## The Relationship

# between Time Management and

## **Decision-Making Processes**



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## **Table of Contents**

Ackn	owledgements	4
Astra	net	5
Intod	luction	6
	Time Management	6
	Decision Making	9
	The Link between Time Management and Decision-Making Processes	16
	Hypotheses	19
Meth	od	20
	Participants	20
	Procedure	21
	Materials	22
	Measures	22
Resul	lts	26
	Data Analysis	26
	New Zealand and Russian Comparison	27
	Bivariate relationships between the Study variables	30
	The New Zealand and Russian Samples	30
	Multiple Regression	38
Discu	assion	40
	Similar findings for New Zealand and Russia	40
	Findings, unique to the New Zealand sample	42
	Findings, unique to the Russian sample	43
	Significant cultural differences	44

Limitations and Future Research Suggestions	46
Conlusion	48
References	49
Appendices	4
Appendix A:	55
Appendix B:	65
Figures and Tables	
Figure One: A Process Model of Time management	8
Figure Two: Model of decision-making process	13
Figure Three: Cyclic Model of decision-making process	15
Figure Four: Description of research variables	19
Table One: Descriptive statistics for demographic variables	27
Table Two: Descriptive Statistics for all Scales	29
Table Three: Correlation Matrix of Study Variables	
for the New Zealand sample	32
Table Four: Correlation Matrix of Study Variables	
for the Russian sample	33
Table Five: Multiple Regression, examining the effect of	
the time management variables on decision-making	
ability, in the New Zealand sample	39
Table Six: Multiple Regression, examining the effect of	
the time management variables on decision-making	
ability, in the Russian sample	40

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## **Abstract**

During the last two decades, time management and decision-making have become well-established topics in modern working life. However, little research attention has been given to the link between the two. The purpose of this study was to investigate the relationship between time management factors and decision-making processes. This research was specifically focused on identifying which aspects of decision-making processes are related to time management factors. It was predicted that decision-making processes will be more efficient\effective when employees have time management related competencies and work in an environment that supports time management.

A research model was built based on previous research in this field and tested using bivariate correlations, t-tests, and multiple-regression analyses. Five organizations in New Zealand and three in Russia participated in the research, contributing a total of 164 employees. Results indicated, as predicted, that the effectiveness of decision-making processes partially depends on time management factors. Implications of the findings are discussed and future directions for research on the relationship between time management factors and decision-making processes are suggested.

## Introduction

The relationship between time management and decision-making processes was investigated in this study. The study measured time management competencies (e.g. planning, priority setting, goal setting, time allocation, scheduling), and organizational time management environment factors. The overall objective of the research was to show that the effectiveness of decision-making processes is at least partially dependent on these aspects of time management. A set of scales measuring aspects of decision-making processes was adapted from existing scales. Specific predictions are outlined below. The additional focus of this study was to examine if cultural factors may influence the relationship between time management and decision-making processes. Employees from New Zealand and Russia participated in this research. The purpose of the cross-cultural comparison was to determine if the same aspects of time management were related to decision-making processes in each culture.

## Time Management

Time is a fundamental asset for both individuals and organisations, and time is an important factor in performance. There is not one adopted definition of time management. Many authors referred to Lakein's (1973) description of time management, which suggested that time management involves determining needs, setting goals to achieve the needs, prioritising the tasks required, and matching tasks to time and resources by planning, scheduling and making lists. However, several other definitions have been offered. Time management has been referred to as a set of techniques for managing time (Macan, 1994; Jex & Elacqua, 1999; Davis, 2000); planning and allocating time (Burt & Kemp, 1994; Francis-Smythe& Robertson, 1999); the degree to which individuals perceive their use of time to be structured and purposive (Bond & Feather, 1988; Strongman & Burt, 2000;

Sabelis, 2001); and self-regulation strategies aimed at discussing plans, and their efficiency (Eilam & Aharon, 2003).

Hassard (1991) has pointed out that time is a ubiquitous element in human organizations. Time's limited nature means that it should be prioritized and used effectively. According to Britton and Tesser (1991), the way in which organisations manage their time relates to organizational profitability. The common adage "Time is money" highlights the potency and centrality of time for individuals and organisations. Poor time management has been associated with poor academic performance and low productivity (Burt, 1994; Burt & Kemp, 1994; Longman & Atkinson, 1998; Mackenzie, 1990), and feelings of purposelessness and depression (Bond & Feather, 1988; Feather & Bond, 1993). Consequently, there are good reasons why organizations are interested in improving time management processes.

Several researchers have proposed methods for handling time issues on the job (e.g., Drucker, 1967; Lakein, 1973; Mackenzie, 1972; McCay, 1959). They have offered simple remedies such as using a "to-do-list" in order to increase job performance. Their ideas have been widely accepted for increasing employee effectiveness (Orpen, 1994; Mackenzie, 1990). Time management training programmes are now widely attended by many employees (Lakein, 1991; Richards, 1987). However, some authors (such as Drucker, 1967) have pointed out that planning tasks and activities does not always lead to the completion of planned work, especially in time-pressure situations. In 1988, Bluedon and Denhardt drew attention to the lack of systematic investigation of the benefits of time management practices. For the last two decades time management has been positively related to variables such as self esteem (Feather & Bond, 1983; Bond & Feather, 1988), academic performance (Britton & Tesser, 1991; Lahmers, 2000) and job satisfaction (Macan, 1994; Macan, Shahani, Dipboye & Phillips, 1990).

Most researchers in the field of time management agree that time management behaviours involve particular key processes. In 1994, Macan offered a process model (Figure 1), that identifies three main factors which contribute to effective time management: setting goals and priorities, mechanics (including making lists and task time estimation); and preference for an organization. These three factors all contribute to a person's perceived control of time.

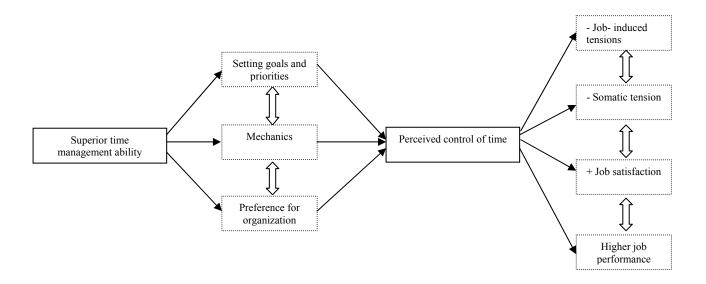


Figure 1. A Process Model of Time management (Macan, 1994)

Macan's model suggests that the positive outcomes (right-hand side of the Figure 1) operate through the perceived control of time factor. According to Krause (1999), this factor leads to positive outcomes such as job satisfaction and job performance.

However, it must be said, that the term "time management" has perhaps been wrongly interpreted. Time cannot be managed, because time is uncontrollable. People can only manage themselves and their use of time. Time management can be viewed as a way a person deals with time. According to Eilam and Aharon (2003), time management is a way of monitoring and controlling time. In 2004 Brigitte Claessens, Wendelien van Earde and Rutte proposed a definition of time management as behaviours aimed at achieving an

effective use of time while performing central goal-directed activities. This definition suggests that the use of time is not an aim in itself and cannot be pursued in isolation. Despite all the popular attention focused on managing time, little research attention has been given to the question of what time management can contribute in combination with other organizational factors. One area in which there has been little investigation is the outcome of the linkage between time management processes and decision-making processes.

### **Decision Making**

Undoubtedly, decision-making processes are one of the main problems for organizations. Decision-making processes are central to almost every aspect of organizational functioning, and an unavoidable aspect of employment in many jobs. The activities of an organization can be a sequence of successful and unsuccessful decisions (Larichev, 2000). The decision-making process is often a factor, which can determine future success (Hershey, Walsh, Read, & Chulef, 1990). Research on decision-making has typically attempted to either understand, or to offer suggestions for improving decision-making processes.

Researchers in the decision-making field have attempted to clarify the distinctions between choice, decision and problem-solving. According to Etzioni (1988) "the term choice should be used to encompass the sorting out of options, whether conscious or nonconscious. Deliberate choices are to be referred to as decisions". Behaviourists almost solely use the term "choice". Cognitivists and subjectivists tend to use the term "decision", when they imply deliberation, such as processing information. In our view, choices may be either conscious or unconscious; decisions are always conscious, because they are consultative.

Problem–solving and decision-making also often have no clear distinction. A problem is generally defined as a barrier to attaining some desired goal under conditions of uncertainty (Agre 1982; Bourne 1971). By definition, problem-solving is a nonroutine mental or physical activity that successfully removes, circumvents, or overcomes a goal-impeding barrier (Agre 1982, Tallman 1988). It is a process that is driven by decisions.

One of the best definitions to distinguish between problem-solving and decision-making was made by Herbert A. Simon (1986). According to him, decision-making and solving problems require attention, setting goals, finding or designing suitable courses of action, and evaluating and choosing among alternative actions. The first three of these activities: fixing agendas, setting goals, and designing actions, are usually called *problem solving*; the last, evaluating and choosing, are usually called *decision-making*.

However, some researchers tend to use the terms "decision-making" and "problem-solving" interchangeably. For example, the last three of Berkeley and Humphreys' (1982) seven types of uncertainty in decisions, such as "procedural uncertainty", "uncertainty about one's agency", "uncertainty about how the decision maker will feel and wish to act in the future", are better understood as relevant to problem-solving. The main difference between problem-solving and decision-making is that the former implies a process driven by a related series of decisions: the decision as to whether to commit oneself to attempt to solve the problem; the decision to search for problem solutions; the decision to take a particular course of action; the evaluation of the outcome; and the decision as to whether to stop the process, continue with the same effort, or search for alternative avenues for solving the problem (Tallman & Gray, 1998). In this study, problem-solving and decision-making are considered as a united process.

In 1988, Hunt classified decision-making theories into four types: Rational, Bounded Rational, Functional and Non-Rational. Non-rational models consider decisions as

outcomes that can be rationalised by the interpretation of a decision analyst. The earlier Rational and Bound Rational theorists (e.g., Simon, 1976; March & Simon, 1979) studied decision-making processes by isolating variables in order to increase experimental control. In 1978, March suggested that bounded rationality represents a way for the intelligent human to simplify the decision problem in the face of impossible numbers of alternatives and excessive information. According to March's view of decision-making processes, a decision maker can be viewed as an intelligent actor capable of balancing internal needs and external demands in an ongoing process involving multiple desires and changing events.

A functional model, or descriptive approach towards decision-making was researched in the 1980s (Quinn, 1977; Meyer, 1982), using qualitative analyses in natural settings. In 1993, Orasanu and Connolly made a distinction between clear-cut and naturalistic decisions. A clear-cut decision supposes a situation when all necessary information is available to the decision makers, who are not under stress, nor dealing with a changing environment. However, most decision makers have to deal with naturalistic decisionmaking situations that are characterised by nine factors: ill-structured tasks, uncertain dynamic environments, ill-defined goals, action and feedback loops, time stress, high stakes, multiple players, and organizational goals and norms (Orasanu & Connolly, 1993). Consequently, outcomes from decisions that were made in naturalistic situations often are heuristic, and the options for the goal are sub-optimal, rather than optimal. Klein in 1999 pointed out that makers of decisions often use a plan based on a previous similar situation and the outcome of that action taken. In contrast to the rationalistic approach, decision makers are suggested not to consider many alternative solutions to the problem, but rather select one used successfully in a previous similar situation. The modern demands for the decision makers are supposed to be rational and effective. The key point in the rational

strategy is cognitive processing that requires finding alternatives, developing criteria for alternatives, estimating probabilities and reasoning.

Among the many models of decision-making, two are often cited in the decision-making literature: Simon's model of "boundedly rational" organizational decision behaviour (1976) and Percy H. Hill's "ideal model" of decision making (1979). Simon's model is described in the section about relationships between time management and decision making. Percy H. Hill's model (Figure 2) was designed to analyse every step in the decision-making process.

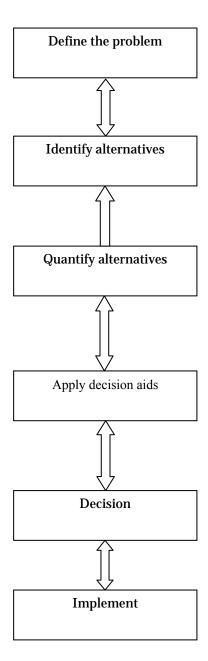


Figure 2. Model of decision-making process (Percy H. Hill, 1979)

The first steps in Figure 2, match with H. A. Simon's description of decision making: define the problem, identify alternatives, and quantify alternatives. If a decision maker accurately defines the problem and identifies many alternatives, it is a major step towards its eventual effective solution (Morris, 1977). High performers and good decision makers pursue more specific goals (Hershey, Walsh, Read & Chulef, 1990) and put more emphasis

on analysing the task or the problem to be solved than moderate performers do (Klemp & McClelland, 1986; Vessey, 1986).

