# How Much Do Job Satisfaction and Relationship Quality Predict Intention to Engage in Health Behaviours in Men and Women?

A Pilot Study. Leiya E. Lemkey Clive Fletchder John A. Barry



This study aimed to assess the degree to which problems with job satisfaction and relationship quality predict problem drinking and the intention to engage in healthy behaviours. This cross-sectional

online survey was analysed using multiple linear regression. 312 men and women participated in the survey. The only significant predictor of problem drinking was neuroticism (emotionality), and this was significant for women only ( $\beta$  = 0.26, p <.05). The most significant predictor of intention to engage in healthy behaviours for women was feeling good about health behaviours ( $\beta$  = 0.36, p <.001), and for men it was greater satisfaction with the clarity of organisational communication ( $\beta$  = 0.42, p <.001). Some intriguing gender differences were found, for example, women who were dissatisfied with pay seemed to compensate by intending to engage more in health behaviours ( $\beta$  = 0.36, p <.05), whereas men who were dissatisfied with pay were less likely to intend to engage in health behaviours ( $\beta$  = -0.34, p <.01). These findings are of importance in understanding how workplace factors predict intention to engage in health behaviours in men and women. Further research should explore the reasons for these interesting gender differences.

<u>Keywords</u>: health behaviours, alcohol, job satisfaction, relationship, gender, Integrative Model of Behaviour Prediction (IMBP)

### Introduction

Approximately 140 million working days per year are lost to physical sickness in Great Britain, averaging approximately five working days per working person per year (Black & Frost, 2011). Although some research has shown that the workplace can have a negative impact on a range of health behaviours (e.g. Hellerstedt & Jeffrey, 1997; Ng & Jeffrey, 2003; Kouvonen et al., 2007), other research has not found this link, or found it only weakly (e.g. Overgaard et al., 2004; Kouvonen et al., 2005). This mix of evidence might suggest that other factors may moderate the relationship between work and stress. A recent study that explored the underlying factors in work and stress concluded that "the impact of the environment outside of work needs to be considered in future research, alongside the interface between work and life outside of work" (Payne et al., 2012, p. 11).

Poor quality relationships can have an impact on health behaviours. For example, several studies have found that an insecure attachment style is associated with alcohol abuse (Vungkhanching et al., 2004; Doumas et al., 2006) as well as other risky health behaviours such as drug abuse (Kassel et al., 2007) and unprotected sex (Feeney et al., 1999). People with relationship or work problems may turn to alcohol or other unhealthy habits as a means of coping. In a recent review examining the reasons for young people's drinking behaviours, Kuntsche et al., (2005) found that those who drank for reasons of coping rather than reasons of socialization or enhancement were more likely to suffer from alcohol-related problems. A review of research on married couples found that the highest levels of relationship satisfaction were reported by egalitarian couples i.e.

couples who share power equally in the relationship (Gray-Little & Burks, 1983). Vorauer and Ross (1996) suggest that people who subscribe to gender stereotypes may have difficulty in developing emotionally authentic relationships because gender stereotypes may constrain sharing of any counter-stereotypic feelings and preferences.

In general, women engage in health behaviours more than men do (Waldron, 1988). Heavy drinking is traditionally considered a masculine trait, and is linked to other traits such as risk taking, physical resilience and aggression (De Visser & McDonnell, 2012). Thus a man may feel more inclined to engage in risky health behaviours in order to live up to, or fulfil, his stereotype of masculinity, compared to a man with more egalitarian views. Therefore adhering to non-egalitarian views of gender may potentially lead to unsatisfying relationships and unhealthy behaviours.

The three variables which are the main focus of this study – job satisfaction, relationship quality and health behaviours - might interact in various ways. However, research exploring the links between these three variables in a single analysis remains to be conducted (Payne et al., 2012), thus the interactions between these variables remains to be properly elucidated. Therefore the present study should be considered a pilot investigation and original exploration of this cluster of issues.

Emotionality – also known as 'neuroticism' – is the heightened tendency to experience negative emotions (distress, anxiety, anger, fear and guilt). Emotionality is related to problems in forming and maintaining close relationships, and increased interpersonal conflict (McNulty, 2008). Emotionality is also related to increased smoking, alcohol abuse, unhealthy eating and lack of exercise (Booth-Kewley & Vickers, 1994).

