



FIGURE 8. IMPACT PERCEPTION RESPONSES ORDERED IN SUMMARY SCALE STRUCTURE.

### 5.1.2 Significant findings

Differences in these impact scales according to age-group (over and under 40 years), gender (male/female), nationality (New Zealand and overseas), and crowding perception (uncrowded/crowded) were analysed (refer Section 4.1 for method). The significant effects and interactions associated with the analysis using these independent variables are summarised in Table 4, where the mean values show that while the perceptions of impact were not high (means < 2), some differences were apparent between the different groups. These results indicate that variations in perceptions of impacts related to hut conditions and water/toilet/hygiene conditions are particularly important for management attention.

TABLE 4. SIGNIFICANT EFFECTS ON IMPACT SCALES.

SOURCE OF SIGNIFICANT EFFECT	SIGNIFICANT IMPACT SCALES	MEAN VALUES (ADJUSTED)*	
		Uncrowded	Crowded
Crowded effect $F(6,297) = 3.29, p = .004$	Hut congestion $F(1,302) = 14.75, p = .000$	1.28	1.71
	Water/toilet/hygiene $F(1,302) = 5.61, p = .018$	1.90	2.00

\* Mean values for the summary scales are divided by the number of constituent items to give an interpreted using the original question categories (e.g., 1 = Strongly agree 3 = Neutral 5 = Strongly disagree)

### Crowded effect

Visitors who felt crowded had higher perceptions of impacts, and most particularly those related to hut congestion. Impacts related to perceptions of water/toilet/hygiene were important to a lesser extent. Additional exploration of the hut congestion scale indicated that crowded visitors perceived greater levels of all the impact items, most particularly those of insufficient bunk numbers and seeing too many in huts. Perceptions of hut noise, having to rush for bunks in huts, and seeing too many big groups were also greater among crowded visitors, although to a lesser extent. Additional exploration of the water/toilet/hygiene scale indicated crowded visitors perceived greater inadequacy of water supply and toilet facilities. Perceptions of uncertain water hygiene were generally more consistent between crowded and uncrowded visitors. No other types of impact perceptions were significantly different.

## 5.2 RELATING IMPACT PERCEPTION SCALES TO OVERALL TRIP EVALUATIONS

None of these impact scales were statistically associated with overall satisfaction, indicating that no specific social or physical impact perceptions were related to how the trip was evaluated. However, significant associations were found between impact perceptions and the overall crowding evaluation. An

SPSS multiple regression ( $F(2,315) = 60.82$ , signif.  $F = .0000$ ) identified an association (adjusted  $r^2 = .274$ ) between the impact scales (independent) and crowding (dependent). The hut congestion scale ( $b = .562$ ,  $t = .10.71$ ,  $p = .0000$ ) was the most important predictor of crowding. That is, being more bothered by the social impacts of hut congestion was weakly associated with feeling more crowded. This interpretation was supported by the moderate correlations between crowding and the hut congestion scale ( $r = .52$ ). The most prominent individual items correlated with crowding from the hut congestion scale were 'insufficient bunks in huts' ( $r = .59$ ), 'seeing too many in the hut' ( $r = .47$ ), and 'having to rush for bunks' ( $r = .36$ ). The prominence of these individual items emphasises the importance of hut-based social impacts to crowding perceptions.

Continue to next file: Sfc073e.pdf