Although the first four steps (in Figure 1), are a guide for decision makers to make the best choice, there is a risk of reversing a choice. The consequences of one's decision should be monitored and analysed. According to Hill's view of decision making, the decision is cyclical in nature; feedback loops and repetition are necessary. "By iterating the sequence of steps in the basic procedure, the chances are good that the best decision will be made" (1976). Stacey (1993) suggested that a cycle of making decisions may start with an action, a choice, or a discovery and the cycle continues through time. Figure 3 presents the process of decision making as a cyclic process.

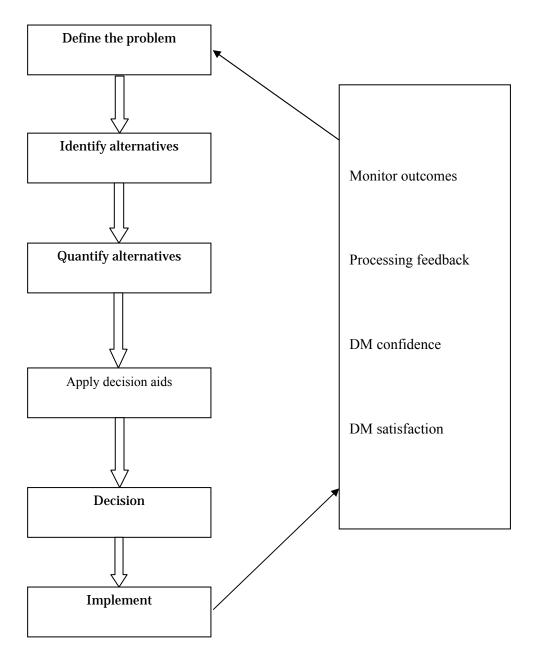


Figure 3. Cyclic Model of decision-making process (Stacey, 1993)

Some research evidence supports the notion that successful decision makers are not impulsive and do not avoid the problem, but rather systematically engage in decision-making behaviours (Osborn, 1963; Parnes, 1967; Shaftel & Shaftel, 1967). There is some evidence that high performers and good decision makers seek more feedback (Simmons & Lunetta, 1993; Sonnentag, 1994) and are particularly` interested in negative feedback that points at the necessity for improvement (Ashford & Tsui, 1991). Recent researchers in this field have confirmed that it is possible to improve the quality of decision outcomes by

teaching employees better decision-making skills and by increasing their understanding about the process of decision making (Mellon, 2006).

Decision-making in organizational settings is much less well understood than individual decision-making and problem-solving. One area that may produce outcomes for organizations is an understanding of the link between time management and decision-making processes.

## The link between time management and decision-making processes

Despite the fact that time management and decision-making are significant factors in organizational functioning, there appears to be little research directly linking the two. Time and time management constructs have rarely been treated in a systematic way by problemsolving and decision-making investigators. Some researchers have found that problems with time management skills have been associated with less effective group and individual decision-making (e.g., Benson & Beach, 1996, Kelly, Jackson & Hutson-Comeaux, 1997). Several studies have shown that time management problems are common for teachers, nurses, (Hawkins & Klas, 1997) and managers (Mc Conalogue, 1980). That is for people who are supposed to make many important decisions.

In 1979, Kahnerman and Tversky's prospect theory explained that people might know their goals, but not their importance in relation to other goals (including organizational goals). According to Kahnerman and Tversky (1994), employees do not always clearly imagine their goals and preferences, and people do not maximize the utility of their decision outcomes. As a result, the outcome of decisions often can be non-rational.

Koch and Kleinmann, (2002), developed an explanation of how behavioural decisionmaking can cause time management problems. Their study about behavioural decisionmaking explanations for time management problems, confirmed a link between time management and aspects of decision-making processes. According to Koch and Kleinmann, people often are guided by their biases and heuristics in their choices and the making of decisions, instead of applying time management techniques, for example setting goals and prioritizing. As a result, the outcomes of many decisions do not achieve the desired goals because of poor time management skills.

Additional problems in time management and decision-making arise because human priorities can change and be dependent on an organization's environment. According to Simon's model of decision-making (1976, 1993), this process depends on an information design:

- 1) attention: how much is available and how it is to be directed
- 2) time-structure: how deadlines are noticed, elected and manipulated as decision triggers
- 3) value judgment: how personal, individual value is aligned with organizational purposes
- 4) memory and learning: how cause/effect relationships are stimulated, maintained and extinguished for use in inference, and efficiently patterned in response to stimuli
- 5) communication: how symbolic exchange and transformation methods provide a mechanism for social/organizational coordination and control of attention, time, value, and memory.

Taking Simon's individual-in-organization decision-making model into account, an organization can create environments, especially in relation to time management, for better decision-making processes. The essence of the decision-making problem is to decide how to attend selectively, to know which stimuli require an automatic or habitual response, and which require "hesitation" and deeper analytic thought. Effective decisions can be made

when the process of selecting some alternatives over others are led by a purposive, goaloriented approach (March & Simon, 1993).

Modern employees have to think of more goals than they are able to achieve; as a result, they "accumulate" more and more undischarged business and many decisions are made later than were expected. According to Orlikowsky and Yates (2000), the temporal dimension of work has become more important because of expanding global competition and increased demands for immediate availability of products and services. Employees have many demands, but have low levels of control over their work (Jex, 1998; Karasek, 1998). Stress influences employees; consequently, it decreases their efficiency and productivity, especially in making important decisions. People that make decisions can do so in many different ways. Differences are caused by their professional competencies and the time involved. Time is an inelastic resource. Employees can manage their time more efficiently or less efficiently, so they can be more successful or less successful in decision-making processes. Undoubtedly, understanding the link between time management factors and decision-making can facilitate the process of growth for organisations.

## Objectives and Hypotheses of this study

The purpose of this study was to examine the relationship between time management competencies, organizational time management environment factors, and decision-making processes. It is clear from the review of the literature that this study fills a gap in the link between these two significant factors in organizational functioning.

The theoretical model (Figure 4) clarifies the proposed relationships. Individual time management competencies (such as setting goals, scheduling, time allocation) and organizational time management environment factors, are predicted to be positively associated to decision-making processes.

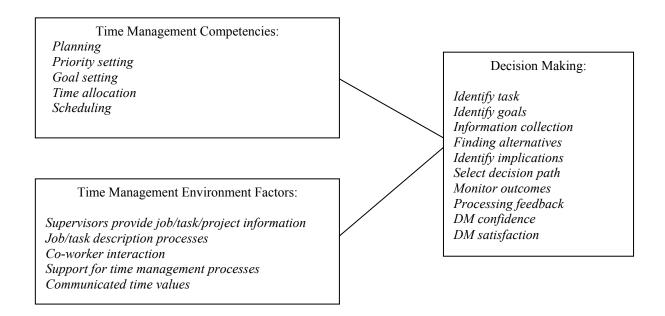


Figure 4. Description of research variables

The following hypotheses are proposed:

*Hypothesis 1a:* Decision-making processes will be more efficient/effective (defined by speed of decision-making, task and goal identification, information collected, finding alternatives, identifying implications, selecting decision paths, monitoring outcomes, processing feedback, see Figure 4, when employees have time management related competencies.

*Hypothesis 1b:* Decision-making processes will be more efficient/effective (defined by speed of decision-making, task and goal identification, information collected, finding alternatives, identifying implications, selecting decision paths, monitoring outcomes, processing feedback, see Figure 4, when employees work in an environment which supports time management.

*Hypothesis 2a:* Employees' satisfaction with decision-making processes will be higher when employees have time management related competencies.

*Hypothesis 2b:* Employees' satisfaction with decision-making processes will be higher when employees work in an environment that supports time management.

*Hypothesis 3a:* Employees' confidence in their ability to make decisions and confidence in decision-making outcomes will be higher when employees have time management related competencies.

*Hypothesis 3b:* Employees' confidence in their ability to make decisions and confidence in decision-making outcomes will be higher when employees work in an environment, which supports time management.

## Method

## **Participants**

The participants in this study were 164 full-time and part-time working employees from a variety of organisations, from New Zealand and Russia. In total, eight organisations participated (five from New Zealand and three from Russia). Three hundred copies of the guestionnaire were delivered in total, with 150 delivered within New Zealand and 150 within Russia. The total response rate was 54%. Response rates for New Zealand and Russia were 58% and 50% respectively.

Participants from the New Zealand sample comprised of 57 males (64.7%) and 31 females (35.3%), with an overall average age of 49 years (SD=10.1). The average tenure was just over 10.7 years (SD=10.6), and the average hours worked per week was 43.6 (SD=7.7). A variety of occupational positions were represented, with 20 job titles in all (e.g. service manager, facilities manager, training and information support manager, commercial director, finance analyst, marketing). Of those who had done some TM training in the past (39 % of the sample), the average length of the training was 4.7 hours.

In the Russian sample, participants comprised of 18 males (23.6 %) and 58 females (76.4%), with an overall average age of 30.3 years (SD=5.7). The average tenure was just over 2.9 years (SD=2.4) and the average hours worked per week was 43.4 (SD=5.6). A variety of occupational positions were represented in the Russian sample, with 10 titles in all (e.g. administrator, facilities manager, human resources manager, commercial director, finance analyst). Of those who had done some TM training in the past (23 % of the sample), the average length of the training was 3.1 hours.

#### Procedure

The procedure for distributing, completing, collecting and returning the questionnaire differed between countries and organizations. A key aspiration for the data collection phase was to gather data from equal groups of participants from both New Zealand and Russia.

Three month prior to data gathering companies were contacted via phone and e-mail. The questionnaire was prefaced by an informed consent statement, which described the goal of the study, assured confidentiality of response, and provided contact details of the author. Printed copies of the questionnaire were delivered to interested companies. All measures were self-administered with instructions for completion at the top of each section. Each questionnaire had a pre-paid envelope with a return address on it. Distribution and collection of the questionnaire was done by the author first in New Zealand, and then in Russia. Participants were asked to complete the questionnaire in their free time.

For the Russian participants, the questionnaire and cover letter were translated by the Moscow Translation Centre into Russian and back-translated to ensure accuracy.

Distribution and collection of surveys from interested organizations in Russia was done by author.

After collecting questionnaires, participants were thanked in person or by letter for their participation. After the statistical analysis was made, each organization was sent a summary of the findings of the study, together with a summary of the organization's findings, compared to the overall sample.

#### Materials

A questionnaire was designed (see Appendix A) that contained eight scales:

Managing Your Time at Work; TiME Scale; Time Dimensions of Work (TMS); DecisionMaking Internal Dynamics and Speed; Problem-Solving Inventory; Personal Growth;

Satisfaction with Decision Making Processes and Confidence in Outcomes.

#### Measures

#### Demographic section

The cover page included instructions, an informed consent statement, and questions on the participant's gender, age, position title, tenure with their organization, number of work hours per week, and time-management-training experience.

#### Managing Your Time at Work (TMB)

The Scale was constructed by Macan *et al.* (1990), and was based on a list of popularised concepts of time management behaviours examined by factor analysis. The Managing Your Time at Work Scale measures participants' use of time management behaviours: *setting goals and prioritizing* (10 items, e.g., "I review my goals to determine if they need revising"); *mechanics of time management* (8 items, e.g., "I write notes to remind myself of what I need to do"; *perceived control of time* (5 items, e.g.," I feel in control of my time"); and *preference for organisations* (8 items, e.g., "At the end of the workday, I leave a clear, well-organised workspace"). Participants responded to each item on a five-point Likert-type scale from seldom true =1 to very often true =5. Items 1, 2, 4, 6,

7, 23 and 27-31 were reversed scored. Mudrack (1997) reports coefficient alphas for the four sub-scales ranging from .69-.80.

## Time Management Environment Scale (TiME)

This scale, developed by Burt, C.D.B., Weststrate, A., Champion, F. & Brown, C. (submitted) contains 26 items measuring the participants' impression of their organizations' time management environment. The scale was developed using a sample of 272 employees across 20 organizations in the Christchurch region. The 26 items examined five dimensions of the time management environment: *supervision* (e.g., "Supervisors provide clear task guidelines"); *co-worker interaction* (e.g., "Co-workers discuss task priorities"); *job/task description processes* (e.g., "Job description documents are provided"); *support for time management processes* (e.g., "Training in time management techniques is provided"); *communicated time values* (e.g., "Productive use of time is a key value"). Participants responded to items on a 7-point Likert-type scale from strongly disagree =1 to strongly agree =7. No items are reversed scored. Coefficient alphas reported by Burt et al., are: *supervision*  $\alpha$ = .88; *co-worker interaction*  $\alpha$ = .87; *job/task description processes*  $\alpha$ = .79; *support for time management processes*  $\alpha$ = .84; *communicated time values*  $\alpha$ = .73.