Several theories have been developed to better understand the underlying causes of health behaviours. In 2000, the leading theorists in the health behaviour field met at a National Institute of Mental Health (NIMH) workshop where the Integrative Model of Behaviour Prediction (IMBP) was developed (Fishbein et al., 2001). This new model combined key variables from the Theory of Reasoned Action, the Theory of Planned Behaviour (TPB), and the Health Belief Model and Social Cognitive Theory (Ajzen & Fishbein, 1980; Ajzen, 1988; Bandura, 1986; Janz NK & Becker, 1984). According to the IMBP, for a person to engage in a risky health behaviour, such as consuming alcohol, there are three necessary and sufficient conditions: the person (a) has the ability to engage in health behaviours (b) intends to engage in health behaviours, and (c) there are no environmental constraints against doing so. The intention to engage in a health behaviour is said to be based on whether the person thinks (d) the benefits of engaging in health behaviours outweigh the costs, (e) they think that people they respect want them to engage in health behaviours, (f) the health behaviours are consistent with the person's personal self-image, (g) on balance, taking the health behaviours will make them feel better, and (h) they feel able to engage in health behaviours.

In this exploratory study, the hypotheses of this are that (a) problem drinking and (b) the

intention to engage in health behaviours will be predicted by work satisfaction, relationship quality and IMBP health behaviour variables.

## Materials and Methods

## **Participants**

Participants were recruited via various general interest websites, for example, *Psychology on The Net*. Participants were excluded if they: did not provide key information (health behaviour, marital status etc.), were under 18, or did not complete the consent form.

312 people (194 women and 118 men) participated in the survey. Table 1 shows that the mean (SD) age for men was 34.51 (12.89) and for women 29.13 (10.33), and that the educational background was similar for men and women. In the regressions, the responses of 20 (17%) men and 31 (16%) women were excluded from the alcohol analysis because they had omitted data for the alcohol variable, and the responses of 25 (21%) men and 37 (19%) women were excluded from the health behaviour analysis analysis because they omitted data for the health behaviour variable. Thus of the overall sample of 194 women and 118 men, a total of 157 men and 93 women gave information regarding alcohol use, and 163 women and 98 men gave information regarding the other health behaviours.

## Design

This study was a cross-sectional online survey analysed using backward stepwise multiple linear regression. All participants were presented with the same survey. The backward stepwise method is useful in finding the most statistically parsimonious model from amongst a relatively large group of potential predictors, and is especially useful where the study is exploratory and the theoretical basis for model building is limited.

The dependent variables were alcohol consumption and intention to engage in healthy behaviours. The predictors (detailed below) were variables predicted to be related to health behaviours: job satisfaction, relationship satisfaction, IMBP health behaviour variables, relationship quality, gender egalitarianism, neuroticism, positive mindset, and aggression.

# Dependent Variables

The dependent variables were, in the first model, problem drinking behaviour, and in the second model, intention to engage in healthy behaviour.

Problem alcohol use was measured using The Alcohol Use Disorders Identification Test (AUDIT): Self-Report Version (Babor et al., 2001). This is a 10-item questionnaire designed to detect early signs of harmful drinking behaviour. Items include 'How often do you have a drink containing alcohol?' and 'Have you or someone else been injured as a result of your drinking?' Items are scored

on five point scale e.g. from 'Never' to 'Daily or almost daily'. Hazardous and harmful alcohol use is indicated by a mean score of 8 or more.

Intention to engage in healthy behaviour was measured by a scale based on Integrative Model of Health Behaviour (Fishbein et al., 2001). This was operationalised with three items on a six-point Likert scale (from Strongly Disagree to Strongly Agree). The items were:

- a) I have no intention of giving up alcohol or cutting down on alcohol (reverse scored)
- b) I plan to exercise to a healthy degree throughout my life
- c) I don't see why I should engage in healthy behaviours (reverse scored)

#### Predictor Variables

- a) Job Satisfaction. This was measured using the Job Satisfaction Survey (JSS, Spector, 1994). The JSS has 36 item assessing nine dimensions of employee attitudes to their job. Responses are on a 6-point Likert scale from "strongly disagree" to "strongly agree", with higher scores representing greater job satisfaction. The nine dimensions are Pay, Promotion, Supervision, Fringe Benefits, Contingent Rewards (performance based rewards), Operating Procedures / Conditions (required rules and procedures), Co-workers, Nature of Work, and Communication (clarity of organisational communication regarding the nature of assignments, goals of the employer etc). The internal consistency alphas for the subscales are between .60 (Co-workers) and .82 (Supervision).
- b) Relationship satisfaction. The Relationship Assessment Scale (Hendrick 1988) has seven items, and higher scores represent greater relationship satisfaction. The internal consistency alpha is .86.
- c) Integrative Model of Health Behaviour (IMBP) Health Behaviours Questionnaire variables. This is based on the integrative model of health behaviour (Fishbein et al., 2001). Twenty seven items assess eight dimensions of health behaviours, namely: barriers to healthy behaviours; intention to engage in healthy behaviours (this was a predictor in the first model and outcome in the second); ability to engage in healthy behaviours; advantages of engaging in healthy behaviours, social pressure to engage in healthy behaviours, self-identity regarding healthy behaviours, emotions around healthy behaviours, and self-efficacy regarding engaging in healthy behaviours. Responses are on a six-point Likert scale (Strongly Disagree to Strongly Agree), with higher scores representing greater intention to engage in health behaviours. The order of presentation of these items was mixed so that they were not presented grouped in their domains. The mean internal consistency alpha for the subscales was .35.
- d) Relationship quality. The Relationship Structures (ECR-RS) questionnaire (Fraley et al., 2006) is a nine-item measure based on Hazan & Shaver's (1987) classic three-category attachment questionnaire. The internal consistency alphas for the subscales are .85 for Avoidance and .88 for Anxiety. Higher scores represent better relationship quality.

