Multiple Regression

Example Results Section

A multiple regression analysis was conducted to assess whether the components of the Theory or Planned Behaviour (Attitudes, Subjective Norms, and Perceived Behavioural Control) were predictive of intentions to quit smoking. Table 1 summarises the means and standard deviations for each variable, with scores for each variable ranging between 1 and 7.

Table 1.

Means and Standard Deviations of all Variables Included in Analysis

	M	*SD*	*N*
Attitude	3.10	1.19	20
Subjective Norm	2.87	1.49	20
Perceived Behavioural Control	6.27	.96	20
Intentions	3.68	2.09	20

Correlations between the predictor variables and dependent variable are highlighted in table 2. As can be seen, attitude had a strong positive correlation with intentions to quit smoking, as did subjective norm. Control was found to have a moderate negative correlation with intentions. Between the predictor variables themselves, attitudes and subjective norm were moderately positively correlated with one another (r = .41, p <.05). Subjective norm and control were strongly negatively correlated (r = -.69, p < .001).

Table 2.

Correlations Between Variables.

	Attitude	Subjective Norm	Perceived Behavioural Control	Intentions
Attitude	-	.41*	-.09	.85**
Subjective Norm	.41*	-	-.69**	.65**
Perceived Behavioural Control	-.09	-.69**	-	-.38*
Intentions	.85**	.41*	-.38*	-

* p < .05
** p < .001

The regression analysis showed that as an overall model, the set of independent variables (attitude, subjective norm and control) were statistically significant (F (3,16) = 28.94, $p < .001$) and produced an adjusted R-squared value of 0.82. The combined IV's therefore explained 82% of the variance in intention to quit smoking scores.

Table 3 shows the coefficients for the separate IV's in the analysis. The variable Attitude was a unique significant independent predictor ($p < .001$) with a Beta value of .74. This indicated a positive prediction, with an increase of .74 standard deviations in intention scores found for every one standard deviation increase in attitude scores. The variables of subjective norm and perceived behavioural control were not statistically significant in contributing to the prediction of participants' intention to quit smoking ($p > .05$).

Table 3.

Beta Coefficients for Independent Variables on the DV of Intention.

Variable	Beta Value
Attitude	.74**
Subjective Norm	24
Perceived Behavioural Control	-.15

** $p < .001$