#### Time Dimensions of Work (TMS)

This organizational temporal scale was devised by Schriber and Gutek (1987) to facilitate cross-organizational and intraorganizational comparisons. Its aim is to measure how well an organization effectively schedules, co-ordinates, and synchronizes its staff and tasks through time (e.g., "To get the job done, it is important for each person to co-ordinate his\her work with others", "People here plan their time carefully"). The original factor analysis found 13 dimensions (constructed from 56 items). Twelve dimensions with the highest coefficient alpha's (ranging from .80 to .52) were used in the current study. The

total numbers of items used were 49, with items 1, 2, 8, 12-13, 19-20, 31, 34-37, 41, 45-46 and 48-49 reverse scored. Coefficient alphas reported by Schriber and Gutek are: *schedules* and deadlines  $\alpha = .78$ ; punctuality  $\alpha = .59$ ; future orientation and quality versus speed  $\alpha = .44$ ; allocation of time  $\alpha = .65$ ; time boundaries between work and non-work  $\alpha = .28$ ; awareness of time use  $\alpha = .58$ ; work pace  $\alpha = .60$ ; autonomy of time use  $\alpha = .52$ ; synchronisation and co-ordination of work with others through time  $\alpha = .47$ ; routine versus variety  $\alpha = .59$ ; intra-organisational time boundaries  $\alpha = .51$ ; and sequencing of tasks through time  $\alpha = .52$ .

#### Decision-Making processes

### Development of the Decision-Making Instrument

There is concern amongst researchers about measures of decision-making processes.

Though numerous decision tasks and scenarios have been used in decision-making research, none of the methods reviewed in the literature were suitable for the goal of this study. Consequently, scales were adapted to provide appropriate decision-making measures, and some scale items were designed specifically for this research.

#### <u>Problem-Solving Inventory</u>

The Problem-solving inventory was constructed by Heppner and Petersen (1978) and consists of 31 items that measure problem-solving stages. Participants responded to each item on a five-point scale from *seldom true* =1 to very *often true* =5. The items are ordered to contain an equal number of positive and negative statements about *problem solving* (e.g., "When I make plans to solve a problem, I am almost certain that I can make them work", "When confronted with a problem, I am unsure of whether I can handle the situation"). This scale has been used in a number of studies to assess problem-solving aspects (e.g., Moos, 1984); the coefficient alpha was reported as .90.

#### Problem-Solving Demand and Speed

Jackson, Wall, Martin and David's (1993) job demand and control scale was adapted to provide a decision-making measure. This measure assesses the extent of job control, method control and production responsibility an employee experiences in their job (e.g., "The problems I deal with require a thorough knowledge of the production process in my area"). Some scale items were designed specifically for this research; the measures cover *timing control* (e.g., "I always make decisions on time", "I need to make decisions quickly") and *problem-solving demand* (e.g., "I have to solve problems which have no obvious correct answer"). Responses were obtained on a five point scale where *1=not at all to 5=great deal*. Coefficient alpha values range from .79 to .85 *for timing control*, .77 to .80 *for method control*, .73 to .75 for *monitoring demand* and .50 to .60 *for problem-solving demand* (Jackson et al., 1993).

#### **Decision-Making Internal Dynamics**

This scale (7 items) was specifically designed for the study. The process of decision-making can involve a number of steps. Items were designed to tap how a decision maker understands the steps of the *decision making process* (e.g., "Identify tasks", "Find alternatives"). Participants responded to item on a seven-point scale from I = seldom true to 7 = very often true. No items are reversed scored. For the current study the alpha was .86 for the total sample.

#### Satisfaction with Decision-Making Processes and Confidence in Outcomes

The Minnesota Satisfaction Questionnaire assesses general job satisfaction.

Coefficient alpha values for the 20-item MSQ ranged from .85 to .91 (Hart, 1999; Hurber, Seybold, & Venemon, 1992; Klenke-Hamel & Mathieu, 1990; Mathieu & Farr, 1991; Wong, Hui, & Law, 1998). The Minnesota Satisfaction Questionnaire (short form) was adapted to measure *satisfaction with decision-making processes* (e.g., "I am absolutely satisfied with decisions which I make at work"), and *confidence in outcome* (e.g., "I feel

competent and fully able to make decisions in my job"). Items were rated on a seven point Likert-type scale, from l = disagree strongly to 7 = agree strongly. Items 4, 11, 13, 15 were reversed scored.

#### Growth

The Job Diagnostic Survey (JDS) was constructed by Hackman and Oldham's (1974). The scale measures satisfaction with the job facets of security, compensation, co-workers, and supervision. Coefficient alpha for the measure encompassing general satisfaction, internal work motivation, and growth satisfaction ranged from .55 to .92 (Adkins, 1995; Mannheim, Baruch, & Tal, 1997; Munz, Huelsman, Konold, & McKinney, 1996; Rothausen, Gonzalez, Clarke, & O'Dell, 1998). In Duffy et al. (1998), coefficient alpha for a composite of facet and growth satisfaction was .91. The JDS was adapted to measure *growth satisfaction*. Sample items include, "I feel personal growth and development when I make decisions", "I like the challenge in the decision making process", "I feel that the decision I make help to promote my organization", and "The people who are involved in the decision making processes in my company contribute to the growth of the organization". In this study, items were rated on a seven point Likert-type scale, from *I* = *disagree strongly to 7* = *agree strongly*. No items were reversed scored.

## **Results**

Firstly, the questionnaire data was entered and the necessary items were reverse coded in the time management and decision–making scales. In Appendix A items from the time management and decision-making scales with an r beside them are the ones which were reverse coded. The data were analyzed for extreme scores by screening all variables using descriptive statistics` tools in Statistics 2007/2008. Four data entry errors were found and corrected. One outlier in the hours of received time management training was found

and deleted. The hypotheses were tested using a combination of one or more analysis methods: descriptive statistics, correlating the variables, multi-regression and ANOVA.

Table 1 shows descriptive statistics for the New Zealand and Russian samples for age, gender breakdown, hours of work and hours of time management training. The samples were compared on age, hours of work, and hours of time management training, and the last column of Table 1 shows the t-test results. Inspection of these results indicates that the New Zealand sample was significantly older on average, and had worked for their organization for significantly longer. Hours of work and hours of time management training were not significantly different between the samples.

Table 1. Descriptive statistics for demographic variables

			NZ				_				
		Mean	Min	Max	Std.Dev.		Mean	Min	Max	Std.Dev.	t-test
Male/Female	57 / 31					18 / 58					
Percentage with TM training	42.6					23.3					
Age		49.0	25.0	71.0	10.1		30.3	19.0	49.0	5.7	14.21*
Tenure (years)		10.7	0.2	42.5	10.6		2.9	0.2	9.0	2.4	6.28
HoursWork/Week		43.6	22.0	60.0	7.7		43.4	35.0	60.0	5.6	0.17
HoursTraining		4.7	0.0	30.0	7.1		3.1	0.0	18.0	5.9	1.53

Note \* P<.05, \*\* P >.01

## New Zealand and Russian Comparison

One of the focuses of the research was to compare the New Zealand and Russian samples on the time management competencies, time management environment, and decision-making measures. Table 2 shows the means, standard deviations and scale coefficient alphas for the time management competencies, time management environment and decision-making variables for both the New Zealand and Russian samples. The last column of Table 2 shows the ANOVA results from the across country (sample) comparison. Inspection of these results indicates that significant differences were found for 13 of the 17 variables. Mainly these differences were found in the decision-making

variables and some of them were found in the time management constructs. Actually, only one factor (decision-making internal dynamics) out of all decision-making factors was not significantly different across the countries. The general discussion explores reasons why these differences might have been found.

These differences may or may not influence the relationships between the time management constructs and decision-making outcomes – and the following analyses will specifically examine this issue.

**Table 2 Descriptive Statistics for all Scales** 

-		NZ			Russia	-			
Variables	α	mean	SD	α	mean	SD	ANOVA: New Zealand – Russia Comparison F (1,162=)		
Number of cases  TiMe Scale		n = 88			n = 76				
Thvie Scale									
TiME:Supervisor	0.83	4.8	1.0	0.79	4.8	1.0	ns		
TiME: Coworker	0.78	4.6	1.0	0.74	3.9	1.2	14.79**		
TiME: Job & task Information	0.67	5.4	1.0	0.46	4.6	1.0	27.585**		
TiME: TM Support	0.83	3.5	1.2	0.61	3.9	1.2	4.925*		
TiME: timevalues	0.64	5.5	1.0	0.52	5.4	0.9	ns		
TMB: TM mechanics	0.64	3.5	0.7	0.73	3.0	0.8	13.390**		
TMB: setting goals and priorities	0.71	3.6	0.5	0.63	3.5	0.5	ns		
TMB: perceived control of time	0.71	3.7	0.7	0.6	3.4	0.7	9.165**		
TMB: preference for ogranisation	0.68	3.9	0.6	0.66	3.7	0.6	8.082**		
TMS: schedule & deadlines	0.75	5.4	0.7	0.41	4.7	0.6	37.063**		
TMS: punctuality	0.76	4.6	1.2	0.48	4.7	1.1	ns		
PSI: confidence	0.69	3.7	0.3	0.77	3.4	0.3	34.180**		
PSD: demand	0.43	5.4	0.8	0.79	5.0	1.3	4.499*		
PSD: speed	0.68	4.6	1.0	0.76	4.2	1.1	4.710*		
DM: processes	0.86	6.1	0.7	0.87	5.9	0.7	ns		
DM: personal growth	0.65	6.0	0.6	0.79	5.8	0.8	4.076*		
DM: satisfaction	0.85	5.0	0.5	0.76	4.7	0.5	9.129**		
DM: confidence outcomes	0.72	6.0	0.6	0.64	5.1	0.8	75.612**		

Note \* P<.05, \*\* P>.01

## Bivariate relationships between the Study variables

Tables 3 and 4 shows the pearson product moment correlations between all the study variables for the New Zealand and Russian samples, respectively. The analysis now considers the relationships between the time management variables and the decision-making variables separately for the New Zealand and Russian samples. One way of examining tables 3 and 4 is to look for correlations, which are significant in both samples, and for significant correlations, which vary between the samples. Six correlations where significant for both samples, and a further 14 correlations where unique to the New Zealand sample and seven were unique to the Russian sample.

First, the correlations, which were significant and consistent across the two samples, are considered in relation to the study hypothesis.

## The New Zealand and Russian Samples

The variable setting goals and priorities (Factor 2 TMB Scale) was significantly correlated with decision-making internal dynamics (r= 0.23, p< .05) in the New Zealand sample, and in the Russian sample (r = 0.28, p< .05). Moreover, the perceived control of time variable was significantly correlated with decision-making speed for the New Zealand sample (r = 0.23, p< .05), and for the Russian sample (r = 0.38, p< .001). These findings support hypothesis 1a.

A significant relationship was found between *organizational supervision* (Factor 3 of the TiME scale) and *decision-making internal dynamics*, for both the New Zealand and Russian samples, at (r = 0.32, p < .01) and (r = 0.27, p < .05), respectively. These finding supports Hypotheses 1b.

Another correlation, significant and consistent across the two samples, was between *setting goals and priorities* (Factor 2, TMB Scale), and *personal development* from decision-making, in the New Zealand sample (r = 0.32, p < .01), and in the Russian sample (r = 0.30. p < .01). These findings support Hypothesis 2a.

Finally, in support of Hypothesis 2b the correlations between *communicated time* values (Factor 5 of TiME scale) and *personal development* from decision-making variables, were significant for the New Zealand sample (r=0.23, p<.05), and for the Russian sample (r=0.43, p<.001). Furthermore, the correlations between *job/task description processes* (Factor 4, TiME Scale) and *personal development* from decision-making were significant for both the New Zealand and Russian samples (r=0.24, p<.05, and r=0.43, p<.001. respectively).

Next, the correlations, which were found to be significant but unique to a sample, are considered in relation to the study hypotheses.

*Table 3* Correlation Matrix of Study Variables for the New Zealand sample.