- e) Gender egalitarianism. Measured with the Attitudes Towards Women Scale Short version (Spence, Helmrich & Stapp, 1973). This is a 25-item scale which measures attitudes towards women's roles in society. Responses are on a four-point Likert scale from 'agree strongly' to 'disagree strongly'. The internal consistency alpha is .87. Higher scores indicate more gender egalitarian views.
- f) Neuroticism. This was measured using the EPQ-R-Short Neuroticism items (Eysenck & Eysenck, 1991), with higher scores representing more neuroticism (or emotionality). The internal consistency alpha for this scale is .88.
- g) General Wellbeing. This was measured using the Positive Mindset Index (PMI) (Barry, Folkard & Ayliff, 2014). This scale measures how positively a person is currently thinking, and consists of six items: happiness, confidence, being in control, emotional stability, motivation and optimism. Higher scores represent a more positive mindset. The internal reliability alpha is .93,
- h) Aggression. This was measured using the short version of the Aggression Questionnaire (Buss & Perry, 1992). The internal consistency alphas for the subscales range from .76 to .86. The survey took approximately 25 minutes to complete.

#### Procedure

An invitation to participate in the survey was posted on participating websites. Participants volunteered to fill in the questionnaires after completing the information sheet and consent sections of the survey. The trial recruited between June 2013 and Sept 2014. Ethical approval was granted by the Graduate School Research Ethics Committee, University College London.

#### Data analysis

In the main analyses, the backward stepwise multiple linear regression method was used.

Rather than combining the data for men and women and running 'gender' as a dummy variable, this study has analysed the data for men and women separately. This is done in order to describe with maximum clarity the association between the predictors and outcome within each gender, which could not be done adequately if gender were simply a predictor variable.

In the first model the outcome was drinking behaviour, and in the second model the outcome was intention to engage in healthy behaviours. In both models, the 25 predictors were: demographic variables (age, level of education), psychological variables (Avoidant Attachment, Anxious Attachment, Relationship Assessment, Aggression, Attitudes to Women Scale, Neuroticism, PMI), job satisfaction variables (Pay, Promotion, Supervision, Fringe Benefits, Contingent rewards, Operating conditions, Co-workers, Nature of work, Communication), IMBP health behaviour variables (Skills, Environmental constraints, Advantages & Disadvantages, Social pressure, Self-discrepency, Emotional reaction, Self-efficacy). Each model was run twice, once for the male sample and once for the female sample, thus four regressions were performed in total.

The sample size required, based on Tabachnick and Fidell (2001) was 50+8m (50+(8\*26)) (where 50 is the baseline N required, and m is the number of predictor variables) thus 258 participants were required for multiple linear regression. To reduce the impact of missing data, missing values were excluded pairwise. Data was analysed using SPSS statistical software, Version 22.

#### Results

## **Initial Analysis**

The final sample size (for alcohol, 98 men and 163 women; for health behaviours 93 men and 153 women) left the initial iterations of the backward stepwise regression somewhat underpowered. However apart from the health behaviours model with men, these numbers fully powered the analyses for the latter iterations, and the final models consisted of, respectively, four and seven predictors (see Tables 3 and 4).

Table 1 shows the descriptive statistics and comparison by gender for background characteristics of the participants.

**Table 1.** Descriptive statistics and comparison by gender for background characteristics. Values are show as mean (SD) or frequency (percentage) as appropriate.

