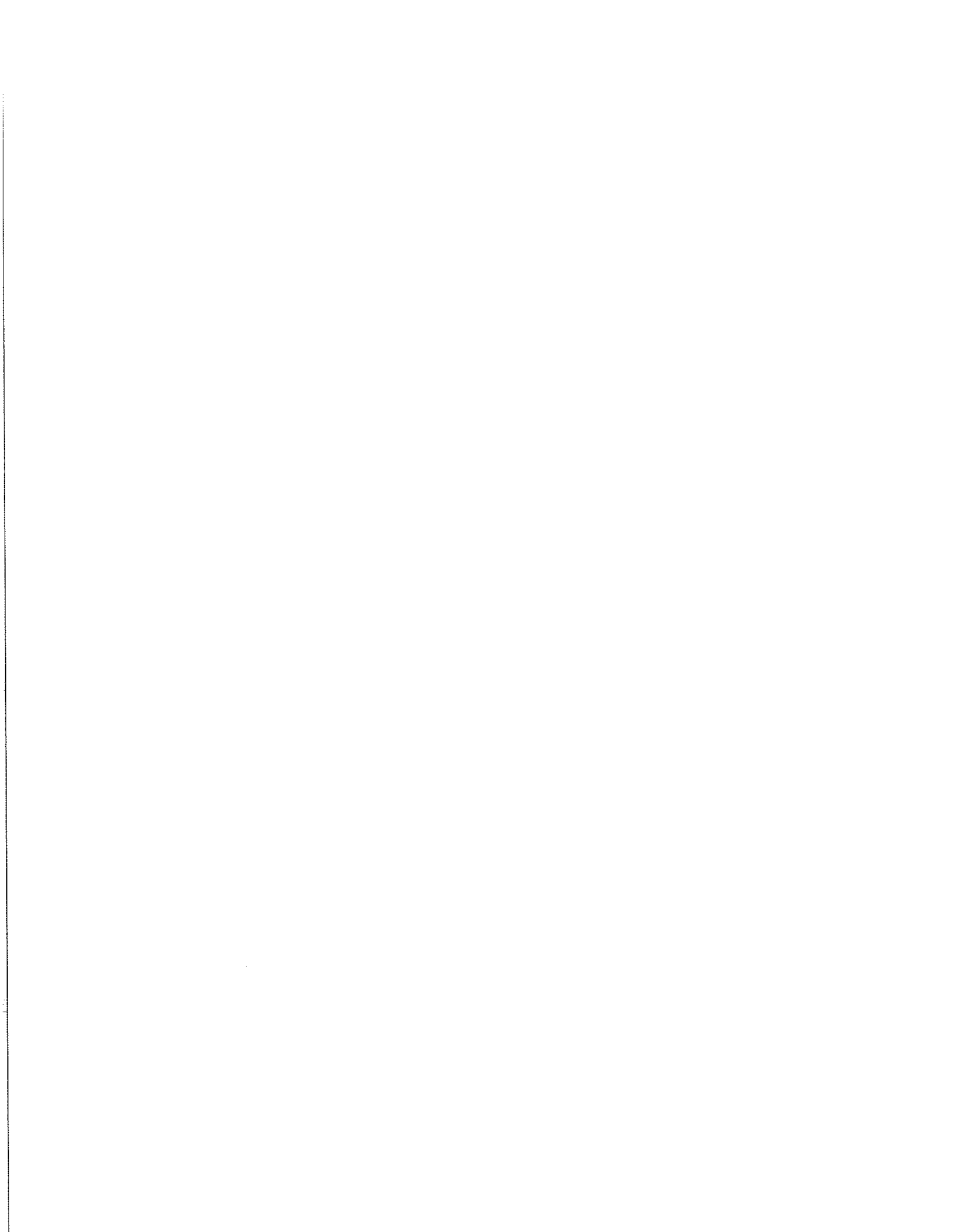
The Castle Deli, a.k.a., the "Boiler Room," provides food service for Smithsonian employees and volunteers. The Deli is open between 7:00 A.M. and 3:00 P.M. on weekdays. Three types of food service are offered: breakfast, lunch, and snacks.

About one in six patrons can be categorized as a heavy user of both breakfast and lunch (16%). Another 30% of patrons eat lunch frequently at the Deli, but rarely eat breakfast at the Deli. About two-fifths (44%) of the Deli patrons are infrequent patrons for either breakfast or lunch. The remaining 10% are frequent breakfast eaters, but rarely eat lunch at the Deli.

Although, quality and servicescape evaluations by patrons are reasonably satisfactory, they express more dissatisfaction with the variety of food options. The percentage of Deli patrons expressing "delight" with their eating experience is substantially lower than for patrons of the Commons Dining Room.

¹ See the description of the survey methodology on page 10.

The Deli could substantially increase its market share and penetration in two patron segments: (1) Frequent lunch users but less frequent breakfast users and (2) Users who infrequently eat at the Deli for either breakfast or lunch. Since these patrons are already using the Deli for some food services, they are familiar with the Deli. The Deli needs to make the food service experience more valuable and satisfying to encourage current patrons to increase their use. Increasing use by current users should be easier to achieve than attracting new users from the population of non-users.



FOOD SERVICE AT THE CASTLE COMMONS DINING ROOM: A SURVEY OF PATRONS

Food service behavior

- Two-thirds of Commons' patrons report purchasing the full-buffet (68%).² (See Table A.1.)
 - Soup and salad purchases are reported more frequently on weekdays (51%) than weekends (21%).
 - Over half of Smithsonian staff eating at the Commons choose the soup and salad (57%).
 - Older patrons (over 55 years old) are most likely to purchase soup and salad (41%).
- Nearly half of Commons' patrons are eating at the dining room for the first time (46%), while one-fifth report eating monthly or more frequently (22%). (Table A.2.)
 - Soup and salad purchasers, weekday patrons, and Smithsonian staff are more likely to be repeat patrons at the Castle Commons Dining Room.
 - Resident Associate members (RAP) represent a market segment with higher repeat purchases than other patrons although nearly half (48%) say that they have rarely or never eaten at the Commons Dining Room previously.
 - The weekend meal segment, members (especially Contributing Members), and the general public are segments whose eating experience reflects a first or rare experience.
- Nearly seven out of ten Smithsonian staff eating at the Commons do so on a weekday (69%), while similar percentages of Contributing Members, Resident Associates, and the general public visit on a weekend (62%, 63%, and 92% respectively). (Table A.3)

Demographic characteristics

- More than one-third of the Commons' patrons were RAP members (38%) while another third were general public patrons (32%). The remaining patrons were either Contributing Members (18%) or Smithsonian staff (12%). (Table A.4.)
 - Smithsonian staff and volunteers made up one-eighth of Commons' patrons interviewed (12%), although they composed one-quarter of weekday patrons (25%).
 - Interestingly, younger patrons (under 35 years old) were disproportionately members of the general public patron segment (64%).
- In general, the Commons' patrons represented a broad distribution across the age spectrum with the greatest percentages between 45 and 64 (53%).
 - The median age of all patrons is 50.6 years old.
 - As noted before, soup and salad purchasers tend to be slightly older (median age 56) than full buffet purchasers (median age 48). (Table A.5.)

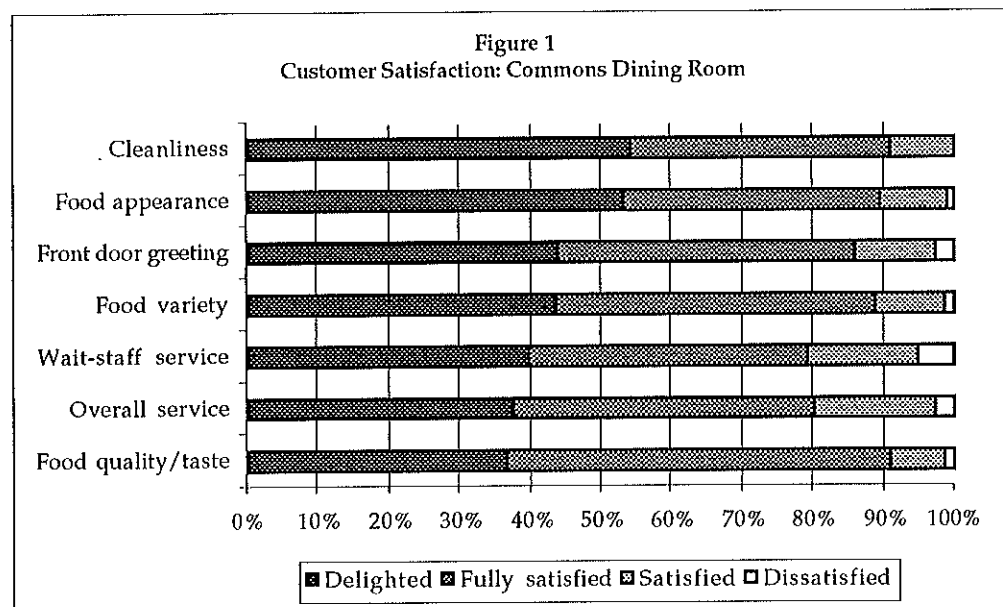
² All tables are presented in an Appendix to this report. The reader should read the preliminary discussion on "How to Read Tables."



- Three-fifths of all Castle Commons Dining Room patrons are female (61%), identical to the percentage in the 1998 survey.

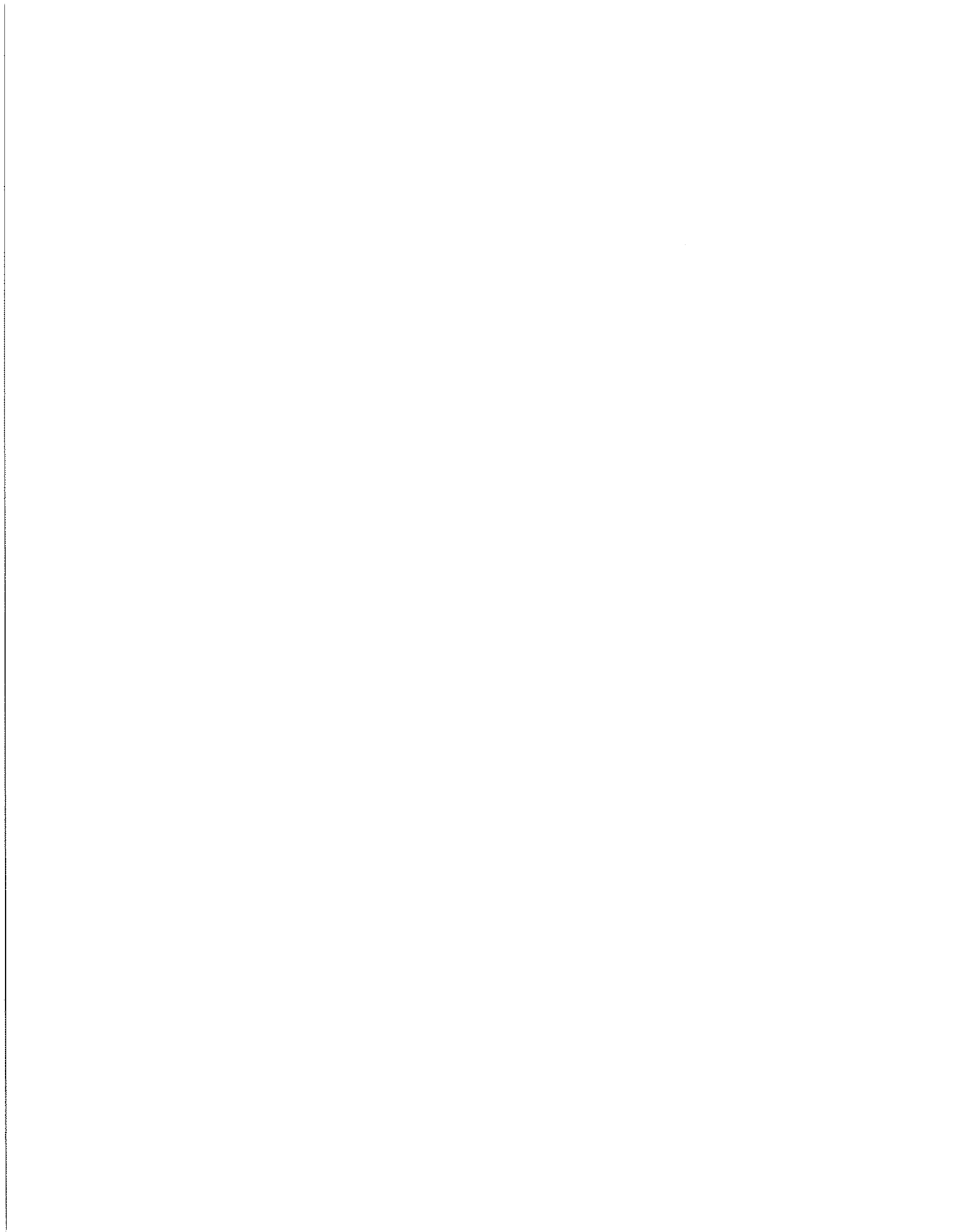
Satisfaction with food service at the Commons Dining Room

- Patrons were asked to rate their satisfaction on each of seven attributes of the experience of eating at the Commons Dining Room. The seven food service attributes measured were: (1) Overall food quality/taste; (2) Overall service; (3) Front door greeting by Hostess (Host); (4) Wait-staff service; (5) Overall food variety; (6) Overall food appearance; and (7) Cleanliness of dining room.
 - Satisfaction was highest for cleanliness of the dining room (54% delighted) and overall food appearance (53% delighted).
 - Conversely it was lowest for wait-staff service and overall service. (Figure 1)



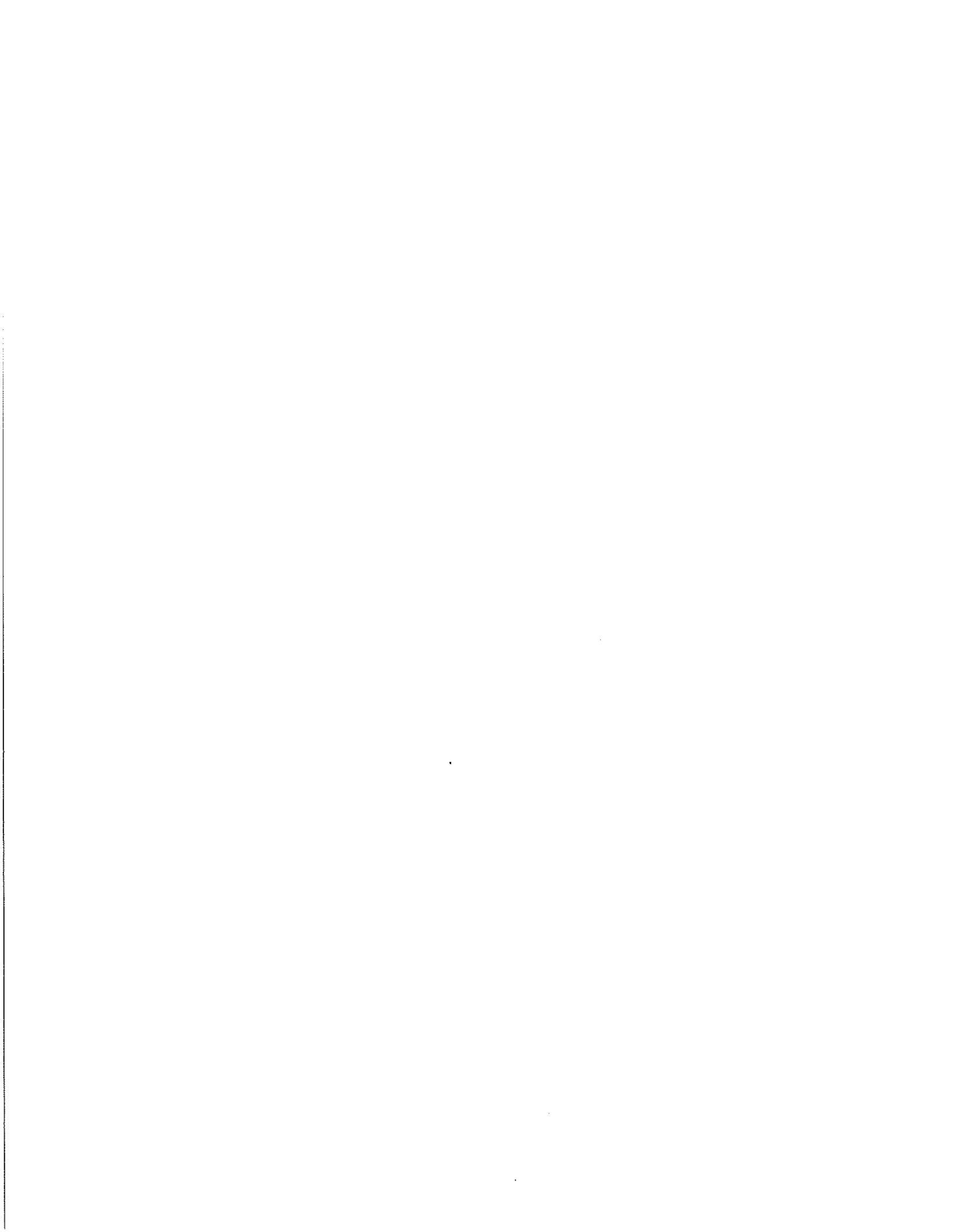
Source: Table A.7.

- Three-eighths of the diners indicated that they were “delighted” with the overall food quality in the Commons (37%). Full buffet purchasers and weekend patrons were more delighted than other patrons, while Smithsonian staff were less satisfied. (Table A.8.)
- Commons’ patrons were less satisfied with the overall service than most other dining attributes. (Table A.9.)
 - Nearly one-fifth (20%) rated their satisfaction as “satisfied” or less.
 - While both weekday and weekend patrons had low mean ratings for overall service, twice as many weekend patrons were delighted (45%) as weekday patrons (23%).



- About as many patrons were delighted with their front door greeting (44%) as were "fully satisfied" (42%). About one in six patrons were less than fully satisfied (15%). (Table A.10.)
- Satisfaction with the wait-staff service was lower than satisfaction with any other dining attribute. One-fifth were less than fully satisfied (21%), compared to 40% delighted. (Table A.11.)
 - Weekday patrons were half as delighted (24%) as weekend patrons (47%).
 - Older patrons (over 55 years old) were much more satisfied (10% less than fully satisfied), than younger patrons among whom more than one-quarter were less than fully satisfied.
- There were significant differences between full buffet and soup and salad patrons regarding overall food variety. (Table A.12)
 - Full buffet patrons were more satisfied (51% delighted) than soup and salad patrons (28% delighted).
 - Fewer Smithsonian staff were delighted (19%) than other patrons.
 - Overall, 44% of patrons were delighted with the overall food variety.)
- More than half of the patrons were delighted by the overall food appearance in the Castle Commons Dining Room (53% delighted with a mean rating of 4.42). All patron segments essentially concurred in this level of satisfaction. (Table A.13.)
- Cleanliness of the dining room received the highest total satisfaction rating with 54% saying that they were delighted. The mean rating was 4.45.³ Although the total rating was high, soup and salad patrons and Smithsonian staff expressed a lower level of delight (44% and 23% respectively). The feelings of these two segments are reflected in less delight among weekday patrons (39%) than among weekend patrons (61%). (Table A.14.)
- The Castle Commons Dining Room survey respondents had an opportunity to make suggestions or comments for the management of the Commons. Since all respondents did not respond to a fixed list, the comments provide a non-scientific summary of major feelings expressed by a subset of respondents about topics they wished to mention. The respondent comments should be read with a caveat that they are suggestive, but not necessarily representative.
 - In general, the Commons Dining Room received more positive comments than negative comments.
 - Some of the negative comments were related to the wait-staff service.
 - Others mentioned a feeling of excessively long service waiting time.
 - Finally, some negative comments indicated a feeling that food prices are somewhat high.

³ The rating scale was assigned the following values: Delighted = 5; Fully Satisfied = 4, Satisfied = 3, Somewhat Dissatisfied = 2, and Dissatisfied = 1.



FOOD SERVICE AT THE CASTLE DELI/BOILER ROOM: A SURVEY OF PATRONS

Food service behavior

- Half of the Castle Deli survey respondents reported that they had purchased lunch (50%). Approximately one-quarter each said that they were purchasing a snack (25%) or breakfast (23%). (Table B.1.)
- The Castle Deli food service daypart segments are fairly differentiated. That is, frequent breakfast patrons buy breakfasts, but relatively few lunches; frequent lunch patrons buy lunches, but relatively fewer breakfasts.
 - About one-third (35%) of all respondents interviewed at the Castle Deli frequently purchased both breakfast and lunch.
 - Slightly fewer (30%) frequently purchase lunch, but rarely purchase breakfast.
 - Another ten percent are frequent purchasers of breakfast only.
 - Finally, more than two-fifths (44%) buy both breakfast or lunch at the Castle Deli infrequently.
 - The 1999 interview data show fewer reported purchases at the Castle Deli for both breakfast and lunch dayparts than the comparable survey in 1998. The two surveys should not be compared because different questions and sampling methods were used. Differences may be due to question wording rather than altered consumer behavior.⁴
- The average Boiler Room patron reported buying 3.20 breakfasts from some food servery near/on the Mall during the previous two weeks. (Table B.2.)
 - More than 81% of those purchases are made at the Castle Deli (2.62 mean).
 - Half of the patrons (57%) reported no breakfast purchases at the Castle Deli during the previous two weeks.
 - Patrons interviewed during the breakfast daypart reported purchasing more than three breakfasts per week at the Deli (6.17 mean), compared to fewer than one breakfast per week for patrons interviewed during the lunch daypart (1.39 mean).
- The average Deli patron reported buying more than six lunches (6.42 mean) from some food servery near/on the Mall during the previous two weeks. (Table B.3.)
 - Three-fifths of the purchased lunches (62%) were bought at the Deli (3.98 mean).
 - About one-quarter (29%) of the patrons reported no lunch purchases at the Deli.
 - Lunch daypart respondents bought more lunches at the Boiler Room (5.10 mean) as well as concentrating their purchases at the Boiler Room

⁴ The 1998 survey asked, "In an average workweek, how often do you use the Boiler Room/Castle Deli for breakfast?" The 1999 survey asked, "During the last two weeks, how many times did you buy breakfast at the Deli or Boiler Room?" Similar questions were asked about lunch.



(76% of lunch purchases), compared to respondents interviewed during breakfast or snack times

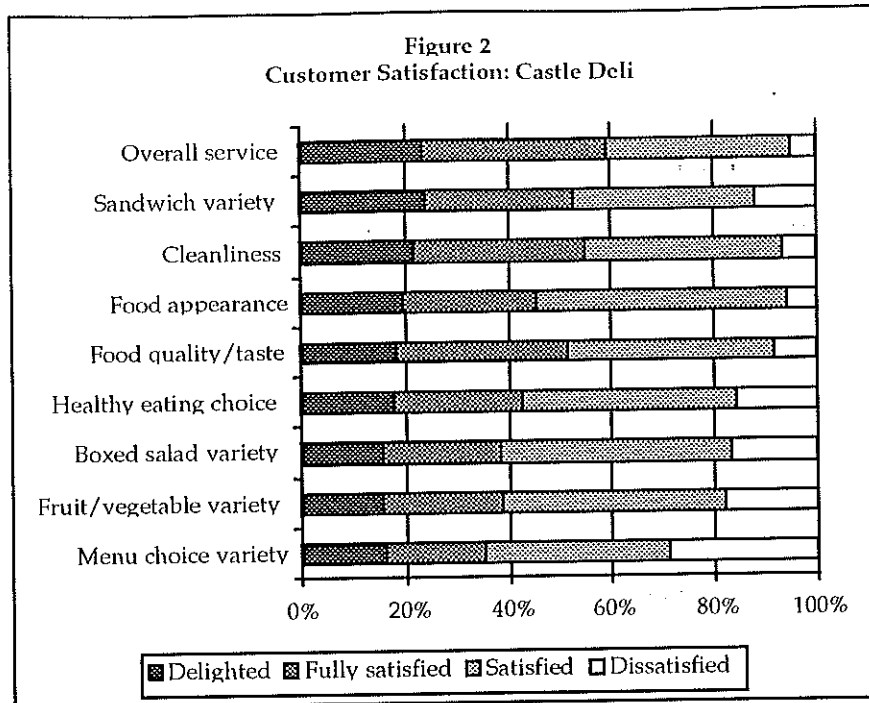
- An average patron purchased 1.84 snacks (mean) in the previous two weeks with 80% of the purchases being made at the Boiler Room (1.48 mean). (Table B.4.)
- One-quarter (26%) of the survey respondents reported purchasing more than four breakfasts over the two week period. These consumers may be referred to as "Frequent" breakfast purchasers. (Table B.5.)
 - Unsurprisingly, patrons interviewed during the breakfast daypart were more likely to be frequent breakfast purchasers (62%).
 - Likewise, frequent lunch purchasers were also more likely to be frequent breakfast purchasers (35%).
- Nearly half (46%) of the Boiler Room patrons can be described as "Frequent lunch" purchasers since they reported buying four or more lunches during the two week period. (Table B.6.)
 - Frequent breakfast purchasers (61%) and lunch daypart respondents (58%) were significantly more likely to be frequent lunch patrons than other respondents.

Demographic characteristics

- Four-fifths of Deli patrons are Smithsonian staff (80%) with the highest presence during breakfast (92%). (Table B.7.)
- The median age of Castle Deli patrons is 39.7 years. The age distribution in the 1999 and 1998 surveys are similar. (Table B.8.)
- More than half of the Castle Deli patrons interviewed were female (55%). Fewer than half of the 1998 respondents were female (43%). (Table B.9.)

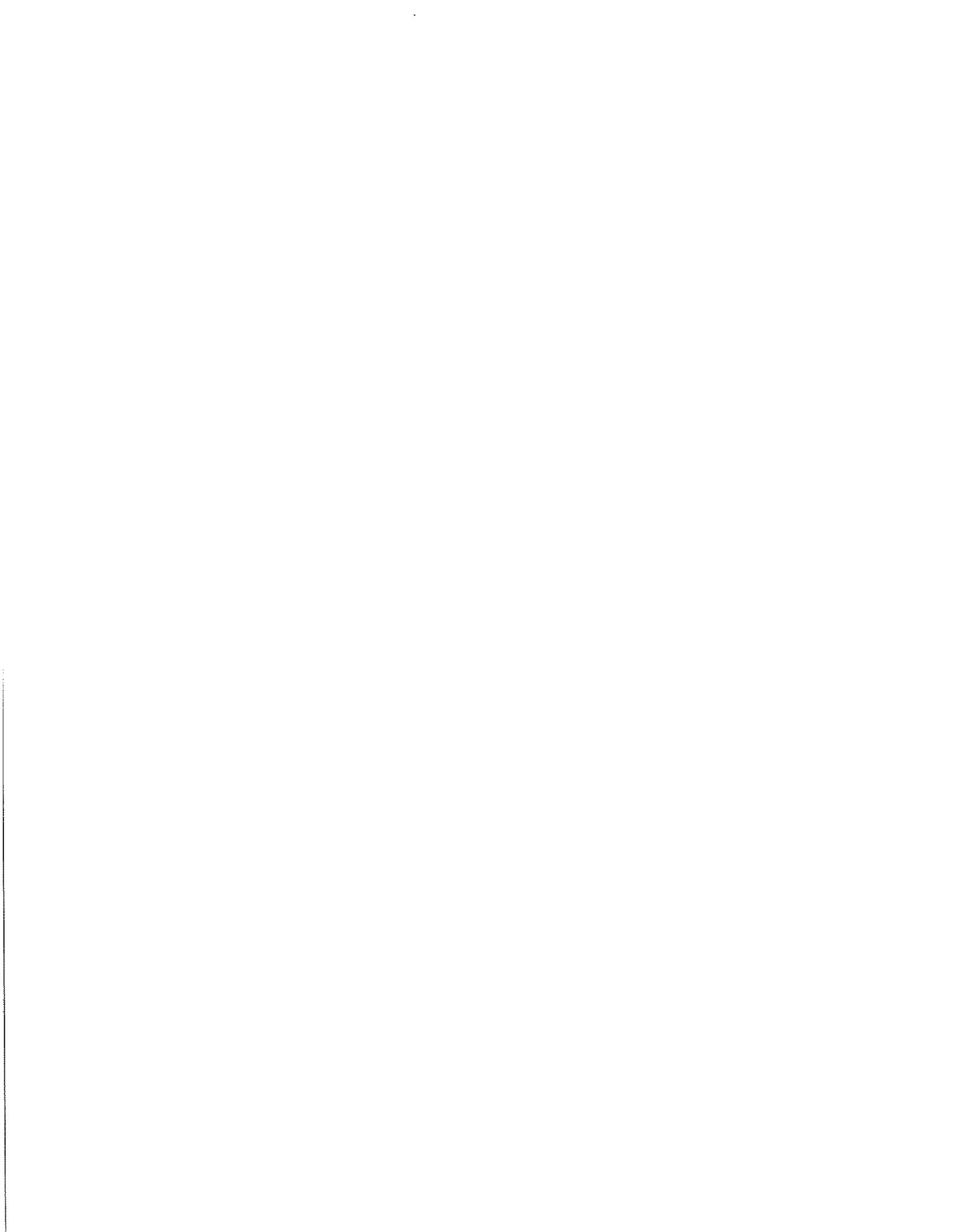
Satisfaction with food service at the Castle Deli

- Castle Deli survey patrons were asked to rate their satisfaction or dissatisfaction with nine food service attributes. The nine attributes were: (1) Overall food quality/ taste; (2) Overall service; (3) Cleanliness of Deli; (4) Variety of menu choices; (5) Overall food appearance; (6) Variety of made-to-order sandwiches; (7) Variety of fresh fruit/vegetables; (8) Variety of boxed salads to-go; and (9) Variety of healthy eating choices. (Figure 2.)
 - In general, the Castle Deli survey respondents rated servicescape issues more favorably than the variety of food offerings.
 - Overall service and the cleanliness of the Deli were the two most highly rated Deli food service attributes.
 - The lowest rated were the variety of menu choices, variety of fresh fruit and vegetables, variety of boxed salads, and the variety of healthy eating choices.

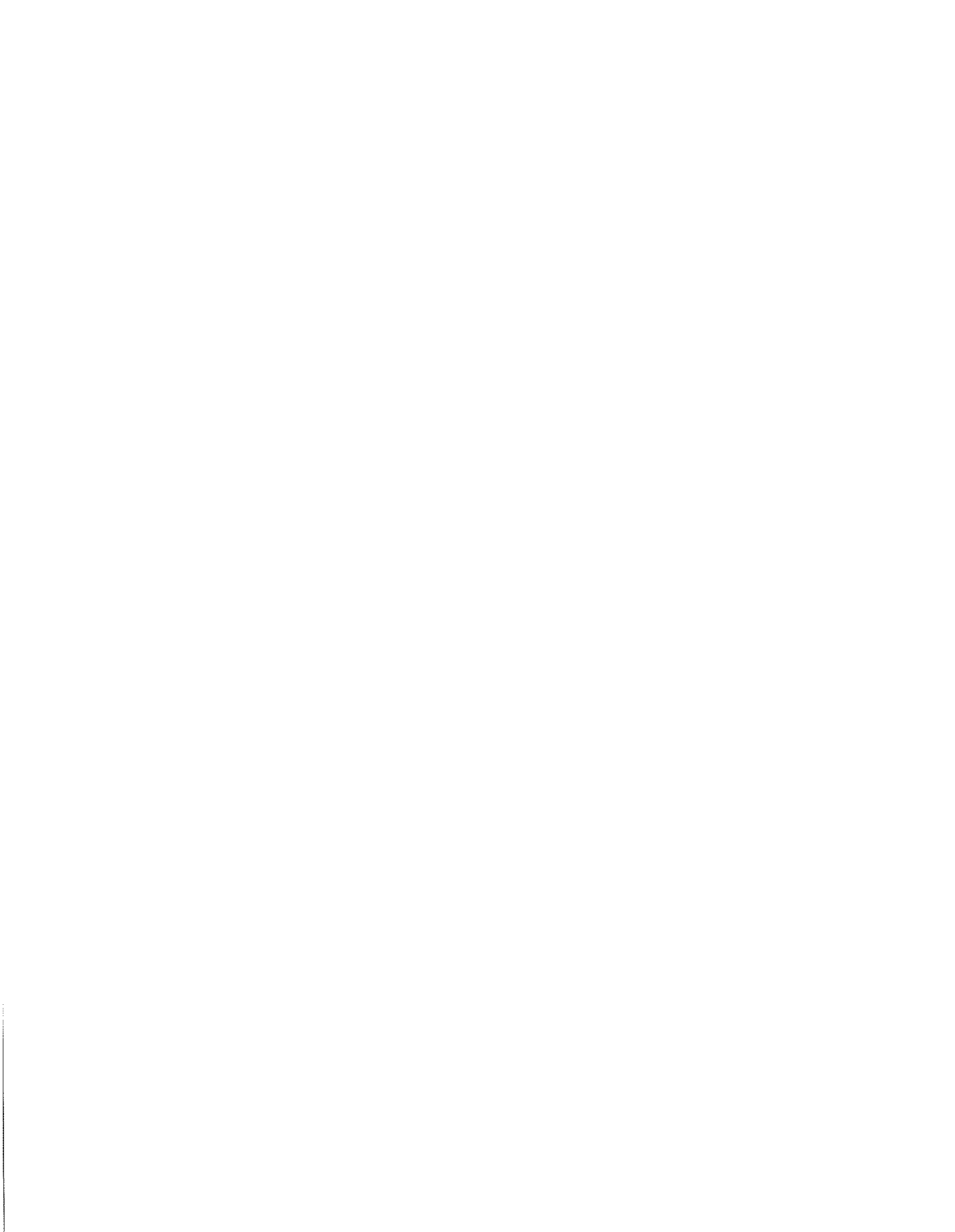


Source: Table B.10.

- Half of Deli respondents said that they were delighted (18%) or fully satisfied (33%) with the overall food quality/taste (mean rating 3.60). Breakfast purchasers and Smithsonian staff were less satisfied than other patrons. (Table B.10.)
- Six out of ten Deli patrons were delighted (24%) or fully satisfied (36%) with the overall service at the Boiler Room. Again Smithsonian staff were less satisfied than other users. (Table B.11.)
- Regarding the cleanliness of the Castle Deli, nearly 60% were delighted (22%) or fully satisfied (33%). (Table B.12.)
- More than a quarter of the Deli respondents said that they were either very dissatisfied (6%) or somewhat dissatisfied (23%) with the variety of menu choices available at the Deli. Patrons during the lunch food service daypart were much more satisfied (22% delighted and 27% fully satisfied) than patrons at other times. (Table B.13.)
- Lunch patrons were significantly more satisfied with the Deli's overall food appearance (28% delighted and 33% fully satisfied) than breakfast patrons (18% delighted and 18% fully satisfied). (Table B.14.)
- More than two-thirds of lunch patrons were satisfied with the variety of made-to-order sandwiches (34% delighted and 31% fully satisfied). Also, male patrons were more satisfied than females. (Table B.15.)



- One-fifth of Deli patrons said that they were dissatisfied with the variety of fresh fruit and vegetables available (3% very dissatisfied and 16% somewhat dissatisfied) in contrast to two-fifths being happy (16% delighted and 23% fully satisfied). (Table B.16.)
- As in other comparisons, breakfast patrons expressed a lower level of satisfaction with the variety of boxed salads (31% very or somewhat dissatisfied). (Table B.17.)
- Nearly one-quarter of female patrons are dissatisfied with the variety of healthy eating choices available in the Castle Deli (5% very dissatisfied and 18% somewhat dissatisfied). Overall, one out of six patrons expressed dissatisfaction (16%). (Table B.18.)
- The Castle Deli survey respondents had an opportunity to make suggestions or comments for the management of the Deli. Since all respondents did not respond to a fixed list, the comments provide a non-scientific summary of major feelings expressed by a subset of respondents about topics they wished to mention. The respondent comments should be read with a caveat that they are suggestive, but not necessarily representative.
 - In general, the Castle Deli received more negative comments than positive comments.
 - Many of the comments were related to the Deli's spatial layout and the patron's feeling of crowding.
 - Others mentioned a feeling of excessively long service waiting time.
 - Others mentioned the availability of various food items such as foods to satisfy specific dietary requirements such as vegetarian diets and non-pork diets.
 - Finally, some negative comments indicated a feeling that food prices are somewhat high.



OVERVIEW OF SURVEY METHODS

In 1998, the Smithsonian Institution Concessions Office contracted for a survey of patrons at the two food serveries located in the Smithsonian Castle, The Commons Dining Room and the Castle Deli, a.k.a., the Boiler Room. The survey was administered by Shugoll Research during the last week of July and the first week of August throughout serving hours at each location. Self administered questionnaires were completed by patrons.

The Institutional Studies Office (ISO), which participated in the design of the 1998 questionnaire, was asked to design and supervise a scientific, follow-up survey of patrons during July, 1999. The survey was conducted by Shugoll Research interviewers between July 19 and July 25, 1999. Only exiting patrons were interviewed. All respondents were personally interviewed by the Shugoll interviewers, rather than filling out questionnaires themselves.

A survey is considered scientific if and only if the respondents are a representative sample of the population of interest (core customers in this case). Thus, ISO puts great care on two elements during the design and training for a survey: (1) an interviewing methodology that permits concrete specification of the degree to which a survey sample is representative of all patrons who used the food seryery during the time when interviews were being conducted, and (2) a well designed questionnaire that to satisfy study objectives.⁵ To assure representativeness, ISO weights completed interviews so that the relative number of completed interviews is the same as the relative number of patrons exiting at the interview time. That is, one interview completed when 10 patrons are exiting is assigned a weight twice as large as an interview when five patrons are exiting.

Overall, patrons at both food serveries were quite cooperative. More than ninety percent (92%) of Commons Dining Room patrons intercepted completed a survey, as did over eight out of ten Deli patrons (81%) (see Table 3). The patron cooperation was somewhat higher in 1999 than it was in 1998 although the apparent cooperation was probably affected by differences in administration during the two years.

There were no statistically significant differences between the demographic characteristics of patrons who cooperated and refused.

⁵ Interviews were actually administered with exiting patrons Monday through Friday at the Boiler Room exit. The scheduled interviewing time was divided into twelve sessions of one and one-half hours. Each session was further divided into quarter hour segments. One Shugoll employee counted each exiting patron as they crossed an imaginary line. Two interviewers intercepted patrons identified by the counter. Due to space constraints, half of the sessions were conducted with patrons exiting to the west and half with visitors exiting to the east. Patrons who refused to participate were asked what type of food service was purchased, their age, and Smithsonian relationship. Participating patrons were given a coupon for a free beverage. A similar procedure was followed on Tuesday, Thursday, Saturday, and Sunday at the Commons Dining Room.

Appendix I
Survey Questionnaires

FOOD SERVICE FEEDBACK— COMMONS DINING ROOM

Hello, my name is _____. We are talking to people about the Commons Dining Room.

1. What kind of food service were you here for on this visit? 1 Full buffet 2 Soup & salad 3 Other

2. Is this your first visit to the Commons? 1 Yes [GO TO Q4] 2 No [GO TO Q3]

3. [SHOW CARD] How often do you eat in the Commons? 1 Very rarely 4 Several times a week
2 Several times a year 5 Other
3 Several times a month 6 No response

4. [SHOW CARD] Based on your visit today, how satisfied were you with the Commons' overall food quality and taste? How about ...

	Very Dissatisfied	Somewhat Dissatisfied	Satisfied	Fully Satisfied	Delighted	Not applicable No answer
Overall food quality/taste	1	2	3	4	5	6
Overall service	1	2	3	4	5	6
Front door greeting by Hostess (Host)	1	2	3	4	5	6
Wait-staff service	1	2	3	4	5	6
Overall food variety	1	2	3	4	5	6
Overall food appearance	1	2	3	4	5	6
Cleanliness of dining room	1	2	3	4	5	6

* 5. Are you a Smithsonian staff member, volunteer, or Smithsonian member? 1 SI staff 3 Contributing member 5 Other
2 SI volunteer 4 Resident Associate

* 6. What is your age? 1 Under 25 3 35-44 5 55-64 7 No response
2 25-34 4 45-54 6 65 & over

7. What suggestions or comments would you make for the management of the Smithsonian Castle Commons?

RESPONDENT COMMENT

ADMINISTRATIVE USE ONLY ID _____

Session _____ Segment _____ Interviewer _____

* Gender 1 Female 2 Male

Site 3 Commons

Status 1 Completed 2 Refusal 3 OPS Refusal 4 Previous interview (Date _____)

FOOD SERVICE FEEDBACK— CASTLE DELI/BOILER ROOM

Count number _____

Hello, my name is _____. We are talking to people about the Castle Deli and Boiler Room.

1. What kind of food service were you here for on this visit?
 1 Breakfast 3 Snack or break
 2 Lunch 4 Other/No Purchase
2. During the last two weeks, how many times did you buy breakfast at the Deli or Boiler Room? How many times did you buy lunch at the Deli? How many times did you buy food at the Deli for a snack or break?

How many times did you buy breakfast at another Smithsonian food service location? Lunch? Snack?

How many times did you buy breakfast at a non-Smithsonian food service location or restaurant near the Mall? Lunch? Snack?

	Castle Deli Boiler Room	Other Smithsonian	Non Smithsonian	OFFICE
Breakfast	_____	_____	_____	_____
Lunch	_____	_____	_____	_____
Snack or break	_____	_____	_____	_____

3. [SHOW CARD] Based on **THIS** visit, how satisfied were you with the Deli’s overall food quality and taste? How about ...

	Very Dissatisfied	Somewhat Dissatisfied	Satisfied	Fully Satisfied	Delighted	Not applicable No answer
Overall food quality/taste	1	2	3	4	5	6
Overall service	1	2	3	4	5	6
Cleanliness of Deli	1	2	3	4	5	6
Variety of menu choices	1	2	3	4	5	6
Overall food appearance	1	2	3	4	5	6
Variety of made-to-order sandwiches	1	2	3	4	5	6
Variety of fresh fruit/vegetables	1	2	3	4	5	6
Variety of boxed salads to-go	1	2	3	4	5	6
Variety of healthy eating choices	1	2	3	4	5	6

- * 4. Are you a Smithsonian staff member or volunteer? 1 SI staff 2 SI volunteer 3 Other

- * 5. What is your age? 1 Under 25 3 35-44 5 55-64 7 No response
 2 25-34 4 45-54 6 65 & over

6. What suggestions or comments would you make for the management of the Castle Deli or Boiler Room?

RESPONDENT COMMENTS

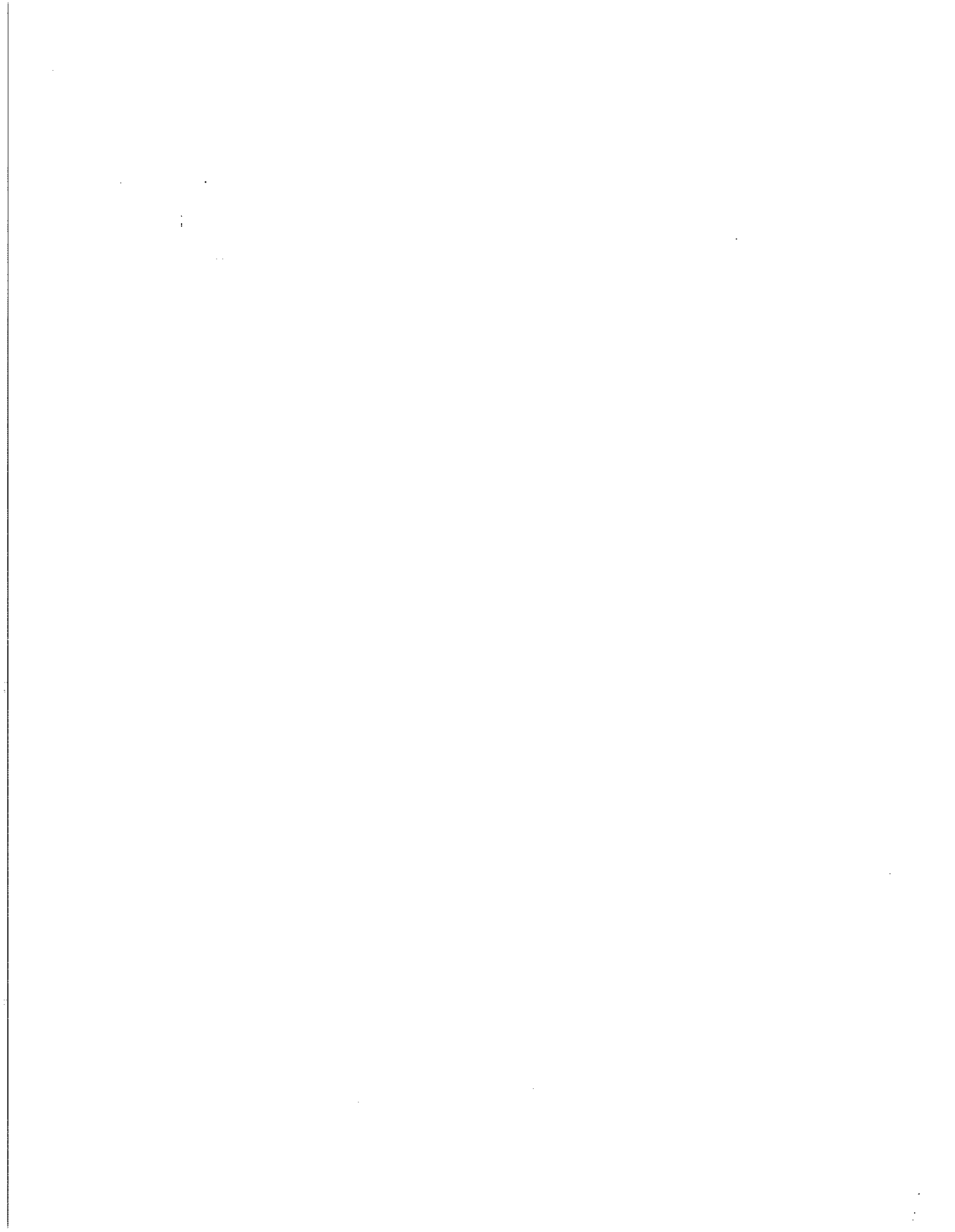
ADMINISTRATIVE USE ONLY ID _____

Session _____ Segment _____ Interviewer _____

* Gender 1 Female 2 Male

Site 1 East - Deli 2 West - Deli

Status 1 Completed 2 Refusal 3 OPS Refusal 4 Previous interview (Date _____)

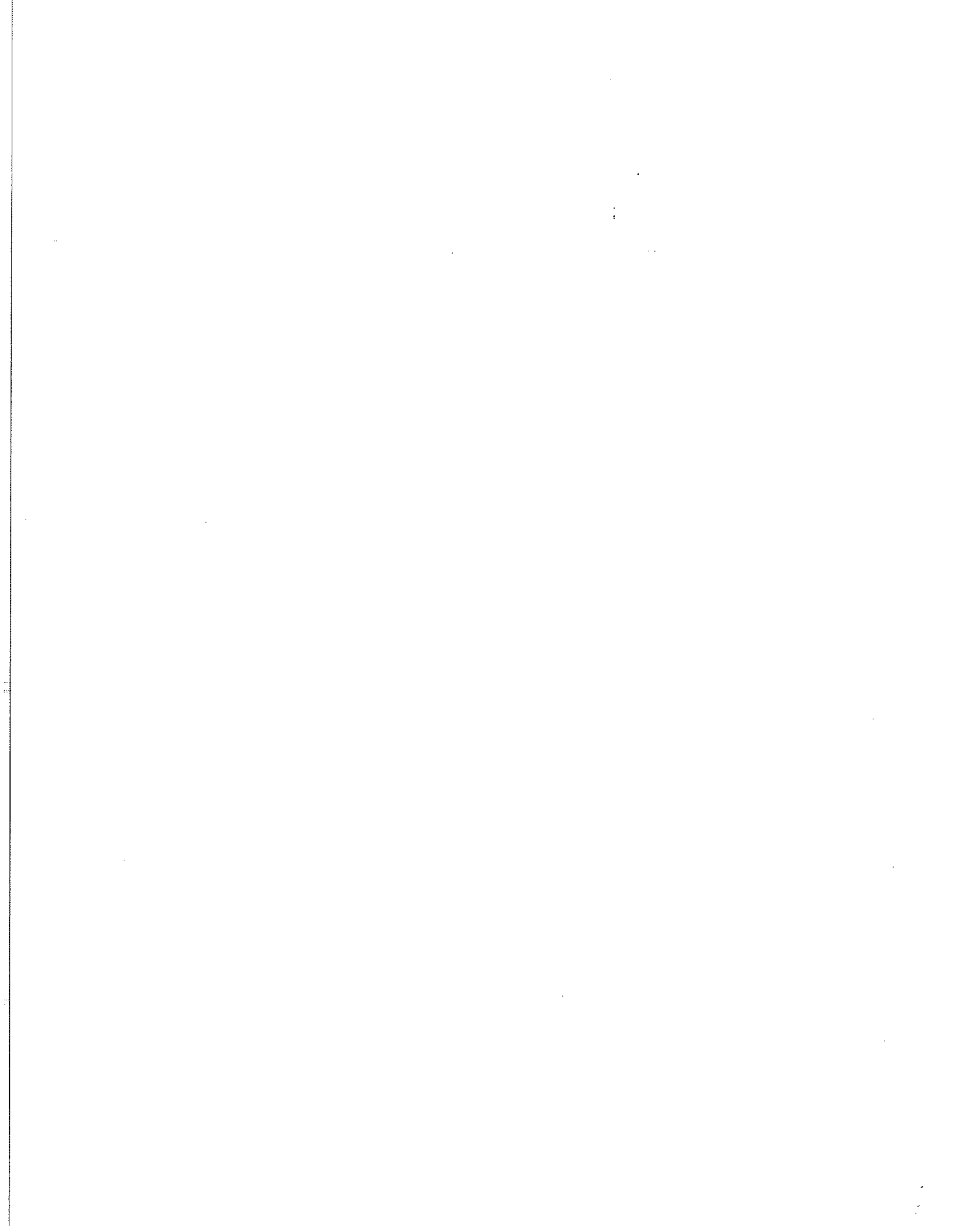


Appendix II
Tables of Survey Findings

Tables A.1. through A.14
Commons Dining Room Results

Tables B.1. through B.19
Castle Deli Results

Table C
Interview Outcomes



How To Read Tables

The appendix contains two series of table that are referenced in this text. Each table is actually a composite of several tables. The first column displays the appropriate responses for a question on the questionnaire. The next column presents the percentage distribution (or average score) for each response calculated over all respondents who answered a question. Below the percentage distribution is the sum or total of the percentages (which should be 100%). The last number in the column presents the number of respondents used to calculate the percentages. The remainder of each table is composed of sets of columns that present the distributions of responses for subsets of the survey data. For example, if the data are divided by gender, there are two columns showing the response percentages for females and males. Each of the subset tables contains a number labeled "Significance." This number is the statistical significance of the differences between the columns for the question that defines the table. This number can range between 0.000 and 1.000. Values below 0.050 show a statistically significant difference. Numbers much larger than 0.100 indicate that column segments do not behave differently. Thus, females and males are not different in their food purchases. For example, the Significance number for "Weekday segment" in Table A.1. is 0.001. Thus, the Significance of 0.001 shows that the mix of full buffet and soup and salad food service is very different between weekdays and weekends. Since we interviewed a large percentage of the actual exiting patrons (118 out of 394 at the Commons Dining Room and 247 out of 740 at the Castle Deli), the numbers presented are rather conservative estimates of the statistical significance of the differences.

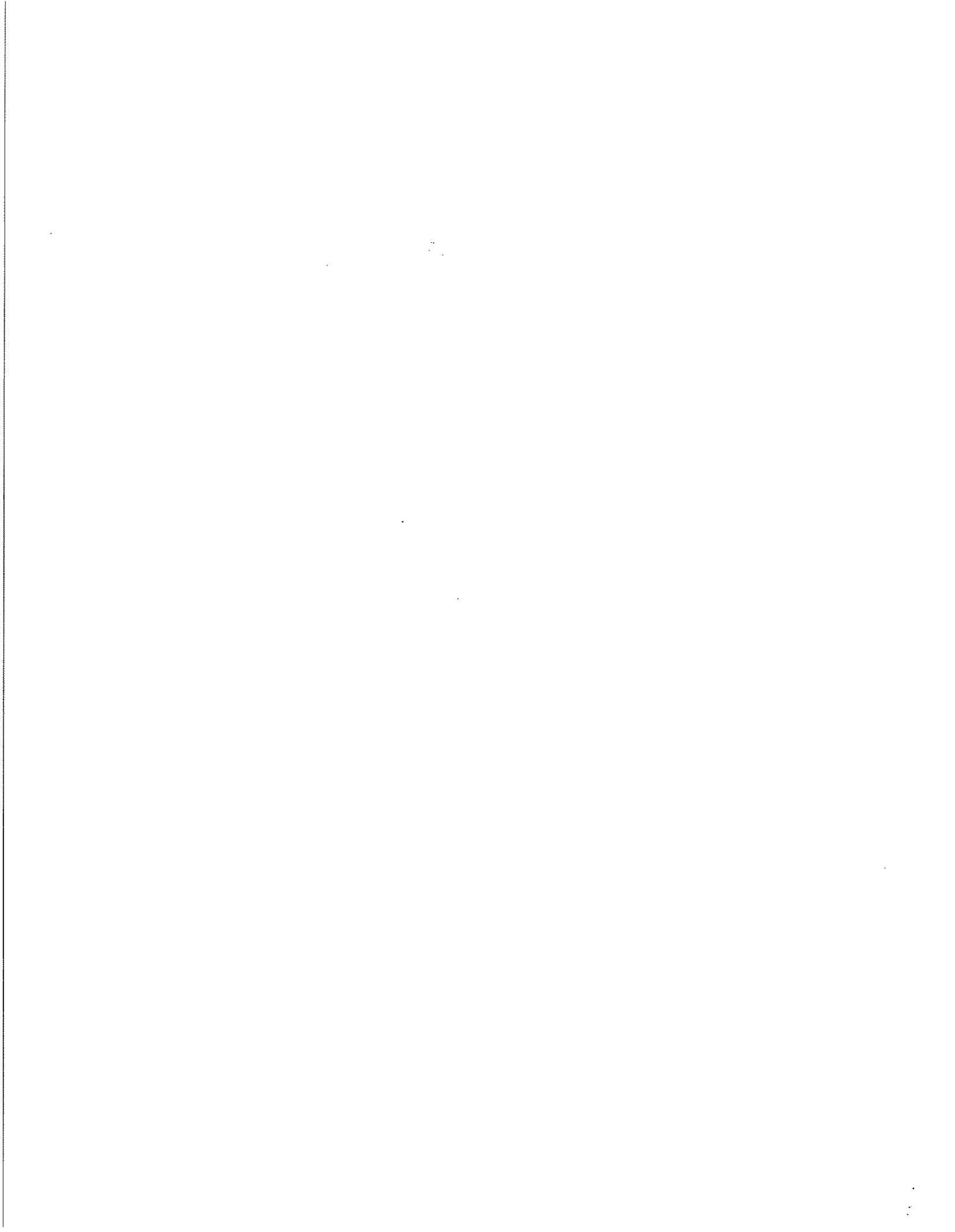


Table A.1. Type of food service used: Castle Commons Dining Room (in percent)

Response category	Total %	Food service		Weekday segment		Previous Commons customer				
		Full Buffet	Soup & Salad	Weekday	Weekend	First time	Rare user	Yearly	Monthly	Other
Full buffet	68	n.a.	n.a.	44	79	78	78	54	40	77
Soup & salad	30	n.a.	n.a.	51	21	22	17	42	60	23
Other	2	n.a.	n.a.	5	0	0	5	3	0	0
Total	100	n.a.	n.a.	100	100	100	100	100	100	100
N	118	n.a.	n.a.	38	81	54	19	29	12	3
Significance		n.a.	n.a.	0.001		0.089				

Response category	Total %	SI affiliation			Age			Gender		
		SI staff	Contributing Member	Resident Associate	Other	18-34	35-54	55 & over	Female	Male
Full buffet	68	43	63	63	86	73	80	55	65	73
Soup & salad	30	57	28	37	14	27	20	41	33	25
Other	2	0	9	0	0	0	0	4	1	2
Total	100	100	100	100	100	100	100	100	100	100
N	118	14	22	45	38	18	51	48	72	46
Significance		0.004				0.068			0.603	

Table A.2. Frequency of eating at the Commons: Castle Commons Dining Room (in percent)

Response category	Total %	Food service			Weekday segment			Previous Commons customer				
		Full	Buffet	Soup & Salad	Weekday	Weekend	First time	Rare user	Yearly	Monthly	Other	
First time	46		53	32	22	57	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Rarely	15		18	11	17	16	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Yearly	25		20	35	36	19	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Monthly	11		6	20	16	8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Frequent/other	3		3	2	2	0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total	99		100	100	100	100	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
N of interviews	118		80	38	37	81	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Significance		0.035			0.001		n.a.					

Response category	Total %	SI affiliation			Age				Gender	
		SI staff	Contributing Member	Resident Associate	Other	18-34	35-54	55 & over	Female	Male
First time	46	8	47	26	82	53	37	49	41	
Rarely	15	4	22	22	9	17	21	21	7	
Yearly	25	48	19	34	8	21	23	20	32	
Monthly	11	35	6	14	0	9	16	7	16	
Frequent/other	3	5	6	3	0	0	3	3	3	
Total	99	100	100	100	100	100	100	100	100	
N of interviews	118	14	21	45	38	18	50	72	45	
Significance		0.001			0.613			0.103		

Table A.3. Weekday or weekend food service: Castle Commons Dining Room (in percent)

Response category	Total %	Food service		Weekday segment		Previous Commons customer				
		Full	Soup & Salad	Weekday	Weekend	First time	Rare user	Yearly	Monthly	Other
Weekday	32	21	56	n.a.	n.a.	15	33	46	47	100
Weekend	68	79	44	n.a.	n.a.	85	67	54	53	0
Total	100	100	100	n.a.	n.a.	100	100	100	100	100
N of interviews	118	81	38	n.a.	n.a.	54	19	29	12	3
Significance		0.001		n.a.	n.a.	0.001				

Response category	Total %	SI affiliation			Age			Gender		
		SI staff	Contributing Member	Resident Associate	Other	18-34	35-54	55 & over	Female	Male
Weekday	32	69	38	37	8	20	32	37	30	35
Weekend	68	31	62	63	92	80	68	63	70	65
Total	100	100	100	100	100	100	100	100	100	100
N of interviews	118	14	22	45	38	18	51	48	72	46
Significance		0.001				0.438			0.599	

Table A.4. Type of customer: Castle Commons Dining Room (in percent)

Response category	Total %	Food service		Weekday segment		Previous Commons customer				
		Full Buffet	Soup & Salad	Weekday	Weekend	First time	Rare user	Yearly	Monthly	Other
SI staff/volunteer	12	7	21	25	5	2	3	23	39	23
Contributing Member	18	17	22	22	17	18	25	14	9	39
RAP Member	38	35	44	44	35	22	53	53	52	39
Other	32	41	14	8	43	58	19	11	0	0
Total	100	100	100	100	100	100	100	100	100	100
N of interviews	118	81	38	38	81	54	19	29	12	3
Significance		0.014		0.001		0.001				

Response category	Total %	SI affiliation			Age			Gender		
		SI staff	Contributing Member	Resident Associate	Other	18-34	35-54	55 & over	Female	Male
SI staff/volunteer	12	n.a.	n.a.	n.a.	n.a.	15	11	11	11	12
Contributing Member	18	n.a.	n.a.	n.a.	n.a.	4	19	24	16	22
RAP Member	38	n.a.	n.a.	n.a.	n.a.	17	29	53	42	31
Other	32	n.a.	n.a.	n.a.	n.a.	64	40	12	31	35
Total	100	n.a.	n.a.	n.a.	n.a.	100	100	100	100	100
N of interviews	118	n.a.	n.a.	n.a.	n.a.	18	51	48	72	46
Significance		n.a.				0.001			0.699	

Table A.5. Customer age : Castle Commons Dining Room (in percent and mean rating)

Response category	Total %	Food service		Weekday segment		Previous Commons customer				
		Full Buffet	Soup & Salad	Weekday	Weekend	First time	Rare user	Yearly	Monthly	Other
Under 35	15	16	13	10	18	18	16	14	13	0
35 to 44	17	22	7	16	18	25	15	11	0	19
45 to 54	26	29	21	26	26	23	14	37	26	39
55 to 64	27	19	44	29	26	22	38	23	40	19
65 & over	15	14	15	18	13	11	17	16	21	23
Total	100	100	100	100	100	100	100	100	100	100
Median age	50.6	48.2	56.0	53.0	49.5	46.9	55.4	51.0	56.9	51.9
N of interviews	117	81	37	38	80	54	19	28	12	3
Significance		0		0.765		0.748				

Response category	Total %	SI affiliation			Age			Gender		
		SI staff	Contributing Member	Resident Associate	Other	18-34	35-54	55 & over	Female	Male
Under 35	15	20	3	7	30	100	0	0	14	17
35 to 44	17	4	21	11	27	0	40	0	18	16
45 to 54	26	38	24	23	27	0	60	0	25	28
55 to 64	27	12	50	36	9	0	0	65	28	24
65 & over	15	26	3	23	7	0	0	35	15	14
Total	100	100	100	100	100	100	100	100	100	100
Median age	50.6	50.9	54.5	56.5	41.3	n.a.	n.a.	n.a.	51.3	49.8
N of interviews	117	13	21	44	38	18	51	40	72	45
Significance		0.001				n.a.			0.967	

Table A.6. Customer gender: Castle Commons Dining Room (in percent)

Response category	Total %	Food service		Weekday segment		Previous Commons customer				
		Full Buffet	Soup & Salad	Weekday	Weekend	First time	Rare user	Yearly	Monthly	Other
Female	61	58	67	57	62	66	82	49	41	58
Male	39	42	33	43	38	34	18	51	59	42
Total	100	100	100	100	100	100	100	100	100	100
N of interviews	118	81	38	38	81	54	19	29	12	3
Significance		0.380		0.599		0.103				

Response category	Total %	SI affiliation			Age			Gender		
		SI staff	Contributing Member	Resident Associate	Other	18-34	35-54	55 & over	Female	Male
Female	61	58	54	67	58	56	60	64	n.a.	n.a.
Male	39	42	46	33	42	44	40	36	n.a.	n.a.
Total	100	100	100	100	100	100	100	100	n.a.	n.a.
N of interviews	118	14	22	45	38	18	51	48	n.a.	n.a.
Significance		0.699				0.823			n.a.	n.a.

Table A.7. Overall food quality rating : Castle Commons Dining Room (in percent and mean rating)

Response category	Total %	Food service		Weekday segment		Previous Commons customer				
		Full Buffet	Soup & Salad	Weekday	Weekend	First time	Rare user	Yearly	Monthly	Other
Delighted	37	42	24	20	44	43	32	31	42	0
Fully satisfied	55	53	58	65	50	47	68	54	52	100
Satisfied	8	5	14	11	6	7	0	15	6	0
Somewhat dissatisfied	1	0	4	4	0	3	0	0	0	0
Very dissatisfied	0	0	0	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100	100	100	100
Mean rating	4.26	4.37	4.02	4.01	4.38	4.29	4.32	4.16	4.36	4.00
N of interviews	118	81	38	38	81	54	19	29	12	3
Significance		0.039		0.025		0.592				
Chi-square		3	8.346	3	9.328	12	10.275			

Category	Total %	SI affiliation			Age			Gender		
		SI staff	CM	RAP	Other	18-34	35-54	55 & over	Female	Male
Delighted	37	17	28	46	37	36	34	40	33	41
Fully satisfied	55	58	65	48	54	59	55	53	56	52
Satisfied	8	25	0	5	8	5	11	3	8	7
Somewhat dissatisfied	1	0	7	0	0	0	0	3	2	0
Very dissatisfied	0	0	0	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100	100	100	100
Mean rating	4.26	3.92	4.13	4.41	4.29	4.31	4.23	4.30	4.21	4.34
N of interviews	118	14	22	45	38	18	51	48	72	46
Significance		0.033				0.563			0.655	
Chi-square		9	18.191	6	4.848	6	4.848		3	1.619

Table A.8. Overall food quality rating : Castle Commons Dining Room (in percent and mean rating)

Response category	Total %	Food service		Weekday segment		Previous Commons customer				
		Full Buffet	Soup & Salad	Weekday	Weekend	First time	Rare user	Yearly	Monthly	Other
Delighted (5 points)	37	42	24	20	44	43	32	31	42	0
Fully satisfied (4)	55	53	58	65	50	47	68	54	52	100
Satisfied (3)	8	5	14	11	6	7	0	15	6	0
Somewhat dissatisfied	1	0	4	4	0	3	0	0	0	0
Very dissatisfied (1)	0	0	0	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100	100	100	100
Mean rating	4.26	4.37	4.02	4.01	4.38	4.29	4.32	4.16	4.36	4.00
N of interviews	118	81	38	38	81	54	19	29	12	3
Significance		0.039		0.025		0.592				

Response category	Total %	SI affiliation			Age			Gender		
		SI staff	Contributing Member	Resident Associate	Other	18-34	35-54	55 & over	Female	Male
Delighted (5 points)	37	17	28	46	37	36	34	40	33	41
Fully satisfied (4)	55	58	65	48	54	59	55	53	56	52
Satisfied (3)	8	25	0	5	8	5	11	3	8	7
Somewhat dissatisfied	1	0	7	0	0	0	0	3	2	0
Very dissatisfied (1)	0	0	0	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100	100	100	100
Mean rating	4.26	3.92	4.13	4.41	4.29	4.31	4.23	4.30	4.21	4.34
N of interviews	118	14	22	45	38	18	51	48	72	46
Significance		0.033				0.563			0.655	

Table A.9. Overall service quality rating : Castle Commons Dining Room (in percent and mean rating)

Response category	Total %	Food service			Weekday segment			Previous Commons customer				
		Full Buffet	Soup & Salad	Other	Weekday	Weekend	Other	First time	Rare user	Yearly	Monthly	Other
Delighted (5 points)	38	39	35	45	23	45	44	27	31	48	19	
Fully satisfied (4)	43	38	53	33	64	33	38	41	50	52	23	
Satisfied (3)	17	21	10	19	13	19	18	25	14	0	58	
Somewhat dissatisfied	1	1	2	2	0	2	0	8	0	0	0	
Very dissatisfied (1)	1	2	0	2	0	2	0	0	5	0	0	
Total	100	100	100	100	100	100	100	100	100	100	100	
Mean rating	4.14	4.11	4.22	4.16	4.10	4.16	4.26	3.87	4.02	4.48	3.61	
N of interviews	118	81	38	81	38	81	54	19	29	12	3	
Significance		0.374		0.023		0.146						

Response category	Total %	SI affiliation			Age			Gender		
		SI staff	Contributing Member	Resident Associate	Other	18-34	35-54	55 & over	Female	Male
Delighted (5 points)	38	14	24	43	48	28	41	37	35	42
Fully satisfied (4)	43	69	58	40	27	52	36	47	47	36
Satisfied (3)	17	17	14	13	25	20	22	11	16	19
Somewhat dissatisfied	1	0	3	2	0	0	1	1	2	0
Very dissatisfied (1)	1	0	0	2	0	0	0	3	0	3
Total	100	100	100	100	100	100	100	100	100	100
Mean rating	4.14	3.97	4.03	4.17	4.23	4.08	4.15	4.14	4.14	4.14
N of interviews	118	14	22	45	38	18	51	48	72	46
Significance		0.18			0.633				0.329	

Table A.10. Front door greeting by hostess or host rating : Castle Commons Dining Room (in percent and mean rating)

Response category	Total %	Food service			Weekday segment			Previous Commons customer				
		Full Buffet	Soup & Salad		Weekday	Weekend		First time	Rare user	Yearly	Monthly	Other
Delighted (5 points)	44	49	32	30	51	46	47	35	55	39		
Fully satisfied (4)	42	39	49	53	36	39	42	50	38	23		
Satisfied (3)	12	9	17	13	11	12	11	15	7	0		
Somewhat dissatisfied	2	2	2	2	2	3	0	0	0	19		
Very dissatisfied (1)	1	1	0	2	0	0	0	0	0	19		
Total	100	100	100	100	100	100	100	100	100	100		
Mean rating	4.27	4.34	4.11	4.09	4.35	4.27	4.36	4.20	4.49	3.42		
N of interviews	113	78	35	38	76	50	19	28	12	3		
Significance		0.420		0.243		0.016						

Response category	Total %	SI affiliation			Age			Gender	
		SI staff	Contributing Member	Resident Associate	18-34	35-54	55 & over	Female	Male
Delighted (5 points)	44	33	34	51	36	38	52	48	37
Fully satisfied (4)	42	55	64	32	41	47	38	33	55
Satisfied (3)	12	12	2	12	17	14	7	15	6
Somewhat dissatisfied	2	0	0	3	6	0	3	2	1
Very dissatisfied (1)	1	0	0	1	0	1	0	1	0
Total	100	100	100	100	100	100	100	100	100
Mean rating	4.27	4.21	4.32	4.28	4.08	4.20	4.39	4.25	4.28
N of interviews	113	13	21	44	17	49	47	69	44
Significance		0.640		0.623				0.176	

Table A.11. Wait-staff service rating : Castle Commons Dining Room (in percent and mean rating)

Response category	Total %	Food service		Weekday segment		Previous Commons customer				
		Full Buffet	Soup & Salad	Weekday	Weekend	First time	Rare user	Yearly	Monthly	Other
Delighted (5 points)	40	40	38	24	47	52	25	28	50	0
Fully satisfied (4)	40	34	51	58	31	35	34	50	37	61
Satisfied (3)	16	19	8	18	15	12	34	10	13	39
Somewhat dissatisfied	4	4	2	0	5	2	8	6	0	0
Very dissatisfied (1)	1	2	0	0	2	0	0	5	0	0
Total	100	100	100	100	100	100	100	100	100	100
Mean rating	4.13	4.07	4.26	4.06	4.16	4.36	3.76	3.90	4.37	3.61
N of interviews	118	81	38	38	81	54	19	29	12	3
Significance		0.295		0.024		0.213				

Response category	Total %	SI affiliation			Age			Gender		
		SI staff	Contributing Member	Resident Associate	Other	18-34	35-54	55 & over	Female	Male
Delighted (5 points)	40	14	24	44	52	33	40	42	39	41
Fully satisfied (4)	40	57	63	35	25	39	32	47	36	45
Satisfied (3)	16	29	9	11	20	12	26	6	21	8
Somewhat dissatisfied	4	0	3	6	3	16	1	1	5	2
Very dissatisfied (1)	1	0	0	3	0	0	0	3	0	3
Total	100	100	100	100	100	100	100	100	100	100
Mean rating	4.13	3.85	4.08	4.12	4.27	3.89	4.12	4.24	4.09	4.19
N of interviews	118	14	22	45	38	18	51	48	72	46
Significance		0.107				0.018			0.184	

Table A.12. Overall food variety rating : Castle Commons Dining Room (in percent and mean rating)

Response category	Total %	Food service			Weekday segment			Previous Commons customer				
		Full Buffet	Soup & Salad	Weekday	Weekend	First time	Rare user	Yearly	Monthly	Other		
Delighted (5 points)	44	51	28	28	51	50	43	35	48	19		
Fully satisfied (4)	45	43	50	55	41	35	57	51	46	81		
Satisfied (3)	10	6	17	13	9	13	0	14	6	0		
Somewhat dissatisfied	1	0	4	4	0	3	0	0	0	0		
Very dissatisfied (1)	0	0	0	0	0	0	0	0	0	0		
Total	100	100	100	100	100	100	100	100	100	100		
Mean rating	4.31	4.44	4.02	4.07	4.42	4.31	4.43	4.20	4.43	4.19		
N of interviews	118	81	38	38	81	54	19	29	12	3		
Significance		0.020		0.045		0.630						

Response category	Total %	SI affiliation			Age			Gender		
		SI staff	Contributing Member	Resident Associate	Other	18-34	35-54	55 & over	Female	Male
Delighted (5 points)	44	19	37	55	43	24	41	55	43	44
Fully satisfied (4)	45	56	51	39	45	59	49	35	42	50
Satisfied (3)	10	25	5	7	11	17	10	7	13	6
Somewhat dissatisfied	1	0	7	0	0	0	0	3	2	0
Very dissatisfied (1)	0	0	0	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100	100	100	100
Mean rating	4.31	3.95	4.18	4.48	4.32	4.06	4.31	4.41	4.26	4.39
N of interviews	118	14	22	45	38	18	51	48	72	46
Significance		0.081				0.186			0.403	

Table A.13. Overall food appearance rating : Castle Commons Dining Room (in percent and mean rating)

Response category	Total %	Food service			Weekday segment			Previous Commons customer				
		Full Buffet	Soup & Salad		Weekday	Weekend		First time	Rare user	Yearly	Monthly	Other
Delighted (5 points)	53	57	45		46	57		50	54	62	44	77
Fully satisfied (4)	36	36	37		41	34		36	46	24	56	23
Satisfied (3)	10	6	17		11	9		13	0	14	0	0
Somewhat dissatisfied	1	1	0		2	0		2	0	0	0	0
Very dissatisfied (1)	0	0	0		0	0		0	0	0	0	0
Total	100	100	100		100	100		100	100	100	100	100
Mean rating	4.42	4.49	4.28		4.31	4.47		4.34	4.54	4.48	4.44	4.77
N of interviews	117	81	36		36	81		54	17	29	12	3
Significance		0.236		0.443				0.636				

Response category	Total %	SI affiliation			Age			Gender		
		SI staff	Contributing Member	Resident Associate	Other	18-34	35-54	55 & over	Female	Male
Delighted (5 points)	53	29	49	66	50	43	48	64	52	55
Fully satisfied (4)	36	54	44	28	35	42	41	27	33	42
Satisfied (3)	10	17	7	6	13	15	9	8	14	4
Somewhat dissatisfied	1	0	0	0	2	0	2	0	1	0
Very dissatisfied (1)	0	0	0	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100	100	100	100
Mean rating	4.42	4.13	4.42	4.60	4.33	4.28	4.36	4.56	4.36	4.51
N of interviews	117	14	22	43	38	18	51	47	70	46
Significance		0.448				0.559			0.247	

Table A.14. Cleanliness of dining room rating : Castle Commons Dining Room (in percent and mean rating)

Response category	Total %	Food service			Weekday segment		Previous Commons customer				
		Full Buffet	Soup & Salad	Weekday	Weekend	First time	Rare user	Yearly	Monthly	Other	
Delighted (5 points)	54	58	44	39	61	52	60	53	65	39	
Fully satisfied (4)	37	38	34	50	31	33	40	39	35	61	
Satisfied (3)	9	3	22	11	8	14	0	9	0	0	
Somewhat dissatisfied	0	0	0	0	0	0	0	0	0	0	
Very dissatisfied (1)	0	0	0	0	0	0	0	0	0	0	
Total	100	100	100	100	100	100	100	100	100	100	
Mean rating	4.45	4.55	4.23	4.28	4.53	4.38	4.60	4.44	4.65	4.39	
N of interviews	116	80	36	36	80	54	16	29	12	3	
Significance		0.005		0.091		0.637					

Response category	Total %	SI affiliation			Age			Gender		
		SI staff	Contributing Member	Resident Associate	Other	18-34	35-54	55 & over	Female	Male
Delighted (5 points)	54	23	47	76	44	39	50	64	51	59
Fully satisfied (4)	37	65	46	19	42	43	44	28	37	37
Satisfied (3)	9	11	7	5	13	18	6	8	12	4
Somewhat dissatisfied	0	0	0	0	0	0	0	0	0	0
Very dissatisfied (1)	0	0	0	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100	100	100	100
Mean rating	4.45	4.12	4.40	4.71	4.31	4.20	4.44	4.55	4.39	4.55
N of interviews	116	14	22	42	38	18	51	46	70	46
Significance		0.012				0.196			0.343	

Table B.1. Food service purchased : Castle Deli/Boiler Room (in percent and mean rating)

Food Service	Total %	Food service		Other	Breakfast		Lunch	
		Breakfast	Lunch		Infrequent	Frequent	Infrequent	Frequent
Breakfast	23	n.a.	n.a.	n.a.	12	55	25	22
Lunch	50	n.a.	n.a.	n.a.	57	28	39	63
Snack/break	25	n.a.	n.a.	n.a.	30	12	37	11
Other	2	n.a.	n.a.	n.a.	1	5	0	5
Total	100	n.a.	n.a.	n.a.	100	100	100	100
N of interviews	252	n.a.	n.a.	n.a.	186	66	137	116
Significance		n.a.			0.001		0.001	

Food Service	Total %	SI affiliation		Age			Gender	
		Staff	Other	18-34	35-54	55 & over	Female	Male
Breakfast	23	27	10	19	26	23	23	25
Lunch	50	46	62	54	52	38	48	52
Snack/break	25	25	25	26	20	39	26	24
Other	2	2	3	2	3	0	4	0
Total	100	100	100	100	100	100	100	100
N of interviews	252	203	50	77	133	35	138	111
Significance		0.071		0.237			0.202	

Table B.2. Number of breakfasts purchased : Mall food service locations (mean number in last two weeks)

Food Servery	Total %	Food service		Breakfast		Lunch		Other		Breakfast		Lunch	
		Breakfast	Lunch	Breakfast	Lunch	Infrequent	Frequent	Infrequent	Frequent	Infrequent	Frequent		
Castle Deli	2.62	6.17	1.39	1.81	0.67	8.13	2.22	3.08					
Other Smithsonian	0.33	0.25	0.29	0.46	0.43	0.04	0.52	0.10					
Non-Smithsonian	0.26	0.16	0.16	0.53	0.26	0.25	0.32	0.19					
Total purchased	3.20	6.58	1.84	2.80	1.36	8.42	3.06	3.37					
N of interviews	247	64	124	59	185	62	128	119					

Food Servery	Total %	SI affiliation		Age			Gender	
		Staff	Other	18-34	35-54	55 & over	Female	Male
Castle Deli	2.62	3.01	1.00	2.18	3.03	2.48	2.63	2.63
Other Smithsonian	0.33	0.37	0.16	0.42	0.37	0.00	0.29	0.38
Non-Smithsonian	0.26	0.24	0.33	0.23	0.36	0.00	0.33	0.16
Total purchased	3.20	3.62	1.48	2.83	3.76	2.48	3.25	3.18
N of interviews	247	202	45	79	130	29	139	105

Table B.3. Number of lunches purchased : Mall food service locations (mean number in last two weeks)

Food Servery	Total %	Food service			Breakfast		Lunch		Breakfast		Lunch	
		Breakfast	Lunch	Other	Infrequent	Frequent	Infrequent	Frequent	Infrequent	Frequent		
Castle Deli	3.98	3.62	5.10	2.26	3.60	5.08	1.45	6.98				
Other Smithsonian	0.97	1.65	0.63	1.02	0.87	1.26	1.20	0.70				
Non-Smithsonian	1.47	1.32	0.94	2.57	1.41	1.62	1.97	0.87				
Total purchased	6.42	6.59	6.67	5.84	5.88	7.96	4.62	8.55				
N of interviews	247	64	124	59	185	62	128	119				

Food Servery	Total %	SI affiliation			Age			Gender	
		Staff	Other	Other	18-34	35-54	55 & over	Female	Male
Castle Deli	3.98	4.13	3.37	3.37	4.16	4.14	3.37	4.12	3.84
Other Smithsonian	0.97	1.08	0.52	0.52	0.94	1.19	0.34	1.13	0.80
Non-Smithsonian	1.47	1.54	1.15	1.15	1.39	1.25	2.70	1.43	1.54
Total purchased	6.42	6.76	5.05	5.05	6.49	6.59	6.42	6.68	6.19
N of interviews	247	202	45	45	79	130	29	139	105

Table B.4. Number of break snacks purchased : Mall food service locations (mean number in last two weeks)

Food Servery	Total %	Food service		Other	Breakfast		Lunch	
		Breakfast	Lunch		Infrequent	Frequent	Infrequent	Frequent
Castle Deli	1.48	0.91	0.72	3.37	1.68	0.92	1.66	1.27
Other Smithsonian	0.11	0.09	0.05	0.24	0.15	0.00	0.18	0.04
Non-Smithsonian	0.24	0.16	0.23	0.33	0.30	0.09	0.30	0.18
Total purchased	1.84	1.16	1.00	3.94	2.13	1.02	2.13	1.49
N of interviews	247	64	124	59	185	62	128	119

Food Servery	Total %	SI affiliation		Age			Gender	
		Staff	Other	18-34	35-54	55 & over	Female	Male
Castle Deli	1.48	1.71	0.55	1.35	1.07	3.05	1.22	1.79
Other Smithsonian	0.11	0.14	0.00	0.25	0.07	0.00	0.13	0.08
Non-Smithsonian	0.24	0.22	0.35	0.39	0.22	0.05	0.28	0.21
Total purchased	1.84	2.07	0.89	1.98	1.37	3.10	1.63	2.08
N of interviews	247	202	45	79	130	29	139	105

Table B.5. Castle Deli breakfast purchase frequency in the last two weeks : Castle Deli/Boiler Room (in percent)

Breakfast Purchases	Total %	Food service			Breakfast		Lunch		Breakfast		Lunch	
		Breakfast	Lunch	Other	Infrequent	Frequent	Infrequent	Frequent	Infrequent	Frequent	Infrequent	Frequent
Fewer than four	74	38	85	84	n.a.	n.a.	81	65	n.a.	n.a.	81	65
Four or more	26	62	15	16	n.a.	n.a.	19	35	n.a.	n.a.	19	35
Total	100	100	100	100	n.a.	n.a.	100	100	n.a.	n.a.	100	100
N of interviews	252	59	125	68	n.a.	n.a.	137	116	n.a.	n.a.	137	116
Significance		0.001			n.a.	n.a.	0.004		n.a.	n.a.	0.004	

Breakfast Purchases	Total %	SI affiliation			Age			Gender	
		Staff	Other	18-34	35-54	55 & over	Female	Male	
Fewer than four	74	69	93	80	69	75	72	76	
Four or more	26	31	7	20	31	25	28	24	
Total	100	100	100	100	100	100	100	100	
N of interviews	252	203	50	77	133	35	138	111	
Significance		0.001		0.194			0.483		

Table B.6. Castle Deli lunch purchase frequency in the last two weeks : Castle Deli/Boiler Room (in percent)

Lunch Purchases	Total %	Food service		Other	Breakfast		Lunch	
		Breakfast	Lunch		Infrequent	Frequent	Infrequent	Frequent
Fewer than four	54	57	42	74	60	39	n.a.	n.a.
Four or more	46	43	58	26	40	61	n.a.	n.a.
Total	100	100	100	100	100	100	n.a.	n.a.
N of interviews	252	59	125	68	186	66	n.a.	n.a.
Significance		0.001			0.004		n.a.	n.a.

Lunch Purchases	Total %	SI affiliation		18-34	Age		Gender	
		Staff	Other		35-54	55 & over	Female	Male
Fewer than four	54	53	59	51	52	66	49	60
Four or more	46	47	41	49	48	34	51	40
Total	100	100	100	100	100	100	100	100
N of interviews	252	203	50	77	133	35	138	111
Significance		0.442		0.267			0.072	

Table B.7. Type of customer : Castle Deli/Boiler Room (in percent)

Customer Type	Total %	Food service		Breakfast		Lunch		Other		Breakfast		Lunch	
		Breakfast	Lunch	Breakfast	Lunch	Infrequent	Frequent	Infrequent	Frequent	Infrequent	Frequent	Infrequent	Frequent
SI staff	80	92	75	80	80	75	95	79	82				
SI volunteer	3	3	1	6	6	3	1	3	2				
Other	17	5	23	15	15	21	4	18	15				
Total	100	100	100	100	100	100	100	100	100				
N of interviews	252	59	125	68	68	186	66	137	116				
Significance		0.015		0.021	0.021	0.003	0.003	0.687	0.687				

Customer Type	Total %	SI affiliation		Age			Gender	
		Staff	Other	18-34	35-54	55 & over	Female	Male
SI staff	80	n.a.	n.a.	70	86	88	83	78
SI volunteer	3	n.a.	n.a.	2	1	3	3	1
Other	17	n.a.	n.a.	28	13	9	13	20
Total	100			100	100	100	100	100
N of interviews	252	n.a.	n.a.	77	133	35	138	111
Significance		n.a.	n.a.	0.021			0.232	

Table B.8. Age of customer : Castle Deli/Boiler Room (in percent)

Age range	Total %	Food service		Breakfast		Lunch		Other	Breakfast		Lunch	
		Breakfast	Lunch	Breakfast	Lunch	Infrequent	Frequent		Infrequent	Frequent		
Under 25	10	5	12	11	6	12	10	11	12	6	10	10
25-34	21	21	21	21	18	23	20	21	23	18	20	23
35-44	33	36	30	35	35	32	36	35	32	35	36	29
45-54	22	24	26	12	28	19	17	12	19	28	17	27
55-64	14	14	11	21	13	15	18	21	15	13	18	10
Total	100	100	100	100	100	100	100	100	100	100	100	100
Median age	39.7	40.7	39.5	39.1	41.5	39.0	39.6	39.1	39.0	41.5	39.6	39.8
N of interviews	246	57	123	65	66	180	132	65	180	66	132	114
Significance		0.237			0.379		0.163					

Age range	Total %	SI affiliation		Age		Gender		
		Staff	Other	18-34	35-54	55 & over	Female	Male
Under 25	10	9	16	n.a.	n.a.	n.a.	12	8
25-34	21	18	34	n.a.	n.a.	n.a.	24	18
35-44	33	33	33	n.a.	n.a.	n.a.	33	31
45-54	22	25	6	n.a.	n.a.	n.a.	23	21
55-64	14	15	10	n.a.	n.a.	n.a.	8	22
Total	100	100	100				100	100
Median age	39.7	41.1	33.8	n.a.	n.a.	n.a.	38.2	41.7
N of interviews	246	200	46	n.a.	n.a.	n.a.	134	110
Significance		0.008		n.a.	n.a.	n.a.	0.042	

Table B.9. Gender of customer : Castle Deli/Boiler Room (in percent)

Gender	Total %	Food service		Other	Breakfast		Lunch	
		Breakfast	Lunch		Infrequent	Frequent	Infrequent	Frequent
Female	55	53	54	61	54	59	50	62
Male	45	47	46	39	46	41	50	39
Total	100	100	100	100	100	100	100	100
N of interviews	249	59	124	67	183	66	134	115
Significance		0.587			0.483		0.072	

Gender	Total %	SI affiliation		Age			Gender	
		Staff	Other	18-34	35-54	55 & over	Female	Male
Female	55	57	49	63	57	32	n.a.	n.a.
Male	45	43	51	37	43	68	n.a.	n.a.
Total	100	100	100	100	100	100	n.a.	n.a.
N of interviews	249	202	47	77	131	35	n.a.	n.a.
Significance		0.335		0.008			n.a.	n.a.

Table B.10. Food quality/taste rating : Castle Deli/Boiler Room (in percent and mean rating)

Response category	Total %	Food service			Breakfast		Lunch		Other		Breakfast		Lunch	
		Breakfast	Lunch	Other	Infrequent	Frequent	Infrequent	Frequent	Infrequent	Frequent	Infrequent	Frequent		
Delighted (5 points)	18	11	24	14	19	17	20	16						
Fully satisfied (4)	33	30	42	21	32	36	27	41						
Satisfied (3)	40	51	28	51	40	40	42	38						
Somewhat dissatisfied (2)	7	3	6	12	9	1	8	5						
Very dissatisfied (1)	2	5	0	1	0	6	3	0						
Total	100	100	100	100	100	100	100	100						
Mean rating	3.60	3.39	3.85	3.35	3.62	3.55	3.53	3.68						
N of interviews	214	54	102	58	157	57	117	97						
Significance		0.001			0.008		0.090							

Response category	Total %	SI affiliation			Age				Gender	
		Staff	Other	Other	18-34	35-54	55 & over	Female	Male	
Delighted (5 points)	18	13	42	42	19	16	25	17	21	
Fully satisfied (4)	33	34	31	31	30	35	34	28	38	
Satisfied (3)	40	44	25	25	47	39	28	42	38	
Somewhat dissatisfied (2)	7	8	3	3	3	8	10	10	3	
Very dissatisfied (1)	2	2	0	0	0	2	3	2	1	
Total	100	100	100	100	100	100	100	100	100	
Mean rating	3.60	3.48	4.11	4.11	3.65	3.54	3.69	3.47	3.76	
N of interviews	214	173	42	42	63	113	32	116	95	
Significance		0.001			0.556			0.100		

Table B.11. Overall service rating : Castle Deli/Boiler Room (in percent and mean rating)

Response category	Total %	Food service		Other	Breakfast		Lunch		Breakfast		Lunch	
		Breakfast	Lunch		Infrequent	Frequent	Infrequent	Frequent	Infrequent	Frequent		
Delighted (5 points)	24	15	30	19	26	16	24	23	31	52	36	36
Fully satisfied (4)	36	39	32	41	40	24	37	34	40	24	37	34
Satisfied (3)	36	40	33	38	4	8	3	7	4	8	3	7
Somewhat dissatisfied (2)	5	6	6	2	0	0	0	0	0	0	0	0
Very dissatisfied (1)	0	0	0	0	100	100	100	100	100	100	100	100
Total	100	100	100	100	3.63	3.86	3.78	3.79	3.77	3.82	3.75	3.75
Mean rating	3.79											
N of interviews	248	58	123	67	183	65	134	114	0.005	0.515		
Significance		0.255										

Response category	Total %	SIC affiliation		Age			Gender	
		Staff	Other	18-34	35-54	55 & over	Female	Male
Delighted (5 points)	24	19	41	27	21	23	28	19
Fully satisfied (4)	36	37	31	28	40	41	33	39
Satisfied (3)	36	38	26	39	33	36	34	38
Somewhat dissatisfied (2)	5	5	3	6	5	0	6	3
Very dissatisfied (1)	0	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100	100
Mean rating	3.79	3.71	4.11	3.77	3.77	3.87	3.82	3.75
N of interviews	248	200	48	75	131	35	137	108
Significance		0.014		0.552			0.271	

Table B.12. Cleanliness of Deli rating : Castle Deli./Boiler Room (in percent and mean rating)

Response category	Total %	Food service			Breakfast		Lunch		Breakfast		Lunch	
		Breakfast	Lunch	Other	Infrequent	Frequent	Infrequent	Frequent	Infrequent	Frequent		
Delighted (5 points)	22	15	24	24	23	17	25	18				
Fully satisfied (4)	33	26	36	36	31	39	32	34				
Satisfied (3)	38	51	33	36	39	37	34	43				
Somewhat dissatisfied (2)	7	8	8	4	7	7	8	5				
Very dissatisfied (1)	0	0	0	0	0	0	0	0				
Total	100	100	100	100	100	100	100	100				
Mean rating	3.70	3.48	3.76	3.80	3.71	3.67	3.75	3.65				
N of interviews	244	57	123	64	179	65	132	112				
Significance		0.307			0.664		0.298					

Response category	Total %	SI affiliation		Age			Gender	
		Staff	Other	18-34	35-54	55 & over	Female	Male
Delighted (5 points)	22	17	43	25	18	26	18	26
Fully satisfied (4)	33	35	25	24	39	34	34	31
Satisfied (3)	38	41	27	45	34	37	38	39
Somewhat dissatisfied (2)	7	7	5	5	9	3	10	3
Very dissatisfied (1)	0	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100	100
Mean rating	3.70	3.62	4.06	3.70	3.66	3.82	3.61	3.80
N of interviews	244	198	46	73	130	35	131	110
Significance		0.002		0.269			0.161	

Table B.13. Variety of menu choices rating : Castle Deli/Boiler Room (in percent and mean rating)

Response category	Total %	Food service			Other	Breakfast		Lunch		Frequent	Infrequent	Frequent	Infrequent	Frequent	Infrequent
		Breakfast	Lunch	Other		Infrequent	Frequent	Infrequent	Frequent						
Delighted (5 points)	16	8	22	13	20	7	20	20	12						
Fully satisfied (4)	19	16	27	6	17	24	17	15	23						
Satisfied (3)	36	41	31	41	37	32	37	30	42						
Somewhat dissatisfied (2)	23	25	19	30	21	28	21	26	19						
Very dissatisfied (1)	5	10	2	11	4	10	4	8	4						
Total	100	100	100	100	100	100	100	100	100						
Mean rating	3.17	2.85	3.48	2.81	3.27	2.89	3.27	3.13	3.21						
N of interviews	235	55	122	58	174	61	174	121	114						
Significance		0.001			0.055		0.055	0.056							

Category	Total %	SI affiliation			Age			Gender	
		Staff	Other	Other	18-34	35-54	55 & over	Female	Male
Delighted (5 points)	16	12	33	18	15	15	17	15	
Fully satisfied (4)	19	20	14	17	22	17	16	22	
Satisfied (3)	36	36	37	39	31	45	33	39	
Somewhat dissatisfied (2)	23	24	17	22	24	24	25	20	
Very dissatisfied (1)	6	7	0	5	8	0	8	3	
Total	100	100	100	100	100	100	100	100	
Mean rating	3.17	3.06	3.63	3.22	3.10	3.23	3.09	3.26	
N of interviews	235	46	189	75	125	29	134	98	
Significance		0.005		0.699			0.278		

Table B.14. Overall food appearance rating : Castle Deli/Boiler Room (in percent and mean rating)

Response category	Total %	Food service		Other	Breakfast		Lunch		Breakfast		Lunch	
		Breakfast	Lunch		Breakfast	Lunch	Infrequent	Frequent	Infrequent	Frequent		
Delighted (5 points)	20	12	28	9	21	15	20	19	21	15	20	19
Fully satisfied (4)	26	18	33	19	24	32	20	33	24	32	20	33
Satisfied (3)	49	60	37	63	51	42	52	45	51	42	52	45
Somewhat dissatisfied (2)	4	9	3	3	2	8	5	3	2	8	5	3
Very dissatisfied (1)	2	1	0	5	1	2	3	1	1	2	3	1
Total	100	100	100	100	100	100	100	100	100	100	100	100
Mean rating	3.58	3.31	3.86	3.25	3.61	3.50	3.49	3.67	3.61	3.50	3.49	3.67
N of interviews	238	56	124	58	174	64	124	114	174	64	124	114
Significance		0.001			0.127		0.157		0.127		0.157	

Response category	Total %	SI affiliation			Age			Gender	
		Staff	Other	18-34	35-54	55 & over	Female	Male	
Delighted (5 points)	20	16	34	21	17	23	16	25	
Fully satisfied (4)	26	23	40	23	30	19	24	27	
Satisfied (3)	49	54	26	56	46	43	50	47	
Somewhat dissatisfied (2)	4	5	0	0	6	9	7	1	
Very dissatisfied (1)	2	2	0	0	1	6	2	1	
Total	100	100	100	100	100	100	100	100	
Mean rating	3.58	3.46	4.07	3.65	3.56	3.42	3.46	3.74	
N of interviews	238	191	47	77	125	31	136	99	
Significance		0.001		0.061			0.085		

Table B.15. Made-to-order sandwich variety rating : Castle Deli/Boiler Room (in percent and mean rating)

Response category	Total %	Food service			Other	Breakfast		Lunch	
		Breakfast	Lunch	Infrequent		Frequent	Infrequent	Frequent	
Delighted (5 points)	24	10	34	17	27	17	19	29	
Fully satisfied (4)	29	29	31	25	28	31	29	29	
Satisfied (3)	36	45	28	43	35	37	38	33	
Somewhat dissatisfied (2)	9	16	8	6	7	14	9	9	
Very dissatisfied (1)	3	1	0	9	3	1	5	0	
Total	100	100	100	100	100	100	100	100	
Mean rating	3.63	3.30	3.91	3.36	3.68	3.48	3.48	3.78	
N of interviews	201	49	103	50	147	54	102	99	
Significance		0.001			0.378		0.110		

Category	Total %	SI affiliation			Age			Gender	
		Staff	Other	Other	18-34	35-54	55 & over	Female	Male
Delighted (5 points)	24	20	39	28	21	21	24	24	
Fully satisfied (4)	29	27	36	24	30	37	26	30	
Satisfied (3)	36	39	20	36	34	42	30	43	
Somewhat dissatisfied (2)	9	10	5	12	10	0	15	3	
Very dissatisfied (1)	3	3	0	0	5	0	5	0	
Total	100	100	100	100	100	100	100	100	
Mean rating	3.63	3.51	4.08	3.68	3.54	3.79	3.51	3.76	
N of interviews	201	160	41	62	111	25	107	91	
Significance		0.025		0.323			0.005		

Table B.16. Fresh fruit and vegetable variety rating : Castle Deli/Boiler Room (in percent and mean rating)

Response category	Total %	Food service			Breakfast		Lunch		Other		Breakfast		Lunch	
		Breakfast	Lunch	Other	Infrequent	Frequent	Infrequent	Frequent	Infrequent	Frequent	Infrequent	Frequent	Infrequent	Frequent
Delighted (5 points)	16	5	24	8	17	12	16	16	16	16	16	16	16	
Fully satisfied (4)	23	18	27	17	24	20	19	27	20	27	20	19	27	
Satisfied (3)	43	53	29	65	44	41	48	38	41	48	41	48	38	
Somewhat dissatisfied (2)	16	22	16	8	13	23	15	16	23	15	23	15	16	
Very dissatisfied (1)	3	1	3	2	2	5	2	3	5	2	5	2	3	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	
Mean rating	3.34	3.02	3.53	3.21	3.43	3.11	3.33	3.35	3.43	3.11	3.33	3.33	3.35	
N of interviews	209	47	112	49	153	56	102	107	153	56	102	102	107	
Significance		0.001			0.275		0.547		0.275		0.547			

Category	Total %	SI affiliation			Age			Gender	
		Staff	Other	Other	18-34	35-54	55 & over	Female	Male
Delighted (5 points)	16	13	27	20	14	4	14	20	
Fully satisfied (4)	23	21	31	18	26	21	27	15	
Satisfied (3)	43	45	33	48	37	59	37	52	
Somewhat dissatisfied (2)	16	17	10	14	18	12	19	12	
Very dissatisfied (1)	3	3	0	0	4	4	4	1	
Total	100	100	100	100	100	100	100	100	
Mean rating	3.34	3.25	3.74	3.45	3.29	3.08	3.28	3.41	
N of interviews	204	169	39	69	112	23	123	83	
Significance		0.092		0.240			0.055		

Table B.17. Boxed salad variety rating : Castle Deli/Boiler Room (in percent and mean rating)

Response category	Total %	Food service			Breakfast		Lunch		Mean rating	N of interviews	Significance
		Breakfast	Lunch	Other	Infrequent	Frequent	Infrequent	Frequent			
Delighted (5 points)	16	8	21	11	17	11	17	14	3.35	40	0.003
Fully satisfied (4)	23	13	30	16	24	18	22	23	3.35	134	0.061
Satisfied (3)	45	48	42	50	47	40	42	48	3.35	88	0.928
Somewhat dissatisfied (2)	13	25	7	15	9	25	14	12			
Very dissatisfied (1)	3	6	0	8	2	6	4	3			
Total	100	100	100	100	100	100	100	100			
Mean rating	3.35	2.90	3.64	3.07	3.45	3.03	3.35	3.34			
N of interviews	177	40	96	41	134	43	88	89			
Significance		0.003			0.061		0.928				

Category	Total %	SI affiliation			Age			Gender		Mean rating	N of interviews	Significance
		Staff	Other	Other	18-34	35-54	55 & over	Female	Male			
Delighted (5 points)	16	12	30	13	15	22	13	19	3.35	144	0.007	
Fully satisfied (4)	23	23	22	26	23	18	23	20	3.35	144	0.007	
Satisfied (3)	45	49	26	44	45	54	43	49	3.35	144	0.007	
Somewhat dissatisfied (2)	13	13	12	11	16	6	18	7				
Very dissatisfied (1)	3	2	10	7	1	0	2	4				
Total	100	100	100	100	100	100	100	100				
Mean rating	3.35	3.31	3.51	3.27	3.33	3.56	3.28	3.43				
N of interviews	177	144	33	64	92	18	103	71				
Significance		0.007		0.555			0.237					

Table B.18. Healthy eating choices rating : Castle Deli/Boiler Room (in percent and mean rating)

Response category	Total %	Food service			Breakfast		Lunch		Other		Breakfast		Lunch	
		Breakfast	Lunch	Other	Infrequent	Frequent	Infrequent	Frequent	Infrequent	Frequent	Infrequent	Frequent		
Delighted (5 points)	18	10	23	14	19	15	20	16						
Fully satisfied (4)	25	20	31	17	25	26	23	27						
Satisfied (3)	41	48	34	51	44	34	45	37						
Somewhat dissatisfied (2)	12	18	9	12	8	23	10	14						
Very dissatisfied (1)	4	3	2	6	4	3	2	5						
Total	100	100	100	100	100	100	100	100						
Mean rating	3.41	3.16	3.60	3.21	3.46	3.26	3.48	3.34						
N of interviews	208	49	113	45	155	53	106	102						
Significance		0.141			0.084		0.428							

Category	Total %	SI affiliation			Age			Gender	
		Staff	Other	Other	18-34	35-54	55 & over	Female	Male
Delighted (5 points)	18	15	30	30	18	16	21	18	19
Fully satisfied (4)	25	24	30	30	26	29	7	25	23
Satisfied (3)	41	44	32	32	40	38	64	34	52
Somewhat dissatisfied (2)	12	14	5	5	10	15	4	18	4
Very dissatisfied (1)	4	4	3	3	6	3	4	5	3
Total	100	100	100	100	100	100	100	100	100
Mean rating	3.41	3.31	3.79	3.79	3.41	3.39	3.37	3.33	3.51
N of interviews	208	165	43	43	71	108	24	119	87
Significance		0.081			0.217			0.017	

Table C. Interview outcomes at the Castle Commons Dining Room and the Castle Deli: 1999 and 1998 surveys (in percents)

Interview status	1999 Survey Castle Food Servery			1998 Survey Castle Food Servery		
	Dining Room	Boiler Room	Deli or Deli Room	Commons Dining Room	Boiler Room	Deli or Deli Room
Completed interview	92.5	81.3	41.9	88.5	41.9	41.9
Refusal	6.7	11.8	13.8	6.5	13.8	13.8
Previous interview	0.8	6.9	44.3	5.0	44.3	44.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
N intercepted	128	304	935	826	935	935