		1	2	3	4	5	6	7	8	9	10	11	12	15	16	17	18	19	20
1	TMB: TM Mechanics	1.00																	
2	TMB: setting goals and priorities	0.31	1.00																
3	TMB: perceived control of time	-0.02	-0.05	1.00															
4	TMB: preference for ogranisation	0.25	0.23	0.27	1.00														
5	TiME: supervisor	0.22	0.38	-0.06	0.18	1.00													
6	TiME: coworker	0.11	0.27	-0.02	0.07	0.69	1.00												
7	TiME: jobtask	0.13	0.24	-0.03	0.20	0.37	0.10	1.00											
8	TiME: supportTM	0.32	0.42	-0.05	0.09	0.52	0.32	0.35	1.00										
9	TiME: timevalues	0.02	0.21	-0.30	0.06	0.51	0.31	0.35	0.37	1.00									
10	TMS: shedule and deadlines	0.12	0.42	-0.24	0.17	0.37	0.34	0.20	0.36	0.61	1.00								
11	TMS: punctuality	0.25	0.53	0.34	0.27	0.29	0.24	0.09	0.19	-0.09	0.21	1.00							
12	PSI: confidence	-0.14	0.10	-0.03	-0.15	0.16	-0.01	-0.09	-0.12	0.21	0.21	0.05	1.00						
15	PSD: demand	0.15	0.17	-0.19	-0.02	0.26	0.02	-0.07	0.18	0.40	0.37	0.01	0.35	1.00					
16	PSD: speed	0.08	-0.13	0.23	0.17	-0.01	-0.07	0.45	0.01	-0.03	-0.33	-0.13	-0.18	-0.27	1.00				
17	DM: process	-0.01	0.23	-0.03	0.19	0.32	0.16	0.18	0.12	0.35	0.25	-0.04	0.43	0.17	-0.05	1.00			
18	DM: personal growth	0.17	0.32	0.23	0.12	0.27	0.02	0.23	0.30	0.34	0.11	0.11	0.19	0.25	0.24	0.33	1.00		
19	DM: satisfaction	0.04	0.19	0.19	-0.12	0.43	0.24	0.24	0.42	0.14	-0.11	0.00	0.03	0.15	0.13	0.26	0.40	1.00	
20	DM: confidence outcomes	0.15	0.21	0.25	0.24	0.25	0.00	0.37	0.21	0.47	0.12	0.09	0.29	0.23	0.27	0.46	0.59	0.43	1.00

Table 4 Correlation Matrix of Study Variables for the Russian sample.

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	TMB: TM Mechanics	1.00																	
2	TMB: setting goals and priorities	0.41	1.00																
3	TMB: perceived control of time	-0.12	0.08	1.00															
4	TMB: preference for ogranisation	0.30	0.13	0.32	1.00														
5	TiME: supervisor	0.15	0.15	0.00	0.14	1.00													
6	TiME: coworker	0.01	0.26	0.16	0.34	0.44	1.00												
7	TiME: jobtask	0.05	0.24	-0.01	0.13	0.41	0.39	1.00											
8	TiME: supportTM	0.12	0.05	0.06	0.16	0.01	0.09	0.58	1.00										
9	TiME: timevalues	-0.06	0.26	0.26	0.23	0.27	0.37	0.42	0.11	1.00									
10	TMS: shedule and deadlines	0.08	0.05	0.04	0.33	0.32	0.08	0.29	-0.06	0.52	1.00								
11	TMS: punctuality	-0.03	0.26	0.06	0.23	0.40	0.42	0.60	0.07	0.37	0.57	1.00							
12	PSI: confidence	-0.06	0.32	-0.08	-0.26	0.28	0.18	0.15	0.08	0.11	-0.41	-0.08	1.00						
13	PSD: demand	0.22	0.18	-0.21	-0.01	0.44	0.34	0.03	-0.10	0.06	-0.08	-0.09	0.20	1.00					
14	PSD: speed	0.19	0.06	0.38	0.38	0.19	-0.21	-0.11	0.17	-0.16	-0.04	-0.09	0.00	-0.01	1.00				
15	DM: process	0.15	0.28	-0.03	0.01	0.27	0.33	0.32	0.06	0.21	-0.13	0.07	0.53	0.23	-0.06	1.00			
16	DM: personal growth	0.06	0.30	-0.01	-0.06	0.20	0.13	0.43	-0.03	0.43	0.14	0.31	0.39	0.12	-0.08	0.57	1.00		
17	DM: satisfaction	0.03	0.24	0.05	-0.26	0.20	-0.12	0.16	0.08	0.24	-0.09	0.03	0.43	-0.05	0.09	0.32	0.31	1.00	
18	DM: confidence outcomes	0.05	0.19	0.11	-0.25	0.09	-0.09	0.10	-0.03	0.08	-0.30	-0.20	0.39	0.04	0.22	0.51	0.41	0.50	1.00

#### The New Zealand Sample

A significant relationship was found between *schedule and deadlines* (Factor 1 TDW Scale) and *decision-making internal dynamics* (r = 0.25, p < .05). This findings support hypothesis 1a. In addition, the variable *schedule and deadlines* was significantly correlated with *decision-making speed*, but in an unexpected negative direction (r = -0.33, p < .01). This finding also support hypothesis 1a, and may suggest that the employees' perception of the presence of stronger scheduling and deadlines demands in an organization may become associated with frustration of not being able to make their decisions in time.

As predicted, the time management environment in an organization was also significantly correlated with efficiency of decision-making processes. Looking more closely at the New Zealand sample, two factors were significantly correlated with efficiency of decision-making processes: *job/task description processes* with *decision-making speed* (Factor 3 TiME Scale) (r = 0.45, p< .001), and *communicated time values* (Factor 5 TiME Scale) in an organization with *decision-making internal dynamics* (r = 0.35, p< .001). These findings support Hypothesis 1b.

Hypothesis 2a was supported in the New Zealand sample: *Perceived control of time* (Factor 3 TMB Scale) was significantly correlated with *personal development* from decision-making (r=0.23, p<.05).

There were strong relationships found for the time management environment and employees' *satisfaction with decision-making processes*, and *personal development* from decision-making in New Zealand. Two factors of the TiME Scale were significantly correlated with *personal development* from decision-making, these were *organizational* 

supervision (r = 0.27, p< .01), and support for time management processes (r = 0.32, p< .01). Furthermore, a strong relationship was found between employees' satisfaction with decision-making processes and four factors of the TiME scale: organizational supervision (r =0.43, p< .001); co-worker interaction (r =0.24, p< .05); job/task description processes (r =0.24, p< .05); and support for time management processes (r =0.42, p< .001). These findings also support hypothesis 2b.

The hypothesis 3a was supported in the New Zealand sample. Three factors of the Time Management Behaviour Scale were significantly correlated with *confidence of decision-making outcomes*: *setting goals and priorities* (r = 0.21. p< .05); *perceived control of time* (r= 0.25, p< .05); and *preference for organization* (r =0.24, p< .05). *Time management mechanics* (Factor 1. TMB Scale) as it relates to *confidence in decision-making outcomes* was not related significantly (r =0.15). There was no significant relationship found for time management competencies and confidence in ability of making decisions for the New Zealand sample. These findings suggests that for New Zealand employees, confidence in outcomes from decision making may depend more on other factors, such as clear criteria for decisions in an organization, feedback on employees' decisions, and experience in making decisions. This idea is examined further in the discussion section.

As predicted in hypothesis 3b, employees' confidence in decision-making outcomes was significantly correlated with the time management environment factors, especially with three factors of the TiMe Scale for the New Zealand sample: *organizational supervision* (r =0.25, p< .05); *job/task description processes* (r= 0.37, p< .001); and *communicated time* values (r = 0.47, p< .001). There was a weaker relationship between *support for time* 

management processes and confidence in decision-making outcomes (r=0.21. p< .05). There was no significant relationship found for time management environment and confidence in ability of decision making for the New Zealand sample.

#### The Russian Sample

For the Russian sample, there was a significant correlation between *preference for organization* (Factor 4, TMB Scale) and *decision-making speed* (r =0.38, p< .001). This finding supports Hypothesis 1a. Furthermore, in support of Hypothesis 1b, two factors of the TiME scale were significantly correlated with decision-making internal dynamics: *coworker interaction* (r =0.33, p< .01) and *job/task description* (r =0.32, p< .01). Curiously, the time management environment was not related to speed of *decision-making processes* in the Russian sample. A possible explanation for this finding might be that for Russian employees, speed of making decisions depends more on personal characteristics and abilities, especially on their personal confidence in their ability to make decisions. This idea is explored further in the discussion section.

There was no significant relationship found between the Time Dimension of Work

Scale and *efficiency of decision-making processes* for the Russian sample. This suggests
that Russian employees have a different association with scheduling and deadlines that may
be explained by cultural differences, an issue that is investigated in the discussion section.

In support of Hypothesis 2a, there were strong relationships found between *setting* goals and priorities (Factor 2, TMB Scale) and personal development from decision-making (r = 0.30. p < .01), and setting goals and priorities and satisfaction with the decision-making processes, (r = 0.24, p < .05). Surprisingly, one of the factors of the TMB

scale, *preference for organization* (Factor 4), had a correlation with *satisfaction with decision-making processes* in a negative direction (r = -0.26, p< .05). One suggestion is that Russian employees, who perceive their organizations' time management standards as being very high, may negatively estimate their decision-making ability.

It is interesting to note, that only for the Russian sample was a relationship found between *punctuality* (factor 2, Time Dimension of Work Scale) and *personal growth* (r = 0.31. p< .01). This can be explained by a new business-culture, which has been formed in Russia over the last two decades. It is described in more detail in the discussion section.

In support of Hypothesis 2b, the variable *communicated time values* (Factor 5, TiME Scale) was significantly correlated with employees' *satisfaction with decision-making processes* (r = 0.24, p < .05). The differences from the New Zealand sample may be explained by cultural differences, and this is reviewed in the discussion section.

In relation to the 3a Hypothesis, there was a significant correlation found between setting goals and priorities (factor two, TMB scale) and confidence in ability of making decisions (r = 0.32, p< .01). Surprisingly, the correlation between time management competencies and confidence in decision-making outcomes was found only for the preference for organization (Factor 4, TMB Scale) and in negative direction (r = -0.25, p< .05). The originally hypothesized direction of the relationships between scheduling and deadlines (Factor 1. the Time Dimension of Work Scale) and employees' confidence in their ability to make decisions, and confidence in decision-making outcomes were reversed in the actual data for the Russian sample, at (r = -0.41. p< .001), and (r = -0.30. p< .01), respectively. These findings suggest that employees' perception that an organization has

high standards in the preference for organization and scheduling/deadlines demands is associated by participants with a greater need for decision-making ability and may lead to negative perceptions from participants of their ability to make decisions and make them less confident about outcomes from their decisions.

In support of Hypothesis 3b, out of all the factors of the TiMe Scale, only the variable *organizational supervision* (Factor 1. TiME Scale) was significantly correlated with confidence in decision-making ability (r= 0.28, p< .05), for the Russian sample. There was no significant relationship found for time management environment and *confidence of decision-making outcomes* in the Russian sample. This shows that supervisors' support may influence employees' personal confidence in making decisions for Russian employees; this issue is examined further in the discussion section.

# Multiple Regression

In order to examine the assumption of normality, the normal probability plots of the regression-standardized residuals were checked. The normal probability plots for the time management constructs and decision-making variables indicated no major deviations from normality (Appendix B). Inspection of the Tables 3 and 4 indicates that no two time management variables had a relationship greater than +/- 0.69, signifying no multi-collinearity problems for the regression analysis.

In order to examine the overall effect of time management on ability to make decisions, a *decision-making ability* variable was created by summing the speed of making decisions ratings and the decision-making dynamics ratings. Two multiple regressions (one for the New Zealand and one of the Russian samples) were performed to determine the ability of the time management variables to predict *decision-making ability*. Table 5 shows

the regression result for the New Zealand sample. The time management variables are ranked in the table using their beta weight. Inspection of Table 5 indicates that the model produced a significant outcome (F (11, 76) = 5.470. p< .01) which in total accounted for 36 percent of the variance in the decision-making ability variable.

Table 5: Multiple Regression, examining the effect of the time management variables on decision-making ability, in the New Zealand sample.

Variable	β(beta)	В	Std.Err. of B	t(76)
TiME: jobtask	0.45***	0.535	0.116	4.603
TMS: shedule and deadlines	-0.337**	-0.542	0.200	-2.702
TMS: punctuality	-0.301**	-0.293	0.118	-2.490
TMB: perceived control of time	0.23*	0.395	0.179	2.209
TiME: timevalues	0.215	0.270	0.168	1.611
TMB: preference for ogranisation	0.181	0.351	0.190	1.844
TiME: setting goals	0.125	0.305	0.289	1.055
TiME: supportTM	-0.088	-0.085	0.108	-0.786
TiME: cowoker	0.066	0.077	0.145	0.532
TMB: TM Mechanics	0.048	0.086	0.172	0.503
TiME: supervisor	0.025	0.029	0.174	0.164
*p < .05 **	p < .01	*** p < .001		

Table 6 shows the regression result for the Russian sample. The time management variables are ranked in the table using their beta weight. Inspection of Table 6 indicates, that the model produced a significant outcome (F(11, 64) = 5.821. p< .01) which in total accounted for 41 percent of the variance in the decision-making ability variable.

*Table 6:* Multiple Regression, examining the effect of the time management variables on decision-making ability, in the Russian sample.