		Men (N = 113°)	Women (N = 194)	Test statistic
Age	_	34.51 (12.89)	29.13 (10.33)	3.29 <sup>a***</sup>
Educational achievement	Doctorate Masters Bachelor / college	5 (4.2%) 25 (21%) 58 (48.7%)	10 (5.2%) 43 (22.2%) 80 (41.2%)	4.23 <sup>b</sup>
	Secondary / high school	25 (21%)	59 (30.4%)	
	Primary school	o (o%)	2 (1%)	

<sup>\*</sup> P<.05, \*\* P<.01, \*\*\* P<.001 (two tailed).

<sup>&</sup>lt;sup>a</sup> independent groups t-test with 'equal variances not assumed' correction used

 $<sup>^{\</sup>text{b}}\chi^{\text{2}}$  with Fisher's Exact Test correction for cells with expected count of less than 5

<sup>&</sup>lt;sup>c</sup> Five of the 118 participants did not give full demographic information.

Table 2 shows the descriptive statistics and comparison by gender for the variables in the model of unhealthy drinking behaviour.

**Table 2.** Descriptive statistics and comparison by gender (using independent t-tests) for predictor and dependent variables. Values are shown as mean (SD).

		Men	Women	t value
Drinking AUDIT		7.13 (5.59)	4.82 (4.51)	3.48 <sup>a***</sup>
Intention to do health behaviours (IBMP)		3.79 (0.60)	3.98 (0.61)	-2.37**
Attitude to Women		3.31 (0.47)	3.44 (0.41)	-2.09*
Neuroticism		5.51 (3.42)	6.25 (3.57)	-1.49
Health Behaviour Variables (IBMP)	Skills	3.55 (0.71)	3.62 (0.77)	-0.73
	Constraints	2.65 (o.74)	2.51 (0.77)	1.36
	Advantages	3.90 (0.69)	3.97 (0.72)	-0.84
	Pressure	3.75 (o.64)	3.70 (0.71)	0.61
	Self-image	3.01 (0.92)	3.11 (o.81)	-0.93
	Reaction	3.49 (0.56)	3.59 (0.69)	-1.18
	Self-efficacy	3.51 (0.77)	3.52 (0.74)	-0.14
Job Satisfaction variables	Pay	3.41 (1.26)	3.46 (1.22)	-0.30
	Promotion	3.49 (1.27)	3.40 (1.13)	0.53
	Supervision	4.41 (1.28)	4.44 (1.13)	-0.16
	Fringe Benefits	3.78 (1.10)	3.78 (1.10)	-0.06
	Rewards	3.62 (1.23)	3.63 (1.18)	-0.07
	Conditions	3.34 (1.04)	3.70 (1.07)	-2.36**
	Co-workers	4.18 (0.93)	4.23 (0.97)	-0.38
	Type of Job	4.15 (1.38)	4.40 (1.05)	-1.39 <sup>a</sup>
		3.59 (0.92)	3.64 (o.81)	-0.35

<sup>\*</sup> P<.05, \*\* P<.01, \*\*\* P<.001 (two tailed).

<sup>a</sup> 'Equal variances not assumed' correction used

## Predictors of Unhealthy Drinking Behaviour

In all four of the regressions (two outcome variables, run once for men and once for women), all collinearity diagnostics were within acceptable limits; all VIF statistics well below 10 and all tolerance statistics well above 0.2 (Field, 2005). The predictors in Tables 3 and 4 are the variables that formed the best statistical model from the initial set of predictors, and show the effect of each variable when the effect of the other variables is held constant.

For men only (N = 98) the model resolved in 26 iterations, and did not perform significantly better than chance (F (1, 41) = 3.46, p<.07). The model only weakly predicted the amount of variation in drinking behaviour (Adjusted R Square = 5.5%). Table 3 shows that for men, problem drinking behaviour was non-significantly predicted by being less able to see the advantage of engaging in health behaviours (p < .07).

For women only (N =163), the model resolved in 24 iterations, and performed significantly better than chance (F (3, 62) = 3.70, p<.016) though only weakly predicted the amount of variation in drinking behaviour (Adjusted R Square = 11.1%). Table 3 shows that for women, problem drinking behaviour was significantly predicted only by higher levels of neuroticism. Two other variables (less intention to engage in healthy behaviours, more constraints against engaging in healthy behaviours) made non-significant contributions to the model.

**Table 3.** Predictors that contributed to model of risky drinking behaviour in men and women.

Variable	Men			Women		
	В	SE B	β	В	SE B	β
	-	-	-	0.32	0.15	0.26*
Intention	-	-	-	-1.682	0.88	-0.23
Constraints	-	-	-	1.260	0.71	0.21
Advantages	-1.75	1.35	-0.28	-	-	-

<sup>\*</sup> P<.05 (two tailed).

