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The impact of stress on eating behavior in M.A.I. employees

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Abstract: The study investigates the link between job satisfaction, workplace locus of control and eating behavior in employees of the Ministry of Internal Affairs (M.A.I.). Using the Dutch Questionnaire for the Assessment of Restrictive, Emotional and External Eating Behavior (DEBQ) and the Occupational Stress Questionnaire (OSI), the research was conducted by applying online questionnaires on the Google Forms platform, on a group of participants consisting of 60 M.A.I. employees. The results highlight the complexity of influences on eating behavior in the workplace environment, highlighting the importance of a satisfactory work environment for promoting health and emotional balance of employees.

Keywords: stress, eating behavior, job satisfaction, M.A.I.

1. Theoretical framework

1.1. Organizational stress

Lately, there has been a noticeable increase in the attention paid by researchers to the notion of organizational stress. This increased interest can be attributed to several factors. First, there is a growing recognition of its association with key indicators of organizational performance, such as absenteeism and general workplace dissatisfaction among employees (Ongori & Agolla, 2008). Second, there is a growing body of research supporting that stress has its role in the development of chronic health conditions, including, but not limited to, coronary heart disease (Peter et al., 2002) as well as mental disorders (Assari & Lankarani, 2016; Hassanzadeh et al., 2017). This recognition highlights the importance of understanding and addressing psychological stress in work environments, not only for the well-being of individuals, but also for the effectiveness and overall functioning of organizations.

Stress is the body's and mind's reaction to requests or threats that upset a person's balance, whether imaginary or real (Selye, 2013). It involves the complicated interaction of a person's cognitive assessment and coping strategies with external stimuli (Lazarus, 2006). Stress triggers a series of physiological reactions that include the release of stress hormones



that stimulate the body for action, such as cortisol and adrenaline. Acute stress reactions can be adaptive, but prolonged or excessive stress can negatively impact physical and mental health, as well as overall quality of life (Marketon & Glaser, 2008).

Organisational stressors in the context of policing encompass a variety of factors inherent in the structure and functioning of police institutions. These stressors span a broad spectrum, ranging from interpersonal conflicts with supervisors or colleagues to deficiencies in material and human resources essential for effective work (Shane, 2010). In addition, work overload, characterized by a large volume of tasks and responsibilities, adds to the burden on police personnel.

1.2. Eating behavior

The concept of eating behavior encompasses a wide range of eating habits, preferences and actions manifested by individuals in their food consumption. This multifaceted construct encompasses various aspects, including food choices driven by personal preferences and nutritional needs, feeding practices influenced by cultural norms and family dynamics, and efforts aimed at weight management through diet and portion control (LaCaille, 2020). In addition, eating behavior encompasses a spectrum of eating-related problems, ranging from common concerns such as overeating and unhealthy snacking to more severe conditions such as obesity, eating disorders such as anorexia nervosa, bulimia nervosa, and eating disorders such as avoidance/restriction eating disorder (Walsh, 2011).

Restrictive eating behavior, involving deliberate restriction of food intake, often motivated by a desire to control body weight or shape, and emotional eating behavior, which refers to eating food in response to emotional states such as stress, anxiety, sadness, or boredom, rather than physiological hunger, are two distinct facets of eating behavior that play a significant role in individuals' eating habits. in general well-being (Vengher et al., 2024).

2. Research methodology

2.1. Objectives

The proposed study aims to investigate the impact of job satisfaction and the workplace locus of control on eating behaviors among M.A.I. employees. Key goals include exploring the relationship between job satisfaction and both emotional and restrictive eating behavior. It will also examine the link between workplace locus of control and emotional eating behavior, investigating individual beliefs about control over work-related outcomes and their influence on food choices. It is proposed to evaluate the mediating role of job satisfaction in the relationship between organizational stress and emotional eating behavior. Finally, the potential role of moderating factors, such as workplace locus of control and job satisfaction, in influencing the link between organizational stress and eating behaviors will be explored. Through this research, it aims to understand more deeply the complex interactions between organizational factors and eating behaviors of MIA employees, with the aim of developing strategies and interventions aimed at promoting well-being and improving the quality of life in this work environment.

2.2. Hypotheses

- It is assumed that there is a correlation between job satisfaction and emotional eating behavior in M.A.I. employees.
- It is assumed that there is a correlation between job satisfaction and restrictive eating behavior in M.A.I. employees.



➤ It is assumed that there is a correlation between workplace locus of control and emotional eating behavior in M.A.I. employees.

2.3. Questionnaires

- Dutch Questionnaire for the Assessment of Restrictive, Emotional and External Eating Behaviour (DEBQ)
- Occupational Stress Questionnaire (OSI)

2.4. Study participants

The questionnaires were applied online, through the Google Forms platform, on a group of participants consisting of 60 M.A.I. employees aged between 18 and 70, 24 being male and 36 female. In this study, informed consent is conducted orally. Participants were fully informed about the purpose, method, rationale of research, procedures participants would go through, and any possible benefits. The potential for any reasonably foreseeable risks, stress and discomfort was also disclosed. Participants were given a guarantee of confidentiality.

3. Data analysis and interpretation

3.1. Hypothesis no. 1: It is assumed that there is a correlation between job satisfaction and emotional eating behavior in M.A.I. employees.

Table 1. Correlations between job satisfaction and emotional eating behavior

			Emotional eating	Job satisfaction
Spearman's rho	Emotional eating	Correlation Coefficient	1.000	-.298*
		Sig. (2-tailed)	.	.021
	Job satisfaction	Correlation Coefficient	-.298*	1.000
		Sig. (2-tailed)	.021	.
		N	60	60

The negative correlation coefficient (-0.298) suggests that there is an inverse association between the two variables: the lower the job satisfaction, the greater the tendency towards emotional eating behavior. The significance of the result Sig. (2-tailed) .021 at a threshold of 0.05 indicates that there is a significant correlation between job satisfaction and emotional eating behavior at the 95% confidence level. The result suggests that the association observed between these two variables is not random, but is probably the result of an authentic relationship between them.

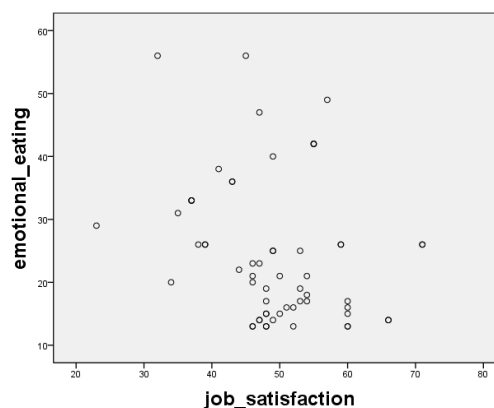


Figure 1. The cloud of dots between job satisfaction and emotional eating behavior



The dot cloud illustrates the relationship between job satisfaction and emotional eating behavior. On the horizontal axis is represented job satisfaction, and on the vertical axis is represented emotional eating behavior. Each point represents a study participant.

Job satisfaction is often considered an important factor in an individual's overall well-being and emotional balance. When people feel fulfilled and satisfied in their work, this positive mood can have a protective effect on mental and emotional health. In this context, they are more likely to use healthy strategies to regulate emotions and manage stress and daily pressures more effectively.

On the other hand, when there is dissatisfaction or discomfort at work, the individual may have difficulty regulating the negative emotions associated with this experience. Emotional eating behavior can become a way to cope with stress, find comfort, or compensate for feelings of dissatisfaction. These psychological mechanisms can influence how individuals perceive, manage and react to stress and pressures at work, having a direct impact on their relationship with food and eating habits. Research by Nishitani and Sakakibara (2005) indicates a significant relationship between job satisfaction and emotional eating, especially in the context of work-related stress. This suggests that stress may influence eating behaviors, causing individuals to either overeat or not eat, with women being more prone to stress-induced food consumption compared to men (Greeno & Wing, 1994). The results of the study show that employees who experience stress at work, especially those who show symptoms of "tension/anxiety", demonstrate eating behaviors similar to those of obese people. Characteristics associated with obesity, such as eating style, feeling full, knowing one's constitution, and motivation to eat, suggest that stressed employees may be inclined to consume larger amounts of food.