Variable	β(beta)	В	Std.Err. of B	t(64)						
TiME: supervisor	0.54***	0.714	0.147	4.867						
TiME: coworker	0.43***	-0.452	0.130	-3.473						
TMS: shedule and deadlines	-0.376*	-0.825	0.327	-2.523						
TMB: preference for ogranisation	0.40***	0.805	0.229	3.519						
TMB: perceived control of time	0.268**	0.463	0.175	2.645						
TiME: setting goals	0.162	0.393	0.275	1.431						
TiME: supportTM	0.099	0.103	0.138	0.748						
TiME: TM Mechanics	0.038	0.062	0.190	0.327						
TiME: timevalues	-0.023	-0.033	0.194	-0.173						
TMS: punctuality	-0.021	-0.025	0.182	-0.139						
TiME: jobtask	0.004	0.005	0.231	0.022						
*p < .05 ** p <	9									

# **Discussion**

# Similar findings for New Zealand and Russia

The purpose of the present study was to explore the relationship between time management and decision-making processes. Additionally, the aim of this research was to find out if Russian and New Zealand employees indicate similar relationships between time management and decision-making processes. The findings from this study supported the hypothesis that the effectiveness of decision-making processes is at least partly dependent on aspects of time management. In addition, an interesting cultural difference was found between New Zealand and Russian employees regarding which aspects of time management are related to decision-making processes.

Results from this study support the hypothesis that time management competencies would predict higher levels of efficiency in decision-making processes. This hypothesis

received support in that time management dimensions, such as perceived control over time and setting goals and priorities, correlated positively with the effectiveness of decision-making processes (defined by speed and internal dynamics) in both countries. These results support Macan's (1996) findings that perceived control over time positively influences job performance. For example, one of the expected outcomes for decisions, especially in an organizational context, is that decisions should be made within a certain period. A possible reason for the relationship between perceived control of time and decision-making speed may be that employees who use time management behaviours gain awareness of what can be done within the workday time and it leads to optimal speed for action taken.

Furthermore, the findings from this study confirmed the relationship between the time management environment and the effectiveness of decision-making processes. New Zealand and Russian employees who work in a company with strong organizational supervision responded with a higher score on the decision-making dynamics measure. This result confirmed Simons's findings (1993) that employees' priorities can change and are dependent on an organizations environment; consequently, decision processes are controllable, or at least partially dependent on the context of organizational systems.

There were also significant positive correlations found between the measures of *job/task description processes*, *communicated time values* and *development from decision-making* for both countries. A reason for these findings may be that colleagues may help each other in analyzing tasks and specifying the goals in an organizational context. This interpretation coincides with Herhey, Walsh and Chulef's findings (1990) that high performers and good decision makers tend to analyze tasks more thoroughly and to work in collaboration with colleagues.

Finally, New Zealand and Russian employees both showed a significant correlation between the *setting goals and priorities measure* and the *development from decision-making* measure. These findings may indicate that by implementing setting goals and priorities techniques, employees get a clear vision about what should be done, and gain development from decisions taken.

# Findings, unique to the New Zealand sample

Results from the New Zealand sample indicated that the aspect of time management which had the most significant influence on decision-making processes was the time management environment. There were significant correlations between *job/task description* processes and speed of decision-making and communicated time values and decision-making internal dynamics. Moreover, the New Zealand sample also showed a strong association between the time management environment and confidence in decision-making outcomes. These results may signify that a strong time management environment creates the necessary conditions for developing employees' decision-making ability. An outcome these relationships may be that making decisions are viewed by employees as more positive process. This interpretation is supported by the significant positive correlations found between time management environment variables and both satisfaction and personal development from decision-making.

New Zealand employees reported a negative relationship between their scheduling and deadline demands and their speed of making decisions. This negative correlation was not expected. An explanation for this finding may be that people who work for an organization which places considerable demands on them may meet these demands by focusing on the actual decision outcome rather than the time taken to make the decision.

However, in situations where timing is a vital factor, it could be important for employees to develop a good sense of making decisions quickly, especially when an individual is involved in team work.

## Findings unique to the Russian sample

Results from the Russian sample indicated that for Russian employees the most powerful factors that may assist to increase the speed of decision-making were preference for organization and *perceived control of time*. Satisfaction with decision-making processes was strongly related to communicated time values and setting goals and priorities. One possible interpretation for these findings is that employees who have a clear picture of organizational goals and their priorities can maximize the utility of their decision outcomes. As a result, the employee views satisfaction with their decision-making processes as more positive. This interpretation supports Kahnerman and Tversky's findings (1979) that employees' awareness of goals and their importance in relation to other goals (including organizational goals) leads people to make more rational decisions and be more satisfied with decisions' outcomes.

Additionally, positive correlations were found for both co-worker interaction and job/task description processes with decision-making internal dynamics. One explanation for these relationships is that the time management environment creates an awareness of time effectiveness, and supports a better understanding of the designed task and steps involved in gaining goals.

In contrast to the New Zealand sample, the results from the Russian sample showed negative correlations between preference for organization and confidence in ability to make

decisions, confidence in decision-making outcomes, and satisfaction with decision-making processes. As a possible explanation of these results we can look at the many changes which have occurred in Russia over the last two decades. Russia has experienced many economic changes. The new economic reality in Russia is defined by very high interorganizational competition, and this has resulted in employers having very high standards for employees. People in Russia now often work in situations with high levels of stress. When individuals face decision-making processes under high levels of stress this can block their ability to function and undermines the outcomes (Stacey, 2003). Consequently, Russian employees who work in a company with high-level demands, for example strong preference for organization, also have high expectations set for their job performance, and this may negatively influence their ability to make good decisions, and create doubt about their decision outcomes. Employees have to be encouraged by supervisors, and be provided with clear criteria for expected decisions. This interpretation is supported by the significant positive correlations found in the Russian sample between organizational supervision and employees' confidence in their ability in making decisions.

# Significant cultural differences

New Zealanders, compared with Russian respondents, construed themselves significantly more confident in making decisions and estimating outcomes. In addition, participants from New Zealand rated highly their satisfaction with making decisions. This interesting cultural difference was found in the data in the relationship between preference for organization and confidence in outcome from decision-making. New Zealand employees reported a high positive correlation, while the Russian sample had a negative correlation. This finding raises a question. Why, and on what basis, did the New Zealanders make such a positive evaluation about their decisions? According to the self-esteem

literature (Morling, 2002; Stacey, 2003), consistency predicts higher levels of confidence. It is vital for an individual to have a constant self-view and stable environment in order to be confident about outcomes from his or her actions. It is somewhat different in Russia, where people are deeply involved in the experience of change and are trying to meet high expectations from employers. When everyday attention is framed in terms of competition and comparisons with others, which is very typical for the Russian culture, individuals' self-view may become somewhat dependent on co-action and judgment from others. From this interpretation, it is very understandable why Russian employees reported a strong relationship between supervision in the organization and confidence in decision-making ability.

An alternative explanation for these findings may relate to participant age. The Russian participants were significantly younger than the New Zealand participants, but did have the same job positions and did work in similar types of company. As mentioned above, Russian economics have changed very fast over the last two decades. The new generation starts their career at a very young age. For those, who are supposed to make strategic decisions, confidence in their ability to make the right decisions may come with maturity and experience.

Another possible reason for this finding is that, according to the present study, participants from New Zealand reported a higher level of time management competencies and a more supportive environment, compared to Russians. According to the data, New Zealanders are more skilled in managing work time and work in very structured environments consequently; this may have a positive influence on their decision-making processes. These findings strongly support the idea that decision-making processes at least partly depend on time-management constructs. Organizations should support time

management behavior and create an environment which encourages employees to make optimal and rational decisions.

## Limitations and Future Research Suggestions

Future study in this area should focus on overcoming the most serious limitations present in this study. From the perspective of the present study, the most serious weaknesses are related to sample size, cross-sectional design, and national peculiarity of participants. Each will be addressed below.

One of the key limitations that affected the present research is that from 200 delivered questionnaires only 164 came to the final sample. This means that the multiple regressions were not as powerful as they could have been.

This research design is cross-sectional, even though retrospective time measures were included for decision measures. The second limitation is that although the experimental variables in this study were valid, according to the scale statistics, self-report questionnaires may be filled in under some criticism. However, cross-sectional self-report measures are one of the most common methods in organizational behavior research. Some researchers believe that mono-method may cause bias correlations between the constructs of interest (Spector, 1994). According to Spector (1994), misperceptions and social desirableness may influence self-report measures. Future research would benefit from more rigorous methods of analysis to follow up on the results.

Another possible limitation of the present research is that the cultural differences, which were found, have not been confirmed by behavioral data. It is unclear, for example, whether Russian employees have problems with managing work time, or if they have very high standards for themselves, because of competition and high expectation from employers. However, difficulties in completing the questionnaire by the deadline for

Russian employees, comparing to the New Zealand participants, might indirectly confirm that New Zealand employees are more skilled in managing their time.

Finally, a couple of the scales utilized in this study showed low sub-scale reliabilities. According to Kline (2000), coefficient alphas should not be tolerated, if they are below .7. Two factors from the Time Dimension Scale (Schriber& Gutek, 1987), which were used for this study, namely *punctuality* and *schedule & deadlines* only reached an alpha of .48 and .41. respectively, in the Russian sample. A possible explanation for these findings is different interpretation of the scale items by the Russian and New Zealand employees that might be caused by the translation of the questionnaire in to Russian. Although the general meaning of items used in the questionnaire remained, some slight changes may have influenced understanding by the Russian respondents. Further analysis of this issue and adaptation may be necessary for the future use of this scale.

As mentioned in the literature review section, decisions may be treated as a cognitive process, but personal factors are at least as significant. In the present research design personal characteristics have not been considered. To get a more thorough picture of time management behaviour and its relationship to decision-making processes, measures of personality type, personal characteristics and ability to learn new strategies are desirable.

## Conclusion

The purpose of the present research was to explore the relationship between time management factors and decision-making processes. This study also showed cross-cultural differences in the relationships between time management factors and decision-making processes, more specifically, that culture has a strong influence on some aspects of time management factors and satisfaction, and confidence in the outcomes of the decisions taken. Most of the expected relationships in the research were found. However, a few

relationships were found to be significant, but not in the expected direction. Moreover, the findings of this study suggest that future research is needed to obtain and clarify the underlying relations that cause the associations showed by the participants.

The present study has implications for both theory and practice. On the theoretical level the study explored the relationships between time management factors and decision-making processes. From a practical perspective, the findings have identified aspects of time management, such as setting goals, perceived control of time, the role of the organizational supervision, that seem to affect decision-making processes positively.

Organizational decision-making is not a simple process. Technological and economic changes, as well as the globalization phenomenon, have caused difficulties for employees in decision-making. Findings of this study may help create workplacs where well-structured and supportive time management techniques and environment are conducive to effective decision-making.

## References

Adams, G.A., & Jex, S.M. (1999). Relationships between time management, control, work-family conflict, and strain. *Journal of Occupational Health Psychology*, 4 (1), 72-77.

Adams, G. A., & Jex, S. M. (1997). Confirmatory factor analysis of the time management behavior scale. *Psychological Reports*, 80, 225-226.

Azjen, I. (1991). The theory of planned behaviour. *Organisational Behaviour and Human Decision Processes*, *50*, 179-211.

Bandura, A. (1977). Self-efficacy: Towards a unifying theory of behavioural change. *Psychological Review*, 84, 191-215.

Barling, J., Kelloway, E. K., & Cheung, D. (1996). Time management and achievement striving interact to predict car sales performance. *Journal of Applied Psychology*, 81(6), 821-826.

Baron, R. M., & Kenny, D.A. (1986). The Moderator-Mediator variable distinction in Social Psychological Research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.

Bazerman, M. H. (1982). Impact of personal control on performance: Is added control always beneficial? *Journal of Applied Psychology*, 67, 472-479.

Benson, L., & Beach. L.R.(1996). The Effects of Time Constraints on the Prechoice Screening of Decision Options. *Organizational Behaviour & Human Decision Processes*, 67-68, 222-228.

Benzion, U., Rapoport, A., & Yagil, J.(1989). Discount rates inferred from decision: An experimental study. *Management Science*, 35, 270-284.

Bluedorn, A.C., & Denhardt, R.B. (1988). Time and Organisations. *Journal of Management*, 14(2), 299-320.

Bond, M. J., & Feather, N. T. (1988). Some correlates of structure and purpose in use of time. *Journal of Personality and Social Psychology*, 55(2), 321-329.

Britton, B.K., & Glynn, S.M. (1989). Mental management and creativity: A cognitive model of time management for intellectual productivity. In J.A. Glover, R.R. Ronning and C.R. Reynolds (Eds.). *Handbook of Creativity* (pp.429-440). New York: Plenum Press.

Britton, B. K., & Tesser, A. (1991). Effects of time-management practices on college grades. *Journal of Educational Psychology*, 83(3), 405-410.

Bryman, A, & Cramer, D. (1997). *Quantitative data analysis with SPSS for Windows*. New York: Routledge.

Buchler, R., Griffin, D., & Ross, M.(1994). Exploring the 'planning fallacy': Why people underestimate their task completion times. *Journal of Personality and social Psychology*, 67, 366-381.

Burt, C.D.B., Weststrate, A., Champion, F. & Brown, C. (submitted, 2001). Time Management Environment Scale. Unpublished.

Burt, C.D., & Forsyth, D.K. (2001). Relationships between supervisor behaviour, family support, and perceived time management ability. *New Zealand Journal of Psychology*, 30(1), 4-8.

Chapman, G.B., Nelson, R., & Hier, D.B. (1999) Familiarity and time preferences: Decision making about treatments for migraine headaches and Crohn's disease. *Journal of Experimental Psychology: Applied*, 5, 17-34.

Cohen, S., Kamark, T., & Mermelstein, R. (1983). A Global Measure of Perceived Stress. *Journal of Health and Social Behaviour, 24*(Dec), 385-396.

Cooper, C.L., & Baglioni Jr, A.J. (1988). A structural model approach toward the development of a theory of the link between stress and mental health. *British Journal of Medical Psychology*, 61, 87-102.

Cooper, C.L., Dewe, P.J., O' Driscoll, M.P. (2001). *Organisational Stress: A review and critique of theory, research and applications*. London: Sage. Derogatis, L.R., & Cleary, P.A. (1977). Confirmation of the dimensional structure of the SCL-90: A study in construct validation. *Journal of Clinical Psychology*, 33(4), 981-989.

Drucker, P. (1966). The effective manager. London: Penguin.

Feather, N., & Bond., M. (1983). Time structure and purposeful activity among employed and unemployed university graduates. *Journal of Occupational Psychology*, *56*, 241-254.

Francis-Smythe, J. A., & Robertson, I. T. (1999). On the relationship between time management and time estimation. *British Journal of Psychology*, *90*, 333-347.

Friedman, W. (1993). Memory for the time of past events. *Psychological Bulletin*, 113(1), 44-66.

Frone, M. R. (2000). Interpersonal conflict at work and psychological outcomes: testing a model among young workers. *Journal of Occupational Health Psychology*, 5(2), 246-255.

Ganster, D. C., & Schaubroek, J. (1991). Work stress and employee health. *Journal of Management*, 17(2), 235-271.

Greenberger, D. B., Strasser, S., Cumings, L.L., & Dunham, R.B. (1989). The impact of personal control on performance and satisfaction. *Organisational Behaviour and Human Decision Processes*, 43, 29-51.

Hackman, J.R. & Oldham, G.R. (1980). Work redesign. New York: Addison-Wesley.

Hall, B. L., & Hursch, D. E. (1982). An evaluation of the effects of a time management training program on work efficiency. *Journal of Organisational Behaviour Management*, 3(4), 73-96.

Hassard, J. (1991). Aspects of time in organisations. *Human Relations*, 44, 105-125.

Howell, D.C. (1997). *Statistical methods for Psychology* (4th ed.) Belmont, California: Duxbury Press.

Jackson, P.R., Wall, T.D., Martin, R.,& Davids, K.(1993). New measures of job control, cognitive demand, and production responsibility. *Journal of Applied Psychology*, 78(5), 753-762.

Jex, S.M., & Elacqua, T.C. (1999). Time management as a moderator of relations between stressors and employee strain. *Work and Stress*, 13(2), 182-191.

Josephs, R.A., & Hahn, E.D. (1995). Bias and accuracy in estimates of task duration. *Organizational Behavior and Human Decision Processes*, 61, 202-213.

Kahneman, D., & Tversky, A. (1979b). Prospect theory: An analysis of decision under risk. *Econometrica*, 47, 263-291.

Karasek, R., Brisson, C., Kawakami, N., Houtman, I., Bongers, P., & Amick, B. (1998). The Job Content Questionnaire (JCQ): An Instrument for Internationally Comparative Assessments of Psychosocial Job Characteristics. *Journal of Occupational Health Psychology*, *3*(4), 322-355.

Kasl, S.V. (1998). Measuring Job stressors and studying the health impact of the work environment: An epidemiologic commentary. *Journal of Occupational Health Psychology*, 3(4), 390-401.

Katz, D., & Kahn, R.L. (1978). *The social psychology of organisations*. (2nd ed.). (2nd ed).New York: John Wiley.

Keren, G., & Roelofsma, P. (1995). Immediacy and certainty in intertemporal choice. *Organizational Behavior and Human Decision Processes*, 63, 287-297.

Koch, C.J.,& Kleinman M,.(2002). A stitch in time saves nine: Behavioural decision making explanations for time management problems. *European Journal of Work and Organisational Psychology*, 2002,11(2), 199-217.

Kinicki, A.J., & Vecchio, R.P. (1994) Influences on the quality of supervisor-subordinate relations: The role of time pressure, organisational commitment, and locus of control. *Journal of Organisational Behaviour, 15,* 75-82.

Kline, P. (2000). Handbook of Psychological Testing (2nd ed). London: Routledge.

Kleinbeck, U. et al (Eds). *Work Motivation in the context of the globalising economy*. New Jersey, USA: Lawrence Erlbaum.

Krause, H. (1999). Construction and Validation of the Australian Time Organisation and Management Scale. Unpublished Masters thesis, University of Sydney, Sydney.

Lahmers, A. G., & Zulauf, C.R. (2000). Factors associated with academic time use and academic performance of college students: A recursive approach. *Journal of College Student Development*, 41(5), 544-556.

Lakein, A. (1973). How to get control of your time and life. New York: New American Library.

Lakein, A. (1991). How to get control of your time and your life. New York: New American Library.

Lang, D. (1992). Preventing short term strain through time-management coping. *Work and Stress*, 6(2), 169-176.

Lay, C. H., & Schouwenberg, H.C. (1993). Trait procrastination, time management, and academic behaviour. *Journal of Social Behaviour and Personality*, 8(4), 647-662.

Locke, E. A., & Latham, G.P. (1990). A theory of goal setting and task performance. New Jersey: Prentice-Hall.

Macan, T. H. (1994). Time Management: Test of a process model. *Journal of Applied Psychology*, 79(3), 381-391.

Macan, T. H. (1996). Time-management training: Effects on time behaviours, attitudes, and job performance. *The Journal of Psychology*, 130(3), 229-236.

Macan, T. H., Shahani, C., Dipboye, R. L., &, & Phillips, A. P. (1990). College students' time management: Correlations with academic performance and stress. *Journal of Educational Psychology*, 82(4), 760-768.

Mackenzie, A. (1990). The Time Trap. New York: AMACOM.

McKenna, R. J. (2001), "Identity, not motivation: the key to effective employee-organization relations", in Wiesner, & Millett, B. (Eds), *Management and Organizational Behaviour*, Wiley Australia, Brisbane, pp.35-45.

McGrath, J. (1976). Stress and behaviour in organisations. In M.D. Dunnette (Ed.). *Handbook of Industrial and Organisational Psychology*. (pp.1351-1395). Chicago: Rand McNally.

Misra, R., & McKean, M. (2000). College Students' Academic Stress and Its Relation To Their Anxiety, Time Management, and Leisure Satisfaction. *American Journal of Health Studies.*, 16(1), 41-58.

Motowildo, S.J., Packard, J.S., & Manning, M.R. (1986). Occupational Stress: Its causes and consequences for job performance. *Journal of Applied Psychology*, 71(4), 618-629.

Mudrack, P. E. (1997). The structure of perceptions of time. *Educational and Psychological Measurement*, 57(2), 222-240.

Nonis, S. A., Hudson, G.I., Logan, L.B., & Ford, C.W. (1998). Influence of perceived control over time on college students' stress and stress-related outcomes. *Research in Higher Education.*, 39(5), 587-605.

Nunnelly, J.C. (1978). Psychometric Theory (2nd ed.). New York: McGraw-Hill

Orpen, C. (1994). The effect of time-management training on employee attitudes and behavior: A field experiment. *The Journal of Psychology*, 128(4), 393-396.

Ordo ez, L., & Benson, L., III. (1997). Decisions under time pressure: How time constraint affects risky decision making. *Organizational Behavior and Human Decision Processes*, 71, 121-140.

Orlikowsky, W.J. & Yates, J. (2002), "Its about time: temporal structuring in organizations", Organization Science, Vol. 13, pp. 684-700.

Quick, J. C. (1998). Introduction to the Measurement of Stress at Work. *Journal of Occupational Health Psychology*, 3(4), 291-293.

Richards, J. H. (1987). Time management: A review. Work & Stress, 1, 73-78.

Schmitt, N (1994). Method Bias: the importance of theory and measurement. *Journal of Organisational Behaviour*, 15 (5), 393-398.

Schriber, J.B., & Gutek, B.A. (1987). Some time dimensions of work: Measurement of an underlying aspect of organisation culture. *Journal of Applied Psychology*, 72(4), 642-650.

Schuler, R. S. (1979). Managing stress means managing time. *Personnel Journal*, 58, 851-854.

Shahani, C., Weiner, R., & Streit, M.K. (1993). An investigation of the dispositional nature of the time management construct. *Anxiety, Stress and Coping*, *6*, 231-243.

Simons, D.J. & Galotti, K.M. (1992), "Everyday planning: an analysis of daily time management", *Bulletin of the Psychonomic Society*, Vol. 30, pp.61-4.

Simon, H. A. (1955). A behavioural model of rational choice. *Quarterly Journal of Economics*, 69, 99-118.

Simon, H.A. (1978). Rationality as process and as product of thought. *American Economic Review, Papers and Proceedings*, 68, 1-16.

Sonnentag, S. & Schmidt- Brabe, U. (1998), "Expertise at work: research perspectives and practical interventions for ensuring excellent performance at the workplace", *European Journal of Work and Organizational Psychology*, Vol. 7, pp.449-54

Spector, P. E. (1986). Perceived control by employees: A meta-analysis of studies concerning autonomy and participation at work. *Human Relations*, 39(11), 1005-1016.

Spector, P. E. (1987). Interactive effects of perceived control and job stressors on affective reactions and health outcomes for clerical workers. *Work & Stress*, 1, 155-162.

Spector, P. E. (1994). Using self-report questionnaires on OB research: A comment on the use of a controversial method. *Journal of Organisational behaviour*, 15, 385-392.

Spector, P. E., & Jex, S.M. (1998). Development of Four Self-Report Measures of Job Stressors and Strain: Interpersonal Conflict at Work Scale, Organisational Constraints Scale, Quantitative Workload Inventory, and Physical Symptoms Inventory. *Journal of Occupational Health Psychology*, *3*(4), 356-367.

Spector, P. E., Dwyer, D.J., & Jex, S.M. (1988). Relation of Job Stressors to affective, health, and performance outcomes: A comparison from multiple data sources. *Journal of Applied Psychology*, 73(1), 11-19.

Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185, 1124-1131.

Williams, R.L., Verble, J.S., Price, D.E., & Layne, B.H. (1995) relationship between time-management practices and personality indices and types. *Journal of Psychological Type*, *34*, 36-42.

# Appendices

# Appendix A

## Statement of Informed Consent

#### Study title: The relationship between Time management factors and Decision making processes

You are being asked to participate in an anonymous survey. Your participation is very helpful to me. Please ask questions if there is anything that you do not understand.

In advance, I thank you for giving your time on my account.

#### The purpose of this study:

The purpose is to investigate the relationship between time management (TM) factors and decision making (DM) processes. I hope to find the aspects of the process of decision making that are dependent on those of time management factors. These findings can help specialists and employers to better understand and improve the successful operation of their business and organization.

### What is involved in this study?

This study involves completing an anonymous survey. You will be asked to answer questions in which you will describe your attitude towards some aspects of time management such as: organizational time management, environment factors and individual differences in TM and decision making processes. There are no right or wrong answers - it is simply what you think. Please complete all questions, or the questionnaire will be unable to be used.

Your confidentiality is completely assured. Completing the survey can take approximately 30 minutes. All participants are asked to complete the same survey.

### What are the benefits of participating in this study?

Although there will be no direct personal benefits from completing this survey, your participation may help to better understand your own attitudes to both the TM and DM processes, producing personal development.

Questions about this study may be directed to the research supervisor: Dr Chris Burt Department of Psychology University of Canterbury Phone + 6433642231

Alternatively, you can contact me on:

Viktoriya Varlamova

vva17@student.canterbury.ac.nz or v.tori@paradise.net.nz.

#### Please post the completed questionnaire directly to the researcher in the envelope provided.

# Demographics

1.	What is your gender?	Male ☐ Female ☐				
2.	What is your age?					
3.	What is your job title?					
4.	How long have you been working i	n your current job?				
	Years Months					
5.	How many hours do you work per	week?				
6.	Have you ever had any formal Time	e Management training?	Yes □	No□		
7.	Have you ever had any formal Time Management training? Yes ☐ No☐  If you answer Yes to question 6, how many hours training have you received?					

## Managing Your Time at Work

To what extent does each of the statements accurately describe your activities and experience in your work? Indicate how accurately each statement describes you by circling one of the alternatives on the scale below. Mark all your responses directly on the form. This is not a test, and there are no right or wrong answers. *Please respond to all items*.

1	2	3	4	5
seldom true	occasionally	true about as	fraguently true	nam often true
	true	often as not	frequently true	very often true

N	Item	1	2	3	4	5
1	I find myself taking on too many task responsibilities at one time.					
2	I feel overwhelmed by trivial and unimportant tasks.					
3	I feel in control of my time					
4	I must spend a lot of time on unimportant tasks					
5	At the end of a workday, I leave a clear, well-organised workspace					
6	I find it difficult to keep to a schedule because others take me away from my work					
7	When I make a things-to-do list at the beginning of the day, it is forgotten or set aside by the end of the day					
8	When I decide on what I will try and accomplish in the short term, I keep in mind my long-term objectives					
9	I review my goals to determine if they need revising					
10	I break complex, difficult projects down into smaller manageable tasks					
11	I set short term goals for what I want to accomplish in a few days or weeks					
12	I set deadlines for myself when I set out to accomplish a task					
13	I look for ways to increase the efficiency with which I perform my work activities					
14	I finish top priority tasks before going on to less important ones					
15	I review my daily activities to see where I am wasting time					
16	During a workday I evaluate how well I am following the schedule I have set down for myself					
17	I set priorities to determine the order in which I will perform tasks each day					
18	I carry a notebook, or similar, to jot down notes and ideas					
19	I schedule activities at least a week in advance					
20	When I find that I am frequently contacting someone, I record that person's name, address and phone number in a special file					
21	I block out time in my daily schedule for regularly scheduled events					
22	I write notes to remind myself of what I need to do					
23	I can find the things I need for my work more easily when my workspace is messy and disorganised than when it is neat and organised					
24	I make lists of things to do each day and check off each task as it is accomplished					
25	I carry an appointment book, or similar, with me					
26	I keep a daily log of my activities					
27	The time I spend scheduling and organising my work day is time wasted					

28	My workdays are too unpredictable for me to plan and manage my time to any great extent			
29	I have some of my creative ideas when I am disorganised			
30	When I am somewhat disorganised I am better able to adjust to unexpected events			
31	I find that I can do a better job if I put off tasks that I don't feel like doing than if I try to get them done in order of their importance			

### **TiME Scale**

There are 26 statements in this section. Each statement could describe an aspect of your work place. You are to decide whether the statement describes your place of work by giving it a rating from 1 to 7. Give a rating of 1 if you *strongly disagree* that the statement applies to your place of work, through to a rating of 7 if you *strongly agree* that the statement applies. Use ratings between 1 and 7 to express the precise nature of your opinion. *Please give a rating for every statement* 

1 2 3 4 5 6 strongly disagree agree agree slightly disagree neutral agree slightly disagree strongly

N	Item	1	2	3	4	5	6	7
1	Supervisors provide clear task guidelines							
2	Reviews of goal achievement are undertaken on a regular basis							
3	Co-workers discuss task priorities							
4	Processes used to achieve goals are continuously monitored							
5	Jobs are designed around key processes needed to meet goals.							
6	Staff work together to organize each days schedule							
7	Co-workers discuss the time required to complete tasks							
8	Co-workers discuss work goals							
9	Jobs are designed around task sequences							
10	Task priorities are regularly discussed with supervisors							
11	Supervisors are interested in the processes used to complete tasks							
12	Project planning is regularly reviewed							
13	Plans for task completion are developed with supervisors							
14	Feedback on staff's task priority judgments is regularly provided							
15	Productive use of time is a key value							
16	Job description documents are provided							
17	Time is considered to be an important resource							
18	Use of time management techniques is facilitated by supervisors							
19	Emphasis is placed on keeping to deadlines							
20	Documents on time management practice are provided for staff							
21	Training in time management techniques is provided							
22	Performance is reviewed within a performance appraisal system							
23	Contract completion times are discussed with customers							
24	Staff remind each other of appointments							
25	The organization develops an annual plan							
26	Making time to plan the days work is encouraged							

## Time Dimensions of Work (TMS)

There are 49 items in this section. They are statements about various time dimensions in your workplace. The statements are intended to apply to all work environments. You are to decide whether each statement describes your place of work by giving it a rating between 1 (*strongly disagree*) to 5 (*strongly agree*). Use ratings between 1 and 5 to describe the exact nature of your opinion. Please remember, there are no right or wrong answers, it is simply what you think. *Please be sure to give a rating for every statement.* 

1	2	3	4	5	6	7
strongly disagree	disagree	disagree slightly	neutral	agree slightly	agree	agree strongly

N	Item	1	2	3	4	5	6	7
1	People here feel that deadlines don't really matter							
2	People get upset when you are late for work							
3	This organisation invests in its future							
4	Schedules usually seem too tight for most big jobs/projects							
5	People usually expect to take their work home with them							
6	Most people don't think about how they use their time							
7	Working fast is not important here							
8	People here plan their time carefully							
9	Around here, people like to talk about the "good old days"							
10	To get the job done, it is important for each person to co-ordinate his/her work with others							
11	People tend to do different things each day							
12	Some departments work longer hours than others							
13	People can perform their tasks in any order and still get the job done							
14	Staying on schedule is important here							
15	People don't care what time you arrive at work							
16	Planning for the future is important here							
17	We never seem to have enough time to get everything done							
18	People expect to leave at the end of the day without worrying about their work							
19	People here worry about using their time well							
20	People expect you to know how long it will take you to do something							
21	Most people can work at their own pace							
22	People here do <i>not</i> have the freedom to use their time the way they choose							
23	People have to work together to get the job done							

24					
	Our job duties seem to change from week to week				
25	Everyone works about the same number of hours, no matter what jobs they hold				
26	Γο get the job done, it is important to do tasks in a specific order				
27	it is important to meet our deadlines				
28	No one cares if you are late returning from a meal break				
29	Doing things right is better than doing things fast				
30	Tasks usually take longer than planned				
31	People rarely get work-related calls during "off" hours (like nights and weekends)				
32	Most people can take breaks when they want to				
33	Most people here cannot set their own work schedules				
34	Our jobs never seem to change much				
35	We don't pay much attention to schedules				
36	If people arrive an hour late for work, they will feel "rushed" all day				
37	No one gets upset when you miss a deadline				
38	When people go on holiday, they are expected to tell their supervisor how to reach them				
39	It is easy to find time to plan something new				
40	All of our work is tightly scheduled				
41	People just expect to "kill time" on the job				
42	It is very important to be "on time" for everything				
43	People expect to finish their work by the end of each day				
44	People do most of their work under deadlines				
45	t is better to make a bad decision quickly, than a good decision slowly				
46	People are expected to work very fast				
47	People expect their work to be routine				
48	People do things when they are ready, not on a schedule				
49	Γeamwork is not very important around here				

## Problem-solving demand, DM internal dynamics and speed

Please read each item and indicate your agreement with each statement, using the 7 point scale.

1	2	3	4	5	6	7
strongly disagree	disagree	disagree slightly	neutral	agree slightly	agree	agree strongly

N	Item	1	2	3	4	5	6	7
1	I come across problems in my job that I have not met before							
2	I need to make decisions quickly							
3	The problems I deal with require a thorough knowledge of the production process in my area							
4	I always make decisions on time							
5	I often make decisions under stress due to a lack of time							
6	I have to solve problems which have no obvious correct answer							
7	I have enough time to make decisions							
8	I often feel there is not enough time for me to make decisions							

## **Problem-Solving Inventory**

There are 31 statements in this section. Each statement could describe an aspect of your place of work. You are to decide whether the statement describes your place of work. Use ratings between 1 and 5 to express the precise nature of your opinion.

1	2	3	4	5
seldom true	occasionally	true about as	frequently true	very often true
	true	often as not	<i>y</i> • <i>1</i> · · · · · <i>y</i> · · · · ·	5 -5

N	Item	1	2	3	4	5
1	When a solution to a problem was unsuccessful, I examine why it didn't work.					
2	When I am confronted with a complex problem, I develop a strategy to collect information so I can define exactly what the problem is.					
3	When my first efforts to solve a problem fail, I become uneasy about my ability to handle the situation.					
4	After I have solved a problem, I analyze what went right or what went wrong.					
5	I am usually able to think up creative and effective alternatives to solve a problem.					
6	After I have tried to solve a problem with a certain course of action, I take time and compare the actual outcome to what I thought should have happened.					
7	When I have a problem, I think up as many possible ways to handle it as I can until I can't come up with any more ideas.					
8	I have the ability to solve most problems even though initially no solution is immediately apparent.					
9	Many problems I face are too complex for me to solve.					

10	I make decisions and am happy with them later.			
11	When confronted with a problem, I tend to do the first thing that I can think of to solve it.			
12	Sometimes I do not stop and take time to deal with my problems, but just kind of muddle ahead.			
13	When deciding on an idea or possible solution to a problem, I do not take time to consider the chances of each alternative being successful.			
14	When confronted with a problem, I stop and think about it before deciding on a next step.			
15	I generally go with the first good idea that comes to my mind.			
16	When making a decision, I weigh the consequences of each alternative and compare them against each other.			
17	When I make plans to solve a problem, I am almost certain that I can make them work.			
18	I try to predict the overall result of carrying out a particular course of action.			
19	When I try to think up possible solutions to a problem, I do not come up with very many alternatives.			
20	Given enough time and effort, I believe I can solve most problems that confront me.			
21	When faced with a novel situation I have confidence that I can handle problems that may arise.			
22	Even though I work on a problem, sometimes I feel like I am groping or wandering, and am not getting down to the real issue.			
23	I make snap judgments and later regret them.			
24	I trust my ability to solve new and difficult problems.			
25	I have a systematic method for comparing alternatives and making decisions.			
26	When confronted with a problem, I do not usually examine what sort of external things my environment may be contributing to the problem.			
27	When I am confused by a problem, one of the first things I do is survey the situation and consider all the relevant pieces of information.			
28	Sometimes I get so charged up emotionally that I am unable to consider many ways of dealing with my problems.			
29	After making a decision, the outcome I expected usually matches the actual outcome.			_
30	When confronted with a problem, I am unsure of whether I can handle the situation.			
31	When I become aware of a problem, one of the first things I do is to try to find out exactly what the problem is.			

## **Decision Making: Internal Dynamics**

As part of your job you are involved in the processes of making decisions. The process of decision making can involved a number of steps. Each item below describes an aspect of the decision making process. Please read each item, and indicate using the 7 point scale, whether you agree or disagree that it is a component of your decision making. *Please be sure to give a rating for every statement.* 

1	2	3	4	5	6	7
strongly disagree	disagree	disagree slightly	neutral	agree slightly	agree	agree strongly

N	Item	1	2	3	4	5	6	7
1	Identify tasks							
2	Collect information							
3	Identify goals							
4	Find alternatives							
5	Consider implications							
6	Select decision path							
7	Monitor outcomes							

## **Personal Growth**

Please read statements below, and indicate your agreement with each item using the 1-7 scale. *Please be sure to give a rating for every statement.* 

1	2	3	4	5	6	7
disagree strongly	disagree	disagree slightly	neutral	agree slightly	agree	agree strongly

N	Item	1	2	3	4	5	6	7
1	I feel personal growth and development when I make decisions							
2	I like the challenge in the decision making process							
3	I feel that the decisions I make help to promote my organization.							
4	The people who are involved in the decision making processes in my company contribute to the growth of the organization.							

## Satisfaction with Decision Making Processes and Confidence in Outcomes

Each of the statements below is something that a person can say about her or his decision making processes. Please read each item and indicate your agreement with each statement, using the scale below. *Please be sure to give a rating for every statement.* 

Ī	1	2	3	4	5	6	7
	disagree strongly	disagree	disagree slightly	neutral	agree slightly	agree	agree strongly

N	Item	1	2	3	4	5	6	7
1	I feel my decision making efforts are rewarded the way they should be							
2	I feel I have adequate knowledge and skills for decision making							
3	I feel a sense of pride after making decisions							
4	I sometimes feel that my decisions at work are meaningless							
5	I feel competent and fully able to make decisions in my job							
6	My efforts to make a good decision are seldom blocked by red tape							
7	I feel certain about how much authority I have to make decisions							
8	I feel that the decisions I make are appreciated							
9	I am generally satisfied with the person who supervises my decision making processes							
10	I am satisfied with feedback received after decision making							
11	Decisions that I make in my job are only what is expected of me							
12	The process of decision making is enjoyable for me							
13	There are few rewards in our company for those who make decision							
14	Generally I am satisfied with the persons who are involved with me in decision making processes							
15	Many of company's rules and procedures make the decision making process difficult.							
16	I like making decisions in my work							
17	I am absolutely satisfied with decisions which I make at work							
18	I know exactly what is expected of me in my part of decision making							
19	I am satisfied with the number of decisions which I make in my job							
20	I am satisfied with the recognition which I received after my good decisions							

Thank you for your time

# Appendix B

# Информационное письмо

# Исследование: Взаимовлияние между Факторами управления временем и Процессами принятия решения

К вам обращаются с просьбой принять участие в исследовании взаимодействия между управлением временем и процессом принятия решений. Пожалуйста, задавайте вопросы, если вам что-нибудь непонятно.

Я заранее благодарю вас за время, которое вы уделили мне.

