This paper seeks to contribute to the literature on tourists' perception by evaluating the relationship between destination travel attributes and tourist satisfaction. Using a sample of 140 international tourists exiting Kuala Lumpur Malaysia, the influence of travel attributes on satisfaction and the moderating effect of demographic factors in the relationship between travel attributes and tourist satisfaction were investigated. Partial Least Square (PLS), a variance based structural equation model was employed to analyse the data. The travel attributes had satisfactory predictive relevance and explained the changes in the variance of the endogenous variable tourist satisfaction. All the demographic factors considered moderated the relationship between at least one of the travel dimensions and tourist satisfaction. This study is limited with cross-sectional data. (C) 2014 Elsevier Ltd.