Notes: 'Intention' = intention to engage in healthy behaviours; 'Constraints' = constraints against engaging in healthy behaviours; 'Advantages' = the advantages of engaging in healthy behaviour outweigh the costs

## Predictors of Intention to Engage in Healthy Behaviours

For men only (N = 93), the model resolved in 22 iterations, and performed significantly better than chance (F (5, 37) = 13.09, p < .0000002) and was a strong predictor of intention to engage in healthy behaviours (Adjusted R Square = 59%). Table 4 shows that for men only, intention to engage in health behaviours was significantly predicted by greater satisfaction with organisational communication, seeing the advantage of health behaviours, less satisfaction with their job in general, feeling good about health behaviours, and being dissatisfied with pay.

For women only (N = 157), the model resolved in 21 iterations, and performed significantly better than chance (F (6, 59) = 7.36, p < .000007) and was a moderate predictor of intention to engage in healthy behaviours (Adjusted R Square = 37.0%). Table 4 shows that for women, greater intention to engage in health behaviours is predicted by: feeling there is less chance of promotion, seeing the advantage of health behaviours, feeling good about health behaviours, and being happier with pay. Also, having less gender egalitarian views and being less satisfied with organisational communication were non-significant predictors of intention to engage in health behaviours.

**Table 4.** Predictors that contributed to model of intention to engage in health behaviours for men and women.

Variable	Men		Women			
	В	SE B	β	В	SE B	β
Emotions	0.36	0.12	0.33**	0.32	0.10	0.36**
Advantages	0.36	0.10	0.42***	0.27	0.10	0.32**
Pay	-0.16	0.06	-0.34**	0.18	0.08	0.37*
Promotion	-	-	-	-0.18	0.08	-0.32*
Attitudes to	-	-	-	-0.30	0.32	-0.2
Women						
Communication	0.26	0.00	o <b>=</b> 4***	0.15	0	0.0
	0.36	0.08	0.54***	-0.15	0.08	-0.2
Nature of work	-0.17	0.05	-0.40**	-	_	

<sup>\*</sup> P<.05, \*\* P<.01, \*\*\*P<.001 (two tailed).

Notes: 'Emotions' = feeling good about engaging in healthy behaviour; 'Advantages' = seeing that the advantages of engaging in healthy behaviour outweigh the costs; Pay = being satisfied with pay; Promotion = being satisfied with prospects for promotion; Attitudes to Women = believing women should be treated as equals to men; Communication = being satisfied with the quality of organisational communication; Nature of work = liking one's job.

#### Discussion

This study surveyed 194 women and 118 men to assess how much their job satisfaction and

relationship quality affected their drinking behaviour and the intention to engage in healthy behaviours. There were no significant predictors of problem drinking in men, and in women the only significant predictor of problem drinking was neuroticism (emotionality). The most significant predictor of intention to engage in healthy behaviours for women was feeling good about health behaviours, and for men it was greater satisfaction with the clarity of organisational communication. Some interesting gender differences were observed.

After controlling for demographic and other variables, men and women were found to be different in some of the predictors of their intention to engage in healthy behaviours. For women, greater intention to engage in healthy behaviours was predicted by being happier with pay ( $\beta$  = .36, p<.012), but for men the relationship between intention to engage in healthy behaviours and pay was significant in the opposite direction ( $\beta$  = -.34, p<.006) i.e. with being less happy with pay. To a lesser degree, men and women also had contrasting patterns regarding satisfaction with communication at work and healthy behaviours: for women, low satisfaction with communication was associated with (statistically nonsignificantly) greater intention to engage in healthy behaviours, whereas for men it was strongly associated with less intention to engage in healthy behaviours. In understanding these findings it should be noted that 'organisational communication' is defined in the Job Satisfaction Survey in terms of four dimensions: thinking communication in the organisation is good; being clear about the goals of the organisation; knowing what is going on within the organisation; and feeling that work assignments are explained clearly.

The literature from previous research examining the link between the workplace and health behaviour has produced mixed findings. For example, Kouvonen et al. (2007) found that the workplace can have a negative impact on health behaviour, whereas other studies have found no such association (e.g. Overgaard et al., 2004). It could be that had these studies examined data from their male and female participants separately, their findings would have shown sex differences of the kind found in the present study. Previous research has tended to find that relationship quality is positively associated with health behaviours (e.g. Doumas et al., 2006), but the present study did not find evidence supporting those findings. Interestingly, although women reported significantly higher gender egalitarian views than did men, gender egalitarianism in women was negatively linked with intention to engage in health behaviours. Although this relationship was a non-significant contributor to the model (Table 4), future studies might seek to examine this association in further detail.

Relatively few studies have investigated gender differences in the influence of work and relationships on health behaviour; this in part explains why although the findings of this study are intriguing, there is little existing in theory or research that easily explains them. Thus until further research is done, it is only possible to speculate on the causes of the findings. A possible interpretation follows, illustrating the complexity of potential influences and underpinning

motivational dynamics. Perhaps the first thing to note is that the female sample was significantly younger than males, and was educated to a higher level than males, though non-significantly so. Although neither of these variables were significant predictors of alcohol use or intention to engage in health behaviours, in theory, differences in these directions could give rise to a difference between the groups in terms of the way they view work and its importance to their lives overall. For example, differences in personal values relating to work may underpin gender differences and their indirect influence on the outcome variables. Being younger and educated to a higher level should mean that the female participants have better job prospects and more job mobility compared to men. For the latter, being older and less educationally qualified, the current job may be more important to maintain and perhaps play a greater part in their identity and self-esteem. Equity or Justice Theories of work motivation (e.g. Donovan, 2001; Hertel & Wittchen, 2008) would predict that if an individual does not feel they are getting an equitable share of rewards from their workplace, they may seek to redress the work-life balance by putting more effort and time into non-work activities. Thus, males feeling dissatisfied with pay might be expected to show more intent towards health promoting behaviours outside work, which can be viewed as self-nurturing. With the female sample, however, the relationship may be different and less strong, because the present job may not be as bound up with their self-esteem (being young end educated, they can readily find alternatives), and hence if they are not satisfied with the level of extrinsic rewards it has fewer implications for their perception of equity. Moreover, if they seek greater financial rewards they may choose to devote more time in thinking about and seeking new jobs rather than in health promotion behaviours.

Regarding the somewhat contrasting patterns found in men and women between intention to engage in health behaviours and clarity of organisational communication, the explanation may again rest on differences in the perception and importance of work. Much research has shown that women are more open and self-disclosing (Fletcher, 1999), which makes satisfactory communication very important to women, more so than extrinsic rewards like pay, not least because it can act as an indicator of poor relationships at work. In this realm, unsatisfactory organisational communication may have much more relevance in balancing work and non-work perception of equity for the women in the present sample. Hence, women who were dissatisfied with the clarity of communication relating to their work might indeed be driven to restore some balance by devoting more of their time and thought to non-work activities including health promoting behaviours (which may also offer a different route for forming good relationships and communication). On the other hand, if communications regarding work and for the workplace are positive, there is no need for balancing non-work activities. In the case of the male sample, the findings fit with what might be expected, namely that when the general work environment is satisfactory, this spills over to more positive non-work responses.

Clearly, such interpretations are speculative, even though they rest on established theories of work motivation or findings on individual differences in relation to them. However these explanations offer some scope for formulating hypotheses for future research, which might include measures of the importance of various aspects of work and work life balance rather than simply seeking ratings of satisfaction in one's present job. Future researchers might also consider interviewing men and women rather than conducting a survey. This is because interviews may allow a more complete exploration of issues of masculinity and femininity, and such information might shed light on the meaning of the present findings.

# <u>Limitations of this Study</u>

A possible limitation of the present study is that the 'intention to engage in healthy behaviours' variable combined behaviours (alcohol consumption, exercise, and general health behaviours) that are different in important ways and each driven by different motivating factors. For example, risky alcohol use might be driven by more pathological motivations than exercise behaviour. On the other hand, this diversity of variables might be considered a strength, in that the composite variable might broadly capture key elements of different health behaviours.

Although the sample size in three of the four regressions was adequate for the latter iterations of the backward stepwise regression, the initial iterations were underpowered - according to the guidelines of Tabachnick and Fidell (2001) - in all four cases. The impact of such underpowering would have been to underestimate the effect of some predictors in the initial iterations, but the potential effect of is unlikely to have detracted very much from the validity of the final models shown in Tables 3 and 4, the health behaviour models in particular. Future studies are advised to bear the issue of power in mind when specifying their models.

The internal consistency alpha coefficients for the IMBP subscales were, overall, weak (an average of .35). Although this does not reflect on the validity of the IMBP subscales, and may be acceptable for the exploratory purposes of the present study, these alphas would be lower than acceptable for scale development purposes, therefore future studies that are not concerned specifically with the IMBP should consider using a different measure of health behaviour.

Due to the focus being on job satisfaction, relationships and health, the current employment - current job title or rank - of the participant was not assessed in this study. Although their educational levels were assessed, this variable was not a significant predictor of problem drinking or intention to engage in health behaviours. Job title and rank would be interesting variables to explore in future research.

#### Conclusions

Few studies have investigated gender differences in the influence of work and relationships on

health behaviour, and the present paper offers a unique platform from which further research in this field may progress. Health psychologists should consider using this information in order to better target gender-specific health promotion campaigns to men and women. Organisational psychologists might seek to discover why satisfaction with pay is related to opposite patterns of health behaviour in men and women.

#### References

- Ajzen I, & Fishbein, M (1980). Understanding attitudes and predicting social behaviour. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Ajzen, I (1998). Attitudes, personality and behaviour. Open University Press.
- Babor, T. F., Higgins-Biddle, J. C., Saunders, J. B., & Monteiro, M. G. (2001). Audit. The Alcohol Use Disorders Identification Test (AUDIT): Guidelines for use in primary care.
- Bandura, A (1986). Social foundations of thought and action: a social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Barry, J. A., Folkard, A., & Ayliffe, W. (2014). Validation of a brief questionnaire measuring positive mindset in patients with uveitis. Psychology, Community & Health, 3, 1-10. Doi http://hdl. handle.net/10400.12/3129
- Black, C & Frost, D. (2011). Health at Work an Independent Review of Sickness Absence. London: DWP.
- Booth-Kewley, S, Vickers, R.R. (1994). Associations between major domains of personality and health behavior. Journal of Personality, 62, 281-98 DOI: 10.1111/j.1467-6494.1994.tb00298.x
- Buss, A. H., & Perry, M (1992). The aggression questionnaire. Journal of personality and social psychology, 63, 452. http://dx.doi.org/10.1037/0022-3514.63.3.452
- de Visser, R. O., & McDonnell, E. J. (2012). 'That's OK. He's a guy': A mixed-methods study of gender double-standards for alcohol use. Psychology & health, 27, 618-639. doi 10.1080/08870446.2011.617444
- Donovan, J. J. (2001). Work motivation. Handbook of industrial, work and organizational psychology, 2, 53-76.
- Doumas, D. M., Turrisi, R., & Wright, D. A. (2006). Risk factors for heavy drinking in college freshmen: Athletic status and adult attachment. Sport Psychologist, 20, 419-434. http://www.humankinetics.com/20073072107
- Eysenck, H. J., & Eysenck, S. B. G. (1991). EPQ-R short scale. London: Hodder & Stoughton Educational
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G\* Power 3: A flexible statistical power

- analysis program for the social, behavioural, and biomedical sciences. Behaviour research methods, 39, 175-191. DOI 10.3758/BF03193146
- Feeney, J. A., Kelly, L., Gallois, C., Peterson, C., & Terry, D. J. (1999). Attachment Style, Assertive Communication, and Safer-Sex Behaviours. Journal of Applied Social Psychology, 29, 1964-1983. DOI: 10.1111/j.1559-1816.1999.tb00159.x
- Field, A. (2005). Discovering statistics with SPSS. London: Sage.
- Fishbein, M., Triandis, H. C., Kanfer, F. H., Becker, M., & Middlestadt, S. E. (2001). Factors influencing behaviour and behaviour change. Handbook of health psychology, 3-17. 320354
- Fletcher, C. (1999) The implications of research on gender differences in self assessment and 360 degree appraisal. Human Resource Management Journal, 9, 39-46. DOI: 10.1111/j.1748-8583.1999.tboo187.x
- Fraley, R. C., Heffernan, M. E., Vicary, A. M., & Brumbaugh, C. C. (2011). The experiences in close relationships—Relationship Structures Questionnaire: A method for assessing attachment orientations across relationships. Psychological assessment, 23, 615. http://dx.doi.org/10.1037/a0022898
- Godin, G., & Kok, G. (1996). The theory of planned behaviour: a review of its applications to health-related behaviours. American journal of health promotion, 11, 87-98. http://dx.doi.org/10.4278/0890-1171-11.2.87
- Gray-Little, B., & Burks, N. (1983). Power and satisfaction in marriage: A review and critique. Psychological Bulletin, 93, 513-538. http://dx.doi.org/10.1037/0033-2909.93.3.513
- Hellerstedt, W. L., & Jeffery, R. W. (1997). The association of job strain and health behaviours in men and women. International Journal of Epidemiology, 26, 575-583. doi: 10.1093/ije/26.3.575
- Hendrick, S. S., Dicke, A., & Hendrick, C. (1998). The relationship assessment scale. Journal of Social and Personal Relationships, 15, 137-142. doi: 10.1177/0265407598151009
- Hertel, G., & Wittchen, M. (2008). Work motivation. An introduction to work and organizational psychology. 2nd Edition. Ed N. Chmiel. Blackwell: Oxford
- Janz, N. K., & Becker, M. H. (1984). The health belief model: A decade later. Health Education & Behaviour, 11, 1-47. doi: 10.1177/109019818401100101
- Kassel, J. D., Wardle, M., & Roberts, J. E. (2007). Adult attachment security and college student substance use. Addictive behaviours, 32, 1164-1176. doi:10.1016/j.addbeh.2006.08.005
- Kouvonen, A., Kivimäki, M., Väänänen, A., Heponiemi, T., Elovainio, M., Ala-Mursula, L., ... & Vahtera, J. (2007). Job strain and adverse health behaviors: the Finnish Public Sector Study. Journal of Occupational and Environmental Medicine, 49, 68-74. Doi 10.1097/ JOM.obo13e318o2db54a
- Kouvonen, A., Kivimäki, M., Cox, S. J., Poikolainen, K., Cox, T., & Vahtera, J. (2005). Job strain, effort–reward imbalance, and heavy drinking: a study in 40,851 employees. Journal of

- Occupational and Environmental Medicine, 47, 503-513.
- Kuntsche, E., Knibbe, R., Gmel, G., & Engels, R. (2005). Why do young people drink? A review of drinking motives. Clinical psychology review, 25, 841-861. doi:10.1016/j.cpr.2005.06.002
- McNulty, J. K. (2008). Neuroticism and interpersonal negativity: The independent contributions of perceptions and behaviors. Personality and Social Psychology Bulletin, 34, 1439-1450. Doi 10.1177/0146167208322558
- Ng, D. M., & Jeffery, R. W. (2003). Relationships between perceived stress and health behaviours in a sample of working adults. Health Psychology, 22, 638. http://dx.doi.org/10.1037/0278-6133.22.6.638
- Office for National Statistics ELASA. NS-SEC classes and collapses 2004. Available online at http://www.ons.gov.uk/about-statistics/classifications/current/ns-sec/cats-and classes/ns-sec-classes-and-collapses/index.html Accessed 29th Oct 2010
- ONS, Office of National Statistics (2012). Suicide rates in the United Kingdom, 2006 to 2010. Available at http://www.ons.gov.uk/ons/rel/subnational-health4/suicides-in-the-united-kingdom/2010/stb-statistical-bulletin.html Accessed online on 11th May 2012.
- Overgaard, D., Gyntelberg, F., & Heitmann, B. L. (2004). Psychological workload and body weight: is there an association? A review of the literature. Occupational Medicine, 54, 35-41. doi: 10.1093/occmed/kqg135
- Payne, N., Jones, F., & Harris, P. R. (2013). Employees' perceptions of the impact of work on health behaviours. Journal of health psychology, 18, 887-899. doi: 10.1177/1359105312446772
- Spector, P. E. (1985). Measurement of human service staff satisfaction: Development of the job satisfaction survey. American journal of community psychology, 13, 693-713. Doi 10.1007/BF00929796
- Spence, J.T., Helmreich, R., & Stapp, J. (1973). A short version of the Attitudes toward Women Scale (AWS). Bulletin of the Psychonomic Society, 2, 219-220. Doi 10.3758/BF03329252
- Tabachnick, B. G., & Fidell, L. S. (2001). Using multivariate statistics. Boston: Allyn & Bacon.
- Vungkhanching, M., Sher, K. J., Jackson, K. M., & Parra, G. R. (2004). Relation of attachment style to family history of alcoholism and alcohol use disorders in early adulthood. Drug and alcohol dependence, 75, 47-53. doi:10.1016/j.drugalcdep.2004.01.013
- Vorauer, J. D., & Ross, M. (1996). The pursuit of knowledge in close relationships: An informational goals analysis. Knowledge structures in close relationships: A social psychological approach. Psychology Press: New York.
- Waldron, I. (1998). Gender and health-related behavior. In Health behavior (pp. 193-208). Springer US.

NEW MALE STUDIES: AN INTERNATIONAL JOURNAL (NMS) IS AN OPEN ACCESS ONLINE INTERDISCIPLINARY JOURNAL FOR RESEARCH AND DISCUSSION OF ISSUES FACING BOYS AND MEN WORLDWIDE.

THIS JOURNAL USES OPEN JOURNAL SYSTEMS 2.3.4.0, WHICH IS OPEN SOURCE JOURNAL MANAGEMENT AND PUBLISHING SOFTWARE DEVELOPED, SUPPORTED, AND FREELY DISTRIBUTED BY THE PUBLIC KNOWLEDGE PROJECT UNDER THE GNU GENERAL PUBLIC LICENSE.

THIS ARTICLE HAS BEEN DOWNLOADED FROM HTTP://NEWMALESTUDIES.COM.