3.2. Hypothesis no. 2: It is assumed that there is a correlation between job satisfaction and restrictive eating behavior in M.A.I. employees.

Tabel 2. Correlations between job satisfaction and restrictive eating behavior

		Restrictiv eating	Job satisfaction
Spearman's rho	Restrictiv eating	Correlation Coefficient	1.000
		Sig. (2-tailed)	-.234
		N	.072
			60
	Job satisfaction	Correlation Coefficient	-.234
		Sig. (2-tailed)	1.000
		.072	
		60	
		60	

The negative correlation coefficient (-0.234) suggests that there is an inverse association between the two variables: the lower the job satisfaction, the greater the tendency towards restrictive eating behavior. The significance of the result Sig. (2-tailed) .072 at a threshold of 0.05 indicates that there is insufficient evidence to support the hypothesis. At this materiality threshold, we cannot say with confidence that there is a statistically significant association between job satisfaction and restrictive eating behavior.

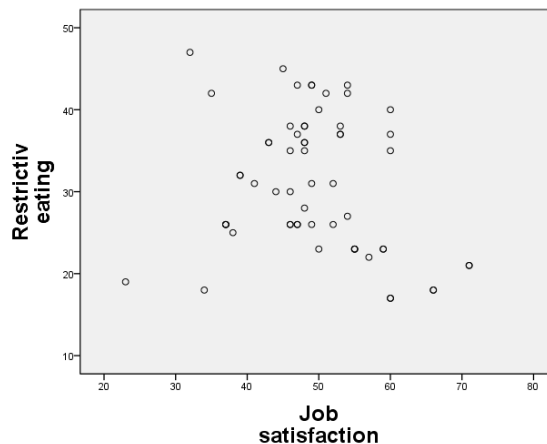


Figure 2. The cloud of dots between job satisfaction and restrictive eating behavior

The point cloud illustrates the relationship between job satisfaction and restrictive eating behavior. On the horizontal axis is represented job satisfaction, and on the vertical axis is represented restrictive eating behavior. Each point represents a study participant.

Psychologically interpreting the finding that there is no significant association between job satisfaction and restrictive eating behavior indicates a more complex perspective on how environmental and internal factors influence the relationship between emotional state and eating behavior. Research by Kendirkiran & Batur (2022) suggests that an increase in workload and work experience tends to lead to greater satisfaction among academics. This contradicts conventional assumptions that higher workloads necessarily lead to decreased job satisfaction. Moreover, the study reveals a negative correlation between job satisfaction and different eating behaviors, including emotional eating, restrictive eating and external eating. This shows that higher levels of job satisfaction are associated with healthier eating habits among academic staff.

The conclusion drawn from the research underlines the importance for institutions to prioritise the levels of job satisfaction of university staff, recognising its direct impact on their eating behaviours. It is recommended to regularly measure levels of job satisfaction to ensure staff well-being and productivity.

3.3. Hypothesis no. 3: It is assumed that there is a correlation between workplace locus of control and emotional eating behavior

Tabel 3. Correlations between workplace locus of control and emotional eating behavior

		.021	
Spearman's rho	Emotional eating	N	60
		Sig. (2-tailed)	.365
	Workplace locus of control	N	60
		Correlation Coefficient	Restrictive Job
	Correlation Coefficient	1.000	-.234
	Sig. (2-tailed)	.	.072

The negative correlation coefficient (-0.119) suggests that there is an inverse association between the two variables: the lower the workplace locus of control, the greater the tendency towards emotional eating behavior. The significance of the result Sig. (2-tailed) .365 at a

threshold of 0.05 indicates that there is insufficient evidence to support the hypothesis. At this materiality threshold, we cannot say with confidence that there is a statistically significant association between workplace locus of control and emotional eating behavior.

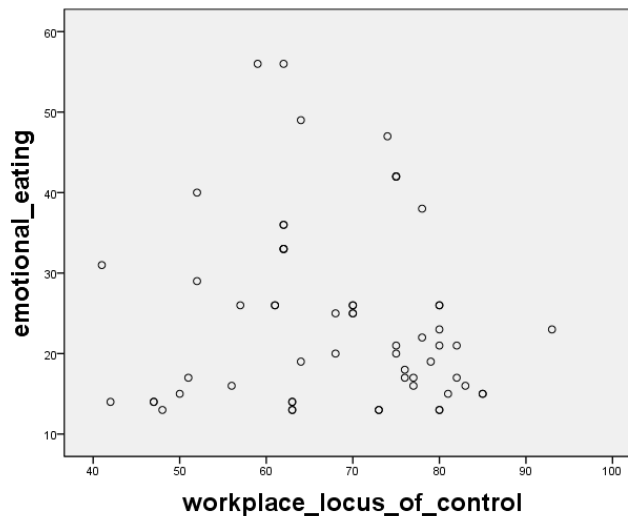


Figure 3. The cloud of points between workplace locus of control and emotional eating behavior

The point cloud illustrates the relationship between workplace locus of control and emotional eating behavior. On the horizontal axis is represented workplace locus of control, and on the vertical axis is represented emotional eating behavior. Each point represents a study participant.

Locus of control refers to how people believe they have control over events in their lives and is a psychological concept introduced by Julian Rotter (1990). People with an internal locus of control believe that their actions directly influence results, considering themselves primarily responsible for their successes and failures. In contrast, those with an external locus of control attribute events to external factors such as luck or destiny, feeling less control over their lives. Research shows that the relationship between workplace locus of control and emotional eating behavior is more complex than originally thought. Other psychological factors, such as stress and anxiety, can have a significant impact on how people regulate their emotions and adopt emotional eating behaviors. For example, a stress-filled work environment can cause people to use food as a means of coping with stress and anxiety, regardless of the level of control they have over their work. The dynamics of social and work interactions can also affect emotional eating behavior.

Based on the results of research conducted by Qi and Cui (2019), it appears that the locus of control plays a significant role in stress-induced eating behavior, especially when considered in conjunction with baseline self-assessment. Escape theory is considered applicable to understand why stress leads to increased food intake. Stress appears to influence food intake, first affecting the control site, which then influences basic self-assessment, ultimately influencing food intake. This suggests a sequential mediation model in which the control site influences basic self-assessment, which in turn affects food intake. What's more, the study suggests that assessing the environment is just as crucial as assessing the self in understanding



the link between stress and eating behavior. The locus of control positively predicts basic self-assessment, and basic self-assessment, in turn, negatively predicts food intake.

Therefore, the result obtained suggests that in order to fully understand the relationship between the workplace locus of control and emotional eating behavior, a more detailed investigation is needed that takes into account a wider range of psychological and environmental factors. Identifying and understanding these intermediate or modulating factors could provide a more complete picture of how emotional eating behavior is formed and regulated in the professional environment.

Conclusions and discussion

These results highlight the complexity and variety of factors that can influence eating behaviour in the work-related context. Although job satisfaction can play an important role in how individuals regulate their emotions and eating behavior, other factors such as stress levels, interpersonal relationship dynamics, and available support resources can also have a significant impact. In further discussions, it would be useful to further explore the mechanisms and intermediate factors underlying the relationship between job satisfaction and eating behaviour, as well as to consider how they can be influenced or modified to promote healthy eating habits and a more fulfilling and emotionally balanced work environment. Further investigation of these issues could also help develop more effective workplace stress intervention and management strategies, given the significant impact of stress on eating behaviour and mental health.

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