#### Цель данного исследования:

Целью данного исследования является изучение взаимного влияния между факторами управления временем и процессами принятия решений. Я надеюсь найти такие аспекты процесса принятия решений, которые зависят от факторов управления временем. Такие открытия смогут помочь специалистам и сотрудникам лучше понять и улучшить процессы управления временем и принятия решений, что в свою очередь будет способствовать увеличению успешности предприятия или организации.

#### Что включено в данное исследование?

Данное исследование включает проведение опроса. Вас попросят ответить на вопросы, при ответе на которые вы опишете ваше отношение к различным аспектам управления временем, таким как организационное управление временем, факторы внешней среды и индивидуальные различия в управлении временем. Вам также зададут вопросы о ваших процессах принятия решений. Верных или неверных ответов нет — есть просто то, что вы думаете. Пожалуйста, ответьте на все вопросы, иначе ваша анкета не сможет быть использована.

Пожалуйста, пришлите заполненную анкету непосредственно получателю в конверте, который мы вам прислали.

Вы можете задать вопросы о данном исследовании специалисту, который ведёт этот проект:

Виктория Варламова Кафедра психологии Университет Кентербери Крастчерч vva17@student.canterbury.ac.nz; v\_tori@list.ru

#### Еще раз спасибо за ваше время!

#### Демографические показатели

1. Ваш пол?	Мужской □	Женский □	
2. Ваш возраст?			
3. Какую должность	Вы занимаете?		
4. Как долго Вы раб	отает на данном пре	едприятии?	
Годы	Месяцы		
5. Сколько часов в н	еделю Вы работаето	e?	
6. Вы когда-нибудь	проходили официал	ьное обучение по Управлению временем? Да	Нет □
Если на вопрос 6	Вы отвечаете «Ла».	отметьте, сколько часов длилось ваше обучение?	

## Управление вашим временем на работе

Как точно каждое из утверждений описывает вашу деятельность и ваш опыт работы? Укажите, как точно каждое подходит Вам, выбрав какую-либо из цифр, предложенных в таблице. Укажите ваши ответы прямо в данной форме. Это не тест, поэтому здесь не может быть правильных или неправильных ответов. Пожалуйста, заполните все пункты.

1	2	3	4	5
редко верно	иногда верно	верно так же	часто верно	очень часто верно
		часто, как и		
		неверно		

No	Пункт	1	2	3	4	5
1	Мне кажется, что я беру на себя слишком много заданий одновременно.					
2	Я чувствую себя перегруженным банальными заданиями, которые не имеют					
	особой важности					
3	Я чувствую, что контролирую свое время					
4	Я трачу много времени на малозначимые задания					
5	После окончания рабочего дня я оставляю свое рабочее место в хорошо					
	организованном порядке и чистоте					
6	Мне трудно соблюдать расписание, т.к. другие отвлекают меня от работы					
7	Если в начале рабочего дня я составляю список дел, которые я должен сделать, к					
	концу дня я забываю о нем или отставляю в сторону					
8	Когда я решаю, что я должен выполнить в короткий срок, я не забываю и о моих					
	долгосрочных целях					
9	Я пересматриваю свои цели, чтобы определить, нуждаются ли они в изменении					
10	Я трансформирую комплексные и трудные проекты в меньшие задания, которыми					
	можно управлять					
11	Я ставлю перед собой краткосрочные цели, которые я хочу достичь в течение					
	нескольких дней или недель					
12	Я устанавливаю для себя предельный срок, за который я должен выполнить					
	задание					
13	Я ищу пути для увеличения эффективности, с которой я выполняю свою работу					
14	Я заканчиваю дела первостепенной важности, прежде чем переходить к менее					
	важным делам					
15	Я анализирую свою ежедневную деятельность, чтобы понять, когда я теряю время					
16	В течение рабочего дня я оцениваю, насколько я придерживаюсь расписания,					
1.5	которое сам для себя установил					
17	Я устанавливаю, какие задания имеют приоритетную важность, чтобы определить					
1.0	порядок выполнения заданий каждый день					
18	Я держу при себе книгу для записей, чтобы записывать заметки и идеи					
19	Я планирую свои действия, как минимум, за неделю					
20	Если я часто контактирую с кем-либо, я записываю имя, адрес и телефон этого					
21	человека в специальном документе					
21	Я составляю черновое расписание для действий, которые я должен выполнять					
22	регулярно					
22	Я делаю для себя заметки, чтобы напоминать себе о том, что я должен сделать Мне легче найти нужные вещи, когда мое место в беспорядке и плохо					
23	организовано, чем когда оно в чистоте и хорошо организовано					
24	Я составляю список дел, которые нужно сделать каждый день и проверяю его по					
24	мере выполнения дел					
25	Я держу при себе дневник деловых встреч, или что-то в этом роде					
26	Я ежедневно веду учет своих действий					
27	Время, которое я трачу на составление расписания и организации моей работы –					
/	потерянное время					
28	Мои рабочие дни слишком непредсказуемы, чтобы составлять для них детальные					
20	планы					
29	Некоторые творческие идеи приходят ко мне, когда я неорганизован					
/						

30	Если я немного неорганизован, мне легче регулировать неожиданные события			
31	Мне кажется, что я лучше выполняю работу, если я откладываю дела, которые я			
	могу выполнить, чем когда я стараюсь выполнить дела в порядке их значимости			

### Шкала времени

В данном разделе 26 пунктов. Каждое утверждение должно описывать какой-либо аспект вашего рабочего места. Вы должны определить, насколько данные утверждения описывают ваше рабочее место, оценивая их по баллам от 1 до 7. Если Вы полностью не согласны с каким-либо утверждением, дайте ему 1 балл, если же Вы абсолютно согласны с каким-либо утверждением, дайте ему 7 баллов. Если у Вас промежуточное мнение, выберете наиболее подходящий балл. Пожалуйста, оцените каждое утверждение.

1	2	3	4	5	6	7
Полностью	Не согласен	Не совсем	Мне все	Частично	Согласен	Абсолютно
не согласен		согласен	равно	согласен		согласен

No	Пункт	1	2	3	4	5	6	7
1	Руководство предоставляет четкие директивы по выполнению							
	заданий							
2	Обзор достижения целей проводится регулярно							
3	Сотрудники обсуждают первоочередность выполнения заданий							
4	Процессы, используемые для достижения целей, постоянно проверяются							
5	Работы связаны с ключевыми процессами, необходимыми для							
	достижения целей							
6	Персонал совместно разрабатывает ежедневное расписание							
7	Сотрудники обсуждают время, требуемое для выполнения заданий							
8	Сотрудники обсуждают рабочие цели							
9	Работы связаны с последовательностью выполнения заданий							
10	Приоритетность выполнения заданий регулярно обсуждается с							
	начальством							
11	Начальство заинтересовано в процессах, используемых для							
	выполнения заданий							
12	Планирование проекта постоянно пересматривается							
13	Планы по выполнению заданий разрабатываются совместно с							
	начальством							
14	Постоянно поддерживается обратная связь в отношении суждений							
	персонала о приоритетности выполнения заданий							
15	Продуктивное использование является ключевой ценностью							
16	Предоставляются документы по должностным инструкциям							
17	Время рассматривается как важный ресурс							
18	Начальство способствует использованию техник управления временем							
19	Акцент делается на соблюдение крайних сроков							
20	Персоналу предоставляются документу по практике управления							
	временем							
21	Предоставляется обучение техникам управления временем							
22	Выполнение проверяется по системе оценки выполнения							
23	Сроки выполнения контракта обсуждается с клиентами							
24	Сотрудники напоминают друг другу о назначениях							
25	Организация разрабатывает годовой план							
26	Поощряется планирование ежедневной работы							

## Временные отрезки работы

В данном разделе 49 пунктов. Это утверждения относительно различных временных отрезков на вашем рабочем месте. Утверждения подходят к любым внешним условиям работы. Вы должны решить, насколько точно каждое утверждение описывает ваше рабочее место, оценивая его от 1 (полностью не согласен) до 7 (абсолютно согласен). Используйте баллы от 1 до 7, чтобы точно описать ваше мнение. Пожалуйста, помните, что нет правильных или неправильных ответов, есть просто то, что Вы думаете. *Пожалуйста*, оцените каждое утверждение.

1	2	3	4	5	6	7
Полностью не	Не согласен	Не совсем	Мне все равно	Частично	Согласен	Абсолютно
согласен		согласен		согласен		согласен

№	Пункт	1	2	3	4	5	6	7
1	Сотрудники здесь считают, что предельные сроки не имеют							
	важности							
2	Люди расстраиваются, когда Вы опаздываете с работой							
3	Эта организация инвестирует свое будущее							
4	Расписания обычно кажутся слишком уплотненными для							
	большинства крупных работ/проектов							
5	Люди обычно надеются взять работу на дом							
6	Большинство людей не думают о том, как они используют время							
7	Здесь не обязательно быстро работать							
8	Сотрудники здесь тщательно планируют свое время							
9	Люди здесь любят поговорить о «добрых старых временах»							
10	Чтобы выполнить свою работу, необходимо скоординировать свои							
1.1	действия с другими							
11	Люди стараются выполнять различные вещи каждый день							
12	Некоторые отделы работают дольше, чем другие							
13	Люди могут выполнять задания в любом порядке, при этом							
1.4	выполняется их работа							
14	Здесь важно придерживаться расписания							
15	Здесь не заботятся, в какое время Вы приходите на работу							
16	Здесь важно планирование будущего							
17 18	Кажется, нам всегда недостаточно времени, чтобы сделать все Люди надеются уйти в конце рабочего дня и беспокоиться о своей							
10	работе							
19	Здесь беспокоятся о правильном использовании времени							
20	Люди ожидают, что Вы знаете, сколько времени у Вас займет							
20	выполнение того или иного действия							
21	Большинство людей могут работать в своем собственном темпе							
22	Сотрудники здесь не могут использовать время по своему выбору							
23	Люди должны работать вместе, чтобы выполнить задание							
24	Нам кажется, что наши рабочие обязанности меняются каждую							
	неделю							
25	Каждый работает примерно одинаковое количество часов, не							
	зависимо от работы, которую они выполняют							
26	Чтобы выполнить работу, важно выполнять задания в особом							
	порядке							
27	Важно уложиться в предельные сроки							
28	Никто не заботится о том, опаздываете ли Вы после перерыва на							
	обед							
29	Качественное выполнение ценится выше, чем быстрое							
30	Задания занимают больше времени, чем при планировании							

2.1	т	1 1		1 1	
31	Люди редко делают звонки, связанные с работой в нерабочее время				
	(по ночам или в выходные)				
32	Большинство людей делают перерывы тогда, когда считают				
	нужным				
33	Большинство людей здесь не могут устанавливать собственное				
	расписание				
34	Кажется, что наша работа не очень меняется				
35	Мы не уделяет большого внимания расписаниям				
36	Если сотрудники опаздывают на работу на час, они целый день				
	проводят в напряжении				
37	Никто не расстраивается, если Вы пропустили предельный срок				
38	Если люди уезжают в отпуск, они должны сообщить начальству,				
	как их можно найти				
39	Чтобы запланировать что-то новое, время найти легко				
40	Вся наша работа строго расписана				
41	На работе люди хотят только «убить время»				
42	Важно все выполнять «в срок»				
43	Ожидается, что сотрудники закончат работу к концу каждого дня				
44	Сотрудники выполняют большую часть работы в соответствии с				
	предельными сроками				
45	Лучше быстро принять плохое решение, чем медленно принять				
	xopowee.				
46	Ожидается, что сотрудники будут быстро работать				
47	Люди считают свою работу обычной				
48	Люди выполняют что-либо, когда они готовы, а не по расписанию				
49	Работа в команде здесь не имеет большого значения				
	1 woota b Romange speed he himself combiner of sharehim		l l		

## Потребность решения проблем, Внутренняя динамика и скорость принятия решений

Пожалуйста, прочитайте каждый пункт и укажите, насколько вы согласны с каждым из утверждений, используя 7-балльную шкалу. *Пожалуйста, оцените каждое утверждение.* 

1	2	3	4	5	6	7
Полностью	Не согласен	Не совсем	Мне все	Частично	Согласен	Абсолютно
не согласен		согласен	равно	согласен		согласен

№	Пункт	1	2	3	4	5	6	7
1	В моей работе я сталкиваюсь с проблемами, которые мне раньше							
	не встречались							
2	Мне необходимо быстро принимать решения							
3	Проблемы, с которыми я имею дело, требуют глубоких знаний							
	производственного процесса в моей области							
4	Я всегда принимаю решения в срок							
5	Я часто принимаю решения, находясь в стрессовом состоянии, из-							
	за отсутствия времени							
6	Я должен решать проблемы, которые не имеют очевидного							
	правильного решения							
7	У меня достаточно времени, чтобы принять решение							
8	Я часто чувствую, что у меня недостаточно времени, чтобы							
	принять решение							

## Варианты решения проблем

В данном разделе 31 утверждение. Каждое утверждение может описать какой-либо аспект вашего рабочего места. Вы должны решить, насколько точно каждое утверждