## Workaholic, or Just Hard Worker?

Published 2006 in Career Development International. 11(5): 394-417.

Copyright 2006 Emerald

## Evan J. Douglas

Brisbane Graduate School of Business, Queensland University of Technology,

Brisbane, Australia
evan.douglas@qut.edu.au
and

## Robyn J. Morris

Brisbane Graduate School of Business, Queensland University of Technology,
Brisbane, Australia
robyn@careconsulting.com.au

## Autobiographical Notes:

Evan Douglas teaches entrepreneurship, new venture strategy, new venture resourcing, and business planning in the Brisbane Graduate School of Business at Queensland University of Technology, where he has been Head of School since July 1997. His research interests include entrepreneurial attitudes and abilities, the self-employment decision, work motivation, and issues relating to new venture funding and new venture strategy.

Robyn Morris is a doctoral candidate in the Brisbane Graduate School of Business at Queensland University of Technology. She teaches management and entrepreneurship, previously at Edith Cowan University in Bunbury, Western Australia. Her research concerns the determinants of work motivation and job satisfaction, and is at the intersection of the entrepreneurship and work motivation literatures.


#### Abstract

Methodology/Approach: There is a lack of theoretical development on the question of why people work long hours and the nature of 'workaholism'. This paper uses the economist's utility-maximization model to build a conceptual model of voluntary work effort that explains the work effort decision of individuals. We demonstrate a variety of reasons that induce a person to work 'excessively'. The paper advances our understanding of work motivation and workaholic behavior and presents a series of researchable propositions for empirical testing.

Propositions: Individuals will work long hours when motivated to do so by the satisfaction they derive separately and collectively from (a) income (materialism); (b) leisure; (c) perquisites; and (d) work per se. It is argued that only the person who is strongly motivated by the latter reason is properly called a workaholic, and that the imposition of negative externalities on co-workers is a separate issue that might also involve work enthusiasts.

Originality of the Paper: This paper discerns three subcategories of the 'work enthusiast', which we call 'materialist', 'the low-leisure' and the 'perkaholic' hard workers. We demonstrate that these work enthusiasts work long hours for relatively high job satisfaction, while workaholics gain relatively low job satisfaction. Inflicting negative externalities on fellow workers is argued to be a separate issue - any one of the hard workers might irk their fellow workers by working 'too hard' or by their individual mannerisms.


Keywords: workaholism, workaholic types, work effort, discretionary work effort, work motivation

## Workaholic, or Just Hard Worker?

## INTRODUCTION

The hard working employee is often considered a valued organisational asset and workaholics are widely perceived as the hardest workers of all. Workaholism is commonly used to describe those people who work many hours and/or work very hard, contributing high levels of discretionary work effort. Why people are motivated to work so hard and whether this workplace behavior has positive or negative organisational outcomes has recently come under the research microscope.

Since the term 'workaholic' was coined by Oates (1971) over three decades ago, workaholism has attracted considerable attention in the popular press and practitioner circles. But empirical research and theory development to advance our understanding of its nature, causes and consequences has received limited consideration (Burke et al.., 2004a, McMillan et al.., 2002, Snir and Harpaz, 2004). Recent special issues on workaholism by the International Journal of Stress Management (2001: 8(2)) and the Journal of Organizational Change Management (2004: 17(5)) are indicative of the growing interest in workaholism in the research community.

Workaholism research has been impeded by the deficiency of clear and consistent concepts, good operational definitions and validated measures (Burke, 2001a, McMillan et al.., 2002, Scott et al.., 1997), although recent progress is being made (Buelens and Poelmans, 2004). Despite this progress, several issues remain, including conflicting views on what constitutes workaholism; differing workaholic typologies and consequent research inconsistencies; unreliable correlation between the extent of workaholism and the number of hours worked, suggesting that working hours inadequately captures the concept of workaholism; a limited number of variables
empirically tested as antecedents and consequences of workaholism; and conflicting research findings on organizational consequences of workaholism (Bonebright et al.., 2000, Buelens and Poelmans, 2004, Burke, 2000, McMillan et al.., 2002, McMillan et al.., 2003). The growing interest in workaholism, its prevalence in the workplace, and conflicting opinions, observations and conclusions about workaholism and its impact on organisations, on the workaholic, and on the families, present a convincing case for directing more research effort towards investigating this phenomenon.

In this paper we extend the existing literature on workaholism is two ways. Firstly we present a conceptual model of work effort that employs economic tools of analysis to provide a framework for analysing workaholic behavior patterns. In so doing we challenge the appropriateness of classifying the work enthusiast as a workaholic type (as did Buelens and Poelmans, 2004) and hypothesise three sub-types of work enthusiast. This analysis also represents a contribution to the work motivation literature which investigates the motivators of discretionary work effort (Morris and Douglas, 2004, 2005). Secondly, we provide a set of testable propositions for future empirical research.

## MAKING SENSE OF WORKAHOLISM

## Defining Workaholism

Workaholism has been differentially defined and classified in the literature. Four distinguishing aspects are whether: 1) it is defined behaviorally (Scott et al.., 1997, Robinson, 2000b) or attitudinally (Spence and Robbins, 1992, Machlowitz, 1980); 2) it is considered to be an addiction (Killinger, 1991, Oates, 1971, Robinson, 2000a); and 3) it is viewed positively (Cantarow, 1979, Machlowitz, 1980) or negatively (Oates, 1971, Robinson, 2000a, Seybold and Salomone, 1994), and 4) it is recognised as having different types with various antecedents and outcomes (Buelens and Poelmans, 2004, McMillan et al.., 2002, Scott et al.., 1997, Spence and Robbins, 1992).

Oates (1971) views workaholism as an addiction, first defining a workaholic as "a person whose need for work has become so excessive that it creates noticeable disturbance or
interference with his bodily health, personal happiness, and interpersonal relationships, and with his smooth social functioning". Spence \& Robbins (1992) provided the first academic and operational definition viewing workaholism as a set of attitudes. They define the workaholic as a person who is "highly work involved, feels compelled or driven to work because of inner pressures, and is low in enjoyment of work" compared to others. On a similar theme, Machlowitz (1980) contends that "what sets workaholics apart is their attitude towards work, not the number of hours they work". She argues that the workaholic is motivated by "psychic income" which comes from responsibility, meaning, opportunity and recognition, not monetary income (Seybold and Salomone, 1994).

In contrast, Scott et al. (1997) argue that workaholism is not an attitude but a pattern of behavior with three critical elements viz: the person spends considerable discretionary time in work activities, thinks about work when not at work and works beyond organisational or economical requirements. Robinson (2000a) proposes a rather stringent definition reflective of what he views as the 'true workaholic'. He defines workaholism as "an obsessive-compulsive disorder that manifests itself through self-imposed demands, an inability to regulate work habits, and an overindulgence in work to the exclusion of most other life activities" (Robinson, 2000a).

Snir \& Harpaz (2004) argue that a definition of workaholism must contain as core elements a substantial behavioral and cognitive investment in work; the investment in work must be stable and not a response to temporary situational factors; it should make no a priori assumptions regarding the nature of the consequences of workaholism, and it should take account of external necessities that may foster workaholic behavior. They define workaholism as "the individual's steady and considerable allocation of time to work-related activities and thoughts, which does not derive from external necessities" (Snir \& Zohar, 2000 as cited in Snir \& Harpaz, 2004). This parallels the operational definition posed by McMillan, O'Driscoll, Marsh and Brady (2001) that workaholism is "a personal reluctance to disengage from work evidenced by the tendency to work (or to think about work) anytime and anywhere", which they developed to address the inability of recent research to replicate the work involvement component of Spence \& Robbins workaholism triad (1992).

The common theme in all these views on workaholism is that it involves a high or excessive input of work effort well beyond what is normally required by an organisation. This central element of high investment of time in work and high work involvement is a core dimension in Spence \& Robbins' measure of workaholism. It is common to all of their workaholic sub-types. Following this point of communality, we build a model of workaholic behavior based on the view of workaholism as a high investment of time in work.

It is generally recognised that the workaholism construct is complex and multidimensional. Several typologies have been developed (see Appendix 1 for an overview of some well recognised typologies). Few of these however have been empirically tested and validated. Some typologies relate to workaholics only (Robinson, 2000a, Scott et al.., 1997) while others identify categories of workaholics and non-workaholics (Buelens and Poelmans, 2004, Naughton, 1987, Spence and Robbins, 1992). Robinson (2000a) argues that workaholism manifests itself in various work styles and patterns and that many classifications of workaholics present only one or two types that are 'truly workaholics' with the others being non-workaholics, which he argues confounds the research results and adds to the contradictory outcomes and confusion.

Arguably one of the most well-recognised and widely used measures of workaholism is the Spence \& Robbins (1992) workaholic triad, which identifies work involvement, feeling driven to work and work enjoyment as the defining dimensions. Amongst the strengths of the Spence \& Robbins typology are that, unlike most others, its underlying dimensions are embedded in the academic literature and the psychometric properties and factor structure of the measures have been empirically tested in various industry sectors and countries (Buelens and Poelmans, 2004, Kanai et al.., 1996, McMillan et al.., 2002, Spence and Robbins, 1992).
'Work involvement' is a generalised attitude of psychological involvement with work (McMillan et al.., 2002). Scott et al. (1997) describe this as a normative belief about the value of work in one's life and relate it to the Protestant Work Ethic, an intrinsic valuing of work or a belief that work is inherently good or satisfying. 'Feeling driven' is an inner pressure to work maintained by internal fulfilment rather than external pressure and converges with intrinsic job motivation (McMillan et al., 2002). We suggest that 'work involvement' and 'feeling driven' means a person is motivated by work for its own sake
which means utility is derived from work effort per se. 'Work enjoyment' is the level of pleasure derived from work and correlates with job satisfaction (McMillan et al.., 2002). Commensurate with Machlowitz's view of psychic income (1980), we argue that work enjoyment means the psychic utility derived from the non-monetary working conditions associated with the workplace.

Employing these defining dimensions, Spence \& Robbins (1992) identify six sub-types of workaholics and non-workaholics, viz: work addicts, enthusiastic workaholics, work enthusiasts, disenchanted workers, relaxed workers and unengaged workers (see Appendix 1). While Kanai et al. (1996) and McMillan et al. (2002) failed to replicate this tripartite model using broader sample bases and rigorous analytical methods, they found considerable consistency for a revised 2 -factor model utilising only feeling driven and work enjoyment. Buelens \& Poelmans (2004) subsequently enriched the Spence \& Robbins' typology by replicating the six workaholic sub-types and also identifying the 'reluctant hard worker' as an additional sub-type, and speculating that 'alienated professionals' might be a further sub-type.

In their original study Spence \& Robbins (1992) do not seem to mean that the work enthusiast should be included as a 'workaholic type'. They state that the core purpose of their study was to assess the concept of workaholism and they contrast this profile with 'work enthusiasm'. Several researchers however subsequently refer to Spence \& Robbins' three workaholic types viz: workaholics (work addicts), enthusiastic workaholics and the work enthusiast (Buelens and Poelmans, 2004, Burke, 1999a, Burke, 1999b, Burke, 2001b, Burke et al., 2004a, Burke et al.., 2004b).

Scott et al. (1997) argue that people who work long hours are not necessarily workaholics. We note that working long hours is a behavior, which is presumably driven
by particular attitudes, and there might be a multitude of attitudinal reasons to work long hours, only some or which might be related to workaholism. People high in work involvement and drivenness (attitudes) are predisposed to work long hours and so are more prone to workaholism. Bonebright et al. (2000) and Robinson (2000a) support this view and contend that the work enthusiast is a non-workaholic sub-type on the basis that they are not compelled or driven to work hard. In our model of workaholic behavior patterns we address this issue of the classification of the work enthusiast as a workaholic sub-type.

The majority of workaholism research has focussed on describing rather than explaining this phenomenon. As a result the antecedents of workaholism are least understood (McMillan et al., 2003). Empirical works by Burke and colleagues examine the cognitive factors (beliefs, fears and perceptions) of workaholism. Kanai and colleagues (2001; 2004) examine the impact of a stressful work environment and economic recession on workaholism, and Buelens \& Poelmans (2004) investigate the effect of organisational culture (work pressure and opportunities for personal growth) on workaholism. Work addicts generally have more negative beliefs and fears and perceptions of work-life imbalance, high organisational pressure to work hard, and low opportunities for personal growth. Workaholism was also found to increase with worsening economic conditions. Many writers address the consequences of workaholism with the focus being primarily on the negatives such as work and life satisfactions, work and work-life conflicts, psychological well-being and physical health, and work behaviors such as perfectionism, non-delegation and job stress (Burke, 1999a; Burke, 1999b; Burke, 2004a; Burke, 2004b; Kanai, 1996; Spence and Robbins, 1992). Work addicts are more likely to have more negative work and non-work outcomes than other workaholic types.

It appears from the literature that the work enthusiast and the enthusiastic workaholic would be the most preferred type of worker from the employer's point of view. Both sub-types enjoy high job satisfaction and less of the negatives of high levels of work effort. The work addict and the reluctant hard worker share a number of characteristics including low work satisfactions, low perceived opportunities for growth, high perceptions of pressure to work by the organisation, and a strong intent to leave the organisation. A key distinguishing factor is that the reluctant hard worker does not feel driven to work (an internal force) but feels pressured by the organisation to work hard (an external force).

Burke and colleagues (1999b, 2004a) report no significant differences between work addicts, enthusiastic workaholics and work enthusiasts on hours worked and work involvement. They conclude that 'feeling driven to work' and 'having fun at work' are the two key elements that distinguish the workaholic types and describe them as attitudes and behaviors people either bring to work or experience at work. We propose that drivenness is something people bring to work (motivated to work for its own sake) whereas work enjoyment is the something the person experiences at work (utility derived from non-monetary working conditions associated with the workplace). This perspective is consistent with Burke's contentions (1999b) when he suggests that managers can increase the work enjoyment factor by intervening to create a more positive workplace environment as proposed by Peters (1994) amongst others.

Scott et al. (1997) are critical of the Spence \& Robbins' typology on the grounds that it is based on attitudes whereas workaholism is a behavioral phenomenon. In the first instance, they argue that to be classified as a workaholic a person must 1) spend considerable discretionary time in work activities; 2) think about work when not at work; and 3) work beyond organisational or economic requirements. In their discussion of 'working beyond organizational and economic requirements' they discuss whether
organizational pressure leading to work effort beyond what is reasonably expected can be considered to be workaholism. They argue that in workaholic organizations where people are expected to 'work hard', people who are not predisposed to workaholic behavior patterns have the option of a) meeting organizational standards; b) quitting; or c) being terminated (presumably for not meeting minimum effort expectations). Thus, anyone that chooses to meet the high work effort demands of the organization rather than exploring the options of moving to another organization not requiring such commitment, is appropriately considered workaholic. Having displayed these 'core behaviors', the workaholic may fall into one of three workaholic types viz: compulsivedependent, perfectionist or achievement-oriented (see Appendix 1). While this typology is well embedded in the literature, it has been neither adopted by other researchers nor empirically tested. Despite the distinctions made by the authors, the compulsivedependent and perfectionist workaholics share many traits with the work addict, and the achievement-oriented workaholic has much in common with the enthusiastic workaholic and to a lesser degree the work enthusiast.

We argue that the differing perspectives on workaholism as proposed by Spence \& Robbins (1992) and Scott et al. (1997) are not entirely incompatible and present a model of workaholic behavior patterns that we believe transcends the attitudinal-behavioral debate. We argue that attitudes towards work and working conditions are manifested in the level of work effort a person contributes in the workplace. We now turn to a discussion of what motivates people to invest high levels of time at work, with a view to extending our understanding of the antecedents of workaholism.

## A MODEL OF WORK BEHAVIOR PATTERNS

Workaholism theory is still in its infancy. In their review of workaholism theory and research, McMillan et al. (2003) synthesise the extant literature into five major paradigms, namely addiction models, learning theory, trait theory, cognitive theory and family-systems models. They conclude that on the basis of current empirically based knowledge of workaholism, it appears that personal traits activated and maintained by environmental circumstances most adequately explain this phenomenon. They argue that the trait and learning theories offer the most promise for future research, and suggest that the cognitive paradigm has important implications for intervention and offers a promising new development in advancing our understanding of workaholism.

In this paper we will proceed to build an analytical model of the individual's work effort decision, using economic tools of analysis, viz: the utility-maximizing model of human behavior. This utility model of work behavior most readily falls under the cognitive paradigm (i.e. beliefs, assumptions and thoughts that activate workaholic behaviors). We apply the utility model to encompass not only utility derived from work but also utility derived from non-work activities. We posit that the individual's choice concerning time spent working needs to be seen in the context of the individual's opportunity cost of working, viz: the utility that might have been gained had the time been spent at leisure.

The utility-maximizing model dramatically simplifies the analysis of work motivation, but such simplification allows us to enunciate the model more concisely and to demonstrate the separate impact of different attitudes that motivate (or de-motivate) people to undertake work activity. We show that people engage in work for a variety of reasons, and that some people will work long hours for one or a combination of those reasons. Some of these reasons are noble, while others are more selfish, and it would therefore seem unreasonable to tar all of these situations with the negative brush of 'workaholism'. Accordingly we begin by breaking the nexus of workaholism and long working hours - we assert that while some who work long hours are
indeed workaholics, others are not - a view also shared by others including Robinson (2000) and Scott et al. (1997).

In simple terms, people work to satisfy their needs. These needs may be material or psychic. For simplicity of exposition we categorize these needs into four broad groups, namely income, leisure, perquisites, and an inherent psychic drive to work. In particular we simplify the concept of leisure to equate with non-work time. We recognize that non-work time may be divided into a variety of subcategories such as private time, family time, travelling time, social activities, community activities, worship, sport, and so forth. But for expositional purposes here we simplify and treat leisure time as the catch-all of non-work activities. Similarly, we aggregate a wide variety of work motivators under the heading of perquisites. Perquisites are defined here to include all tangible and intangible non-monetary benefits received at the workplace or as a result of working at that workplace - e.g. prestige associated with working for a particular firm or organisation. Thus perks include the size of the worker's office, quality of office furniture and equipment, provision of a vehicle, parking place, and other tangible benefits, as well as psychic benefits associated with effective managers, good leadership, social interaction with co-workers, customers, suppliers, and so on. The psychic costs of irksome elements associated with work are deducted from the psychic benefits of working, such that when we say perquisites we effectively mean net perquisites. Accordingly, income is not regarded as a perquisite of work, but is desired separately for its own sake, since income is the means by which one can purchase the great variety of goods and services (sources of utility) that are desired but which are not available at work. The utility-maximizing model helps us to find the combination of work and non-work time that maximizes the individual's utility or overall satisfaction from the variety of sources of utility that are associated with working and non-working time.

Following Machlowitz (1980) and extending her view of people gaining psychic income from work, we argue that satisfying these needs allows the individual to derive psychic satisfaction, or
'utility' in the economist's jargon, and we contend that the individual works to maximize this utility. How much the individual works depends in part on his/her attitudes toward income, leisure, perquisites and inherent psychic drive needs. These attitudes can in turn be interpreted as the relationship between these things and the individual's utility. A person with a strong preference for income, for example, will want to work more than a person with a weak preference for income, other things being equal.

Why will a person have a strong preference for income? Income allows the individual to purchase goods and services that satisfy many of life's tangible and intangible needs. Thus, income allows access to goods and services, the consumption of which allows the individual to gain utility. Thus the need for income is driven by the individual's perceived need for goods and services, which in turn is driven by the individual's attitude toward what we will call material things (despite some of the items being intangible services). A person who aspires to a larger house, a newer car, a flatter TV, exotic holidays, and so on, is more acquisitive and exhibits a stronger attitude to materialism than one who is content to live simply and frugally.

An individual's need for leisure relates to the need for free time to consume the goods and services purchased, or to spend the time relaxing or sleeping. This time might also be spent pursuing affection and companionship, particularly as available in a family relationship. Advocates of 'work-life balance' argue that time spent away from work is critically important to mental health, physical wellbeing, and the quality of life. The advice to seek a better work-life balance is usually offered gratuitously to those who work long hours, and reflects the assumption that working too long is always bad for you. But we note that for some individuals, with a low need for leisure, staying away from work makes them less happy, not happier. Thus, a person with a low preference for leisure (perhaps because of a perception of few leisure options or interests) will have a low need for non-work activities and thus a low need for free time, so will spend longer hours working than a person with a high preference for leisure.

Perquisites (perks) are the potentially very wide range of the tangible and intangible benefits that can be derived from the workplace, working conditions, and the daily commute between the home and the workplace. The workplace environment allows the individual to satisfy intangible needs such as the need for power, recognition, and social interaction. We define perks as the entire gamut of non-monetary costs and benefits associated with working that impact the individual's utility function. They include appreciation of the quality of the physical work environment, of co-workers and leadership, and the characteristics of the job itself. Many people view decision-making autonomy as a perk, as is co-worker trust and a supportive social atmosphere. Negative perks (which for convenience of exposition we will call irks) include irksome situations, processes and people found in the workplace, or between home and the workplace, and these negatively impact the individual's utility. For simplicity we shall henceforth refer to perquisites as the balance of perks minus irks (or net perks).

Individual attitudes to perks may vary considerably. Some will be unimpressed by the trappings of the office while others would die for them. Some seek positions of authority to satisfy their need for power and influence, while others shun positions of autonomy and leadership opportunities because these are perceived to include irksome responsibilities. Perkpreferring individuals will have a higher expressed need for perks in the workplace and, accordingly, when these are available will spend more hours working than people with lesser preference for perks, other things being equal.

Finally, the 'inherent psychic drive' is an internal need that drives some people to work longer hours. This defined in a negative sense - i.e. people are motivated to work long hours to avoid psychic disutility, such a might derive from guilt or an obsession. Note that although working may be seen as a way to gain physical exercise, to maintain physical and mental health, to meet new people and build social networks, and so on, these are included above as perks associated with working. Here we are limiting our scope to the avoidance of disutility associated
with the simple fact of working. The need to work may arise from the recognition that not working hard causes individuals to suffer negative feelings, like guilt, because they are not doing what they 'are expected' to do. Antecedents of this may relate to religious upbringing (e.g. the 'protestant ethic') or to parental admonishments that without hard work one is unlikely to become a success or to have a happy life. If so, these negative feelings cause disutility, and this disutility is assuaged only by working harder. This motive for working long hours is the equivalent of Spence \& Robbins' 'feeling driven' component of workaholism that McMillan et al. (2002) found to converge with 'intrinsic job satisfaction'.

We have outlined four main categories of reasons for working, and for working longer hours, and these are summarised in Chart 1 . We shall now progressively incorporate these into a model of work motivation that indicates the role that each of these separate influences has on the individual's decision to supply more or less work effort.

## (Take in Chart 1)

## The Income-Leisure Trade-off

The labor-supply curve has long been used in economic analysis to show the individual's trade-off between income and leisure (see, for example, Samuelson 1948:473). Individuals supply work effort in return for income, since earned income buys them food, shelter and other things that serve their needs. But they will not work all day and all night because they also value nonwork time (leisure) to actually satisfy their non-work needs such as eating and sleeping, enjoying the things they have purchased, spending time with family members, participating in community activities and so on. The balance of time allocated to work and non-work activities is commonly called the 'work-life balance', and people have differing views of exactly where the balance lies.

To build the model we first assume that the individual gains utility only from work and leisure, and does not receive utility from any perquisites associated with working, nor any utility form the work itself. We later relax these assumptions to demonstrate that they too will induce the individual to work long hours. In Figure 1 we show representative indifference curves for three individuals showing their trade-off between income and leisure ${ }^{[1]}$.

## (Take in Figure 1)

Note that the indifference curves are different for each individual. In part (a) the individual has a relatively high trade-off between income and leisure, reflecting a relatively strong preference for leisure time (and activities) and a relatively weak preference for material goods and services. It is the ratio of these preferences that determines the slope of the indifference curve at a particular point. But note that the slope of each curve changes as we move our eye along the curve - each curve is convex to the origin, reflecting the assumption of diminishing returns to the satisfaction one gains from additional units of both income and leisure. In part (b), the individual displays a more balanced trade-off between income and leisure at any particular combination of income and leisure, compared with the person in part (a). Finally, the person in part (c) has an extremely low trade-off between income and leisure - reflecting a relatively weak preference for leisure time (and activities) and a relatively strong preference for material goods and services this person is willing to give up only a very small amount of income to gain an additional measure of leisure.

[^0]The diagonal line in each part of Figure 1 represents the income the individual might earn from hours spent working. The slope of the income line represents the (wage) rate of income that can be earned per hour by the individuals. Thus income earned is zero when the individual has maximal leisure (168 hours per week) and is maximal when the individual (hypothetically) has zero leisure and works 168 hours per week. To focus attention on the differences in their attitudes to income and leisure, we assume all three people have the same abilities and hence the same income line. Given the wage rate and their strength of preference for income (material goods) and leisure (non-work activities), each individual selects the income-leisure combination that allows attainment of the highest possible indifference curve. Thus in part (a) the individual chooses a very large quantum of leisure ( $\mathrm{L}_{\mathrm{a}}$ hours) and works only $\mathrm{W}_{\mathrm{a}}$, reflecting his/her stronger preference for leisure activities relative to material goods and services. The individual in part (b) exhibits a 'better' work-life balance with leisure time $\mathrm{L}_{\mathrm{b}}$ exceeding working time $\mathrm{W}_{\mathrm{b}}$. Finally, the person in part (c) has hardly any leisure $\left(\mathrm{L}_{\mathrm{c}}\right)$ and works most of the week $\left(\mathrm{W}_{\mathrm{c}}\right)$, reflecting his/her very strong preference for material goods and services compared to his/her relatively weak preference for leisure activities.

Are people who strongly prefer material things properly called workaholics? Perhaps they want to build a home, or educate their children in high-quality schools, or build a retirement nestegg? Surely these materialistic motives do not deserve the stigmatic term 'workaholism'. Alternatively, the person in part (c) of Figure 1 might have a more or less 'normal' preference for material things, but have a very weak preference for leisure activities. Perhaps they are easily bored, or perceive there to be few leisure options or opportunities of interest, or feel that enjoying oneself at leisure is a terrible sin. In any case, it is certainly a value judgement to brand them as workaholics for expressing their choice in favour of work and against leisure.

## The Backward Bending Labor-Supply Curve

In Figure 1 we held the wage rate constant and demonstrated how individuals would choose a work-leisure combination to maximize their utility. We now show how individuals might change their work effort level if the wage rate changes - at a higher wage rate we might expect a higher level of work effort to be offered (Vroom, 1964). The labor-supply curve, showing the work effort to be offered by an individual in response to different rates of remuneration, is common in economic textbook analyses and has also been used in the analysis of the entrepreneur's self-employment decision (Douglas \& Shepherd, 2000).

In Figure 2 we show one individual's response to increasing wage rates. At the lowest wage rate the individual chooses $L_{1}$ hours of leisure and $Y_{1}$ dollars of income to maximize utility on indifference curve $\mathrm{I}_{1}$. When a somewhat higher wage rate is offered, the utility-maximizing choice (on $I_{2}$ ) is $L_{2}$ hours of leisure and income level $Y_{2}$. For a still higher wage rate, the utilitymaximizing choice (on $\mathrm{I}_{3}$ ) is $\mathrm{L}_{3}$ hours of leisure and income level $\mathrm{Y}_{3}$. Thus the individual's supply of work hours has increased as the wage rate is increased. But now note that when an even higher wage rate is offered, the individual maximizes utility (on $\mathrm{I}_{4}$ ) by choosing $\mathrm{L}_{4}$ leisure and $\mathrm{Y}_{4}$ income, and that $\mathrm{L}_{4}>\mathrm{L}_{3}$. That is, the individual has chosen greater leisure at the higher wage rate, and has necessarily reduced the number of hours offered for work despite the higher wage rate. This individual is demonstrating that at some relatively high wage rate he/she would prefer to substitute in favour of leisure time and away from work time, despite the opportunity to earn even higher income.
(Take in Figure 2)

In Figure 3 we show the result of this exercise completed for the three individuals introduced in Figure 1, but this time focus on the relationship between income and work effort hours supplied by each individual. Alternatively, these 'work-effort supply curves' of each individual could be derived as the loci of the individual's indifference curves (in income-work effort space)
and income lines from the origin representing different wage rates offered, similar to Douglas and Shepherd (2000). These effort supply curves must bend backwards at the point where the individual prefers to have more leisure (to enjoy the fruits of income) rather than more work effort (to earn more income) in response to an increase in the wage rate offered.
(Take in Figure 3)

Morris and Douglas (2005) introduce the concept of maximal work effort, or 'the wall'. This is the limit of the individual's physical and mental capability, beyond which he/she would suffer physical or mental breakdown. Accordingly, the dotted line in each part of Figure 3 represents maximal work effort - the limit of each individual's work capability. As we can see, the person in part (a), who places a relatively high valuation on leisure (or a low valuation on income and material things), offers minimal work effort at all wage rates and indeed reduces the amount offered at higher wage rates, well short of the maximal work effort that might be offered. The person in part (b) offers a moderate level of work effort at each income level but similarly exhibits a backward bending supply curve after a particular level of wage rate, and does not come very close to the maximal work effort possible. Finally, the person in part (c) offers a relatively high level of effort at each wage rate, and approaches the maximal work effort capability at relatively high income levels, reflecting his/her relatively strong preference for material goods and/or his/her relatively weak preference for leisure activities.

And so we ask the same question - is the person who more nearly approaches his/her maximal work effort levels properly branded as a workaholic, or should we laud them for the job they do? Surely employers would prefer such hard-working individuals, who at this stage of the model inflict no negative effects on themselves or on others in the workplace.

## The Work-Inducing Impact of Perquisites

Earlier we argued that the individual would derive utility from perquisites offered by the employer, the job, the workplace, co-workers, proximity of workplace to home, and so on. At least some part of these perks is within the control of the employer, who can vary the level of perks offered to induce greater work effort. In effect the adjustment of perks will cause the individual's work-effort supply curve to shift to the right each time perks are increased. In the context of Figure 3, the reader can imagine the supply curves of all three individuals shifting somewhat to the right as the employer adjusts perks upward. Following Morris \& Douglas (2005) we show in Figure 4 that for a particular employee, the supply curve of work effort will shift to the right as perks are increased. The supply curves are labelled $S_{0}, S_{1}, S_{2}$, and $S_{3}$ and reflect progressively higher levels of perks offered to the individual. The line traced out by $\mathrm{E}_{0}, \mathrm{E}_{1}, \mathrm{E}_{2}$, and $E_{3}$ shows the work effort supplied for progressively higher levels of perks with zero income, as in the case of a volunteer (see Morris and Douglas, 2005). Note that all the supply curves are truncated at the point where they would bend back, since no (profit-maximising) employer would want to pay higher incomes or give higher perks for fewer hours of work time. ${ }^{[2]}$

## (Take in Figure 4)

But note that it is the individual's responsiveness to perks that determines how much the work effort supply curve will shift to the right. Some workers may be almost impervious to additional perks, while others might be highly responsive to them. Some workers may crave the power, recognition, acceptance, social interaction and other perks, and perceive that these are positively associated with working longer hours. Thus their supply curves of effort might be quite

[^1]responsive to additional perks associated with longer working hours. Some of these workers might find their effort-supply curve shifts out to approach or even hit the wall of maximal capability. As suggested in Chart 1, such persons might more properly be called 'perkaholics' rather than workaholics.

From the preceding discussion, it is evident that many people invest high levels of work effort without necessarily being addicted or compelled to work due to an inner pressure or drive and gain considerable enjoyment from working. We propose that this group of people who would typically be represented within the work enthusiast category of Spence \& Robbins’ workaholic types, are in fact not a homogeneous group but can be further sub-divided on the basis of their primary source of utility that motivates them to work so hard. Thus, we propose the following propositions:

Proposition 1: Work enthusiasts can be divided into three distinct sub-types; viz: the 'material goal seeker', the 'low-leisure hard worker' and the 'perkaholic'.

1a. The 'material goal seeker' work enthusiast is significantly higher in preference for material goods and services (economic orientation) than other work enthusiasts.

1b. The 'low-leisure hard worker' work enthusiast is significantly lower in leisure enjoyment than other work enthusiasts.

1c. The 'perkaholic' work enthusiast is significantly higher in appreciation of perquisites obtainable in the workplace than are other work enthusiasts.

## The Psychic Drive to Work

Finally we consider those who gain utility from work, per se. An implicit assumption of the income-leisure trade-off and the backward-bending supply curve of work effort is that employees are averse to work effort - that is, work is physically and mentally tiring and gives disutility to the employee. The indifference curves of a work-averse individual would be positively-sloping in income-work effort space, as in part (c) of Figure 5. This individual would want additional income to induce him/her to supply more work effort. If instead, workers gain utility from work effort, they will have indifference curves in income-work effort space that are negatively sloping and convex to the origin, as in part (a) of Figure 5. Morris and Douglas (2005) argue that while workers may gain utility from work initially, at some level we should expect this to switch to an aversion for higher levels of work, and thus the indifference curves will be ellipses, as in part (b) of Figure 5.
(Take in Figure 5)

As can be seen in Figure 5, when we change the assumption from aversion to preference there are significant changes to the work-effort supply curve. For the individual in part (a) who prefers work effort throughout the range of effort levels, the supply curve of work effort is horizontal until the maximal level of effort is reached, at which point the supply curve becomes vertical, coextensive with 'the wall'. Note that this individual achieves the relatively low indifference curve I* without any income being offered. Any income offered by the employer would put this employee on a higher indifference curve, but the employer might realise that this brings forth no additional effort and would be inclined to offer the lowest income level acceptable to the employee (probably equal to his/her opportunity income from an alternative employment position).

In part (b) we show an individual who at first gains utility from work per se, but after some point derives disutility from additional work effort. The utility surface for this individual is
like a hill, with the indifference curves being ellipses that trace out contour lines around that hill. In this case we see that the individual's effort-supply curve approaches the wall but bends back before it hits the wall. The initial preference for work effort has the effect of pushing the base of the effort-supply curve out towards the wall, and the later aversion to work effort has the effect of raising the supply curve away from the horizontal axis and then bending it back. But note that this individual can reach relatively high indifference curves, depending on what the employer needs to pay to secure his/her services. Finally in part (c) we see that the person who is averse to work effort from the outset exhibits an effort supply curve that rises away from the origin and tends to bend back well short of the wall. This person can also reach relatively high levels of utility, depending on his/her opportunity wage rate.

Douglas and Shepherd (2000) argue that an employer might offer more than the opportunity wage rate to retain a productive employee, when it is profit-maximising to do so. The wage rate offered might exceed the employee's opportunity wage rate because of scarcity of appropriately skilled individuals, firm-specific skills of the employee (that are not valuable to other employers), or due to the search, transactions, and training costs associated with finding, selecting and incorporating a new employee into the work situation. In addition, the employer will offer progressively higher bonus rates (profit shares) to induce additional work effort (and associated output) to the point where profit is maximized (see Douglas and Shepherd, 2000). But as they show, no employer will ever find it profit-maximising to induce the individual to offer work effort to the point that the supply curve of effort bends back.

In the present context we can see that the profit-maximising firm will not need to offer the work-preferring person any income or perks to induce the supply of work effort - this person is effectively a volunteer all the way out to the wall. This person might be offered the minimal income (opportunity wage) or might even be offered a 'position' with the organisation as a volunteer worker. Consequently this person will receive relatively little additional utility from
income or perks, and thus might be expected to receive relatively low total utility (job satisfaction), and thus fit the Spence and Robbins (1992) definition of the workaholic.

For the person who initially prefers work per se but after some work effort level is averse to work, higher wage rates (and potentially higher bonus rates) may be offered to induce additional work effort, but only up to the point that is profit-maximising for the employer. Since this workpreferring person is potentially already close to maximal level of work effort, relatively little additional income or perks might be required to induce the profit-maximising work effort level, and thus the total utility (job satisfaction) of this person might also be expected to be relatively low, again fitting the Spence and Robbins (1992) definition of workaholic.

Finally, for the person who is averse to work effort from the outset, income and perks are required to induce work effort and the employer will offer the levels of income and perks that allow the employee to attain the highest level of utility consistent with the employer's profitmaximisation. Since the effort-supply curve of the work-averse individual will be furthest from the wall, (other things being equal) and since the employer will want to move the individual to the profit-maximising level of work effort, this individual will be offered higher levels of income and/or perks, and will thus attain a higher level of total utility (job satisfaction) other things being equal. This individual would seem to fit the Spence and Robbins (1992) definition of the work enthusiast. ${ }^{[3]}$

Bringing all the determinants of the effort supply curve together, we can see that individuals may approach maximal work effort (the wall) for one or a combination of reasons. The

[^2]workaholic, who prefers work effort regardless of work effort level, will get there based on that reason alone, whereas work enthusiasts will have their work effort curve effectively shifted out towards the wall by one or a combination of three reasons, viz: a relatively strong preference for income and material goods, a relatively weak preference for leisure activities, and/or a relatively strong preference for perquisites associated with the workplace. In terms of the Spence and Robbins trilogy, work addicts (High work involvement, High drivenness, and Low work enjoyment, or HHL) must get very little utility from perquisites, since their level of work enjoyment is low. Enthusiastic workaholics on the other hand, who are similar to work addicts in that they are highly driven to work but oppositely gain high levels of work enjoyment (i.e. HHH), must gain substantial utility from the perquisites associated with working. This leads us to the following propositions.

Proposition 2: The enthusiastic workaholic gains significantly higher utility from the perquisites associated with work than does the unenthusiastic workaholic (work addict).

## External Effects of Workaholics and Enthusiastic Workers

Porter (2001) contends that high investment of time in work can be accomplished in a manner that contributes positively or negatively to the workplace environment. Following this view, we argue that the impact of workaholics' high level of work on others depends on how they carry out this work and posit that different types of workaholics will have different spillover effects on co-workers. Thus there may be 'good workaholics' (who create positive externalities for their co-workers and organisations) and 'bad workaholics' (who create negative externalities for co-workers and the organisation). Similarly, work enthusiasts might impact their work
environment positively or negatively. Many writers suggest that workaholism has negative personal and organisational impacts, but there are many competing views that are largely speculative and inconclusive. The research focus has been largely limited to the negative consequences of workaholism and only a limited number of variables have been examined empirically. Only one study (Porter, 2001) has considered the impact of workaholic behaviors on co-workers, although this study has limitations and requires further validation.

Work addicts (Spence and Robbins, 1992) and similarly compulsive-dependent and perfectionist workaholics (Scott, 1997) are negatively portrayed as being perfectionists, controlling, low in delegation, rigid thinkers, inflexible and may deliberately engage in unproductive work to stretch out tasks and experience more work conflict than other workers (Burke, 2004; Kanai, 1996; Porter, 1996: Spence, 1992). In contrast, enthusiastic workaholics (Spence and Robbins, 1992) and achievement-oriented workaholics (Scott et al., 1997) are depicted as achievement striving, high on job performance, engage in pro-social (citizenship) behaviors and are high on adaptability, creativity and innovativeness.

It follows that the long working hours of workaholics and work enthusiasts might be found irksome by fellow workers, who might perceive that these hard workers are embarrassing them and/or shifting the expectations of superiors towards a belief that it is 'normal' to work longer hours, and thus putting pressure on co-workers to raise their level of work effort. This external pressure on co-workers might induce them to work longer hours, beyond what would be utility-maximising in the absence of this external pressure. This seems to correlate with the 'reluctant hard worker' concept of Buelens \& Poelmans (2004).

Conversely, the long working hours of workaholics and work enthusiasts might generate perks for fellow workers. Their hard work might allow the firm to attain output targets or other goals, and the kudos of senior management might flow to all employees. Or the hard work of
some may allow others to reduce their work effort levels, i.e. to shirk, which for a work-averse person is a source of utility. Workaholics and work enthusiasts may well find their own work behaviors irksome or 'perksome', that is, they may gain disutility or utility from their own work behavior. On the one hand their hard work may lead to a deterioration of their health, and cause guilty feelings about neglecting their families and communities. On the other hand their hard work may allow them to gain power and control, or to escape from leisure activities which they find irksome.

Workaholics that display perfectionist tendencies are likely to produce a stressed workplace environment for others working for or with them. Porter (2001) contends that unfulfilled workaholics have a tendency not to cooperate or communicate with their colleagues and often set overly stringent standards. As behavioral manifestations of their need for power and control to perhaps compensate for low self-esteem, workaholics may set unreasonable standards and unrealistic deadlines, withhold information and shift standards on the work expected. This creates considerable frustrations for co-workers, a source of irks for these employees. This may well cause these workers to lower their own work efforts and reduce the overall efficiency and productivity of the organisation. Porter found that perfectionism, especially if combined with no joy in work (as is characteristic of work addicts) is associated with poorer co-worker relationships.

In contrast, Porter suggests that people who work long hours because of a high level of enjoyment in the work do not become caught up in the destructive work behavior patterns of the work addict, thus they may set high standards but not ones that ensure failure and not to the exclusion or victimisation of co-workers. Thus, people who work long hours and gain a high level of enjoyment from the work can be expected to potentially have positive spillover effects on coworkers especially in team settings where these people may be viewed as role models to others around them. This may result from the high but realistic performance standards set that encourage
higher work effort from others, citizenship behaviors that improve the effectives of the team, and so forth. Accordingly, we propose that:

Proposition 3: The possession by hard working individuals of perfectionist tendencies and achievement-orientation will be unrelated to their categorization as workaholic (enthusiastic and unenthusiastic) or work enthusiast (materialist, low-leisure, and perkaholic) subtypes.

Proposition 4: People working with a hard worker (workaholic or work enthusiast) that has perfectionist tendencies will a) report a significantly higher level of co-worker irks and b) contribute a lower level of work effort than people working with a hard worker who does not exhibit perfectionist tendencies.

Proposition 5: People working with a hard worker (workaholic or work enthusiast) that has an achievement-oriented style of workaholism will a) report a significantly lower level of co-worker irks and b) contribute a higher level of work effort than people working with a hard worker who does not have an achievement-oriented style of working.

## Discussion and Directions for Further Research

In this paper we raised the question "are all people who work a lot properly called workaholics?" Since it is a derogatory term, and we work hard, we hoped the answer was no. We asked the question "what motivates people to work hard?" and hypothesize four main groups of work motivators, which we might call drivenness (work orientation), materialism (economic orientation), non-work orientation (leisure orientation) and preference for perquisites associated with work (perquisite orientation). We progressively built a model of work effort behaviour
highlighting the impact of different motives for working on the work effort decision of individuals and in so doing break the nexus of workaholism and long working hours. We argue that some people work a lot because they have material goals - thus they might more charitably be called 'material goal seekers'. Others work a lot because they find little enjoyment from leisure activities - they might better be called 'low leisure’ hard workers. Others work a lot because they love the perks - they are more reasonably called 'perkaholics' than workaholics. Finally we have those who love to work long hours for its own sake - these might properly be called workaholics. Accordingly, we develop a series of testable propositions that might allow researchers to more effectively differentiate workaholics from work enthusiasts and the three distinct subtypes of work enthusiasts from each other.

Much of the workaholic literature is concerned with the external effects of workaholics how they negatively impact the productivity of other people and the culture of the organisation, if not their own health and well-being. But conceptually the motive to work hard, and the internal and external effects of hard work would seem to be separate phenomena. Little consideration has been given however to the impact of workaholic behaviour on co-workers. Some hard workers might augment their employer's culture and productivity in a positive way, while others might have negative impacts. And this might apply to work enthusiasts as well. This deserves further consideration since if the work habits of hard workers impact detrimentally on others, this presents a managerial problem. We present two plausible propositions relating to the external (spillover) effects of workaholic behaviours that warrant empirical investigation in relation to the impact of workaholism on co-workers.

This analysis has attempted to bridge the economic-cognitive realms of work motivation theory to explain high levels of work involvement, and accordingly the limitations of the 'rational-economic' approach must be acknowledged. The utility-maximizing model provides a tractable if overly simplistic model of what motivates human behavior. It assumes continuous
relationships between variables, such as income levels and work effort, which is simply not true in many work places where information asymmetry and managerial slack allow workers to shirk and their managers to ignore this shirking even if they notice it. Asymmetry of information will induce workers to pursue satisfactory levels of observable work effort rather than to maximize actual work effort. Imperfect monitoring means that higher levels of work effort might also go unnoticed and unrewarded, or be ignored if noticed. In reality, of course, employees and managers exhibit cognitive biases, utilize suboptimal decision heuristics rather than seek further information, and behave in self-serving ways that may be contrary to the best interests of the firm or indeed to themselves in the longer term.

But each of these complexities can be seen as potential extensions of the simple model that bring the model closer to reality, and thus suggests interesting areas for further research. To introduce and explain the relatively complex interaction of the factors that motivate workaholics and work enthusiasts to work hard, a simple model was first necessary. It is even better that this model is well-known outside of the economics discipline, since this aids the dissemination of the message to other areas of social science. If this contribution to our knowledge on work motivation and workaholism is accepted it can form the basis for further research work to incorporate the realities of satisficing, cognitive biases, suboptimal decision heuristics, and so on,

Finally, one outstanding issue that Buelens \& Poelmans (2004) identify with extant research is the absence of a clear correlation between the extent of workaholism and the number of working hours. Is this because the behavior being measured is a high level of investment in work which in itself is multi-dimensional and so is not fully captured by measuring hours spent at work, hours spent working away from work and even time spent thinking about work. McMillan et al. (2002) suggest that workaholism is a distinct construct which cannot be singularly explained in terms of just hours worked and recommend further research using a multiple-item criterion.

Hard work is identified in the work effort literature as having at least two components, namely, time and intensity (Bowles et al.., 1984, Brown and Leigh, 1996, Douglas, 1989, Douglas and Shepherd, 2000). Intensity may be defined in terms of the percentage of one's physical and mental capability that one applies to the task at any point in time. Accordingly, a given level of work 'effort' could thus be achieved by short hours and high work intensity, or alternatively by long hours and low work intensity. Where work effort is associated with output this has implications for the cost of output if workers are paid only for their time involvement. The intensity aspect of work needs to be further investigated as this may well have implications for workaholism and work enthusiasm. We may find, for example, that some types of work enthusiasts give high levels of intensity while others do not, and that workaholism is associated with high work hours but not high work intensity, for example. We might expect there to be a significant correlation between the extent of workaholism and work effort defined as the product of time spent working and an index of work intensity. But we may find that work intensity is relatively low for some kinds of work enthusiasts (e.g. low-leisure hard workers) and higher for others (e.g. perkaholics). This should prove to be a fruitful area for further research.

## REFERENCES

Bonebright, C. A., Clay, D. L. and Ankenmann, R. D. 2000, 'The Relationship of Workaholism with Work-Life Conflict, Life Satisfaction, and Purpose in Life', Journal of Counseling Psychology, Vol. 47, no. 4, pp. 469-477.

Bowles, S., Gordon, D. M. and Weisskopf, T. E. 1984, Beyond the Wasteland: A Democratic Alternative to Economic Decline., Verso, London.

Brown, S. P. and Leigh, T. W. 1996, 'A New Look at Psychological Climate and Its Relationships to Job Involvement, Effort, and Performance.' Journal of Applied Psychology, Vol. 81, no. 4, pp. 358-368.

Buelens, M. and Poelmans, S. A. Y. 2004, 'Enriching the Spence and Robbins' Typology of Workaholism: Demographic, Motivational and Organizational Correlates', Journal of Organizational Change Management, Vol. 17, no. 5, pp. 440-458.

Burke, R. J. 1999a, 'Workaholism among Women Managers: Work and Life Satisfactions and Psychological Well-Being', Equal Opportunities International, Vol. 18, no. 7, pp. 25-35.

Burke, R. J. 1999b, 'Workaholism and Extra-Work Satisfactions', International Journal of Organizational Analysis, Vol. 7, no. 4, pp. 352-364.

Burke, R. J. 2000, 'Workaholism in Organizations: Concepts, Results and Future Research Directions', International Journal of Management Reviews, Vol. 2, no. 1, pp. 1-16.

Burke, R. J. 2001a, 'Spence and Robbins' Measures of Workaholism Components: Test-Retest Stability', Psychological Reports, Vol. 88, no. pp. 882-888.

Burke, R. J. 2001b, 'Workaholism in Organizations: The Role of Organizational Values', Personnel Review, Vol. 30, no. 6, pp. 637-645.

Burke, R. J., Oberklaid, F. and Burgess, Z. 2004a, 'Workaholism among Australian Women Psychologists: Antecedents and Consequences', International Journal of Management, Vol. 21, no. 3, pp. 263-277.

Burke, R. J., Richardsen, A. M. and Martinussen, M. 2004b, 'Workaholism among Norwegian Senior Managers: New Research Directions', International Journal of Management, Vol. 21, no. 4, pp. 415-426.

Cantarow, E. 1979, 'Women Workaholics', Mother Jones, Vol. 6, no. pp. 56.
Douglas, E. J. 1989, 'The Simple Analytics of the Principal-Agent Incentive Contract', Journal of Economic Education, Vol. Winter, no. pp. 39-51.

Douglas, E. J. and Shepherd, D. A. 2000, 'Entrepreneurship as a Utility Maximizing Response', Journal of Business Venturing, Vol. 15, no. pp. 231-251.

Kanai, A., Wakabayashi, M. and Fling, S. 1996, 'Workaholism among Employees in Japanese Corporations: An Examination Based on the Japanese Version of the Workaholism Scales', Japanese Psychological Research, Vol. 38, no. 4, pp. 192-203.

Killinger, B. 1991, Workaholics: The Respectable Addicts, Simon \& Schuster, New York, NY.

Machlowitz, M. 1980, Workaholics: Living with Them, Working with Them, Addison-Wesley, Reading, MA.

McMillan, L. H. W., Brady, E. C., O'Driscoll, M. P. and Marsh, N. V. 2002, 'A Multifaceted Study of Spence and Robbins' (1992) Workaholism Battery', Journal of Occupational and Organizational Psychology, Vol. 75, no 3, pp. 357-368.

McMillan, L. H. W., O'Driscoll, M. P. and Burke, R. J. 2003, "Workaholism: A Review of Theory, Research, and Future Directions", In International Review of Industrial and Organizational Psychology, Vol. 18 (Eds, Cooper, C. L. and Robertson, I. T.) John Wiley \& Sons, Ltd, New York, pp. 167-189.

McMillan, L. H. W., O'Driscoll, M. P., Marsh, N. V. and Brady, E. C. 2001, 'Understanding Workaholism: Data Synthesis, Theoretical Critique and Future Design Strategies', International Journal of Stress Management, Vol. 8, no. 2, pp. 69-91.

Morris, R. and Douglas, E. J. (2004) 'A New Approach to Work Motivation Theory: An Economic Analysis’, Proceedings, SEAANZ Conference Brisbane, QLD.

Morris, R. and Douglas, E. J. (2005) 'Motivating Employee Performance: Learning from Entrepreneurship.’ Proceedings, Regional Entrepreneurship Research Exchange, Swinburne, Melbourne, VIC.

Naughton, T. J. 1987, 'A Conceptual View of Workaholism and Implications for Career Counseling and Research', Career Development Quarterly, Vol. 35, no. pp. 180-187.

Oates, W. 1971, Confessions of a Workaholic: The Facts About Work Addiction, World, New York: NY.

Peters, T. 1994, The Pursuit of Wow!: Every Person's Guide to Topsy-Turvy Times, Vintage Books, New York, NY.

Robinson, B. E. 2000a, 'A Typology of Workaholics with Implications for Counselors', Journal of Addiction \& Offender Counseling, Vol. 21, no. 1, pp. 34-48.

Robinson, B. E. 2000b, 'Workaholism: Bridging the Gap between Workplace, Sociocultural, and Family Research', Journal of Employment Counselling, Vol. 37, no. 1, pp. 31-47.

Scott, K. S., Moore, K. S. and Miceli, M. P. 1997, 'An Exploration of the Meaning and Consequences of Workaholism', Human Relations, Vol. 50, no. 3, pp. 287-314.

Seybold, K. C. and Salomone, P. R. 1994, 'Understanding Workaholism: A Review of Causes and Counselling Approaches', Journal of Counselling \& Development, Vol. 73, no. 1, pp. 4-9.

Snir, R. and Harpaz, I. 2004, 'Attitudinal and Demographic Antecedents of Workaholism', Journal of Organizational Change Management, Vol. 17, no. 5, pp. 520-536.

Spence, J. T. and Robbins, A. S. 1992, 'Workaholism: Definition, Measurement, and Preliminary Results', Journal of Personality Assessment, Vol. 58, no. 1, pp. 160-178.

## APPENDIX 1: WORKAHOLIC TYPOLOGIES




- High work involvement
- Low drivenness \& work enjoyment
- External pressures cause him/her to work hard
- Prefers to work less

And speculated the existence of:
8. Alienated professionals

- Internally driven
- Happy but not committed
- Occupation/profession committed but not job committed


## Chart 1: Attitudes that Lead to Long Work Hours



L
Fig. 2: Leisure Choice with Differing Wage Rates
Highest wage rate offered

```
i
S
S
0 E E max m
Y (a) Y (b) Y (c)
```

Fig. 3: The Work-Effort (E) Supply Curve, with Different Attitudes to Leisure

S
$\mathrm{E}_{0}$
Net Perks (NP)
$\mathrm{S}_{3}$
$S_{2}$
$\mathrm{S}_{1}$
$\mathrm{E}_{3}$
$\mathrm{E}_{2}$
$\mathrm{E}_{1}$
$\mathrm{S}_{0}$
Income (Y)
Work Effort (E)
Figure 4: The Impact of Net Perks on the Work-Effort Supply Curve
$\mathrm{S}_{3}$
$\mathrm{S}_{2}$
$0 \quad \mathrm{E}_{\text {wall }} \quad 0 \quad \mathrm{E}_{\text {wall }} \quad 0 \quad \mathrm{E}_{\text {wall }}$
(a) Work Preference
(b) Preference \& Aversion
(c) Work Aversion

Income
$\mathrm{S}_{1}$
Figure 5: The Impact of Work Preference on the Work-Effort Supply Curve
E
E

E
Y
Y
I*
$\qquad$


[^0]:    ${ }^{[1]}$ An indifference curve is a locus of combination (of things - in this case income and leisure) from which the individual expects to gain the same level of psychic satisfaction, or 'utility'. Higher indifference curves represent higher levels of utility, and are therefore preferred to lower indifference curves by the utility-maximizing individual. While individuals do not make utility calculations in their decision making, they often act as if they do, and thus utility analysis is a useful tool for predicting human behavior.

[^1]:    ${ }^{[2]}$ This model assumes for simplicity that the individual and the employer envision a continuous relationship between work effort and income, both as a motivator and as a reward. In reality of course there are observed or unobserved, and intentional or unintentional, breaks in this relationship, typically accompanied by, or due to, asymmetry of information. Such extensions of the model are outside the scope of this paper but represent very interesting extensions for further research.

[^2]:    ${ }^{[3]}$ Note that we cannot make interpersonal comparisons of utility, since it is impossible to measure one person's satisfaction relative to another's. At most, we can infer that, other things being equal (including preference for income, leisure and perks) the workaholic will be offered less income and perks and thus seems likely to derive less utility from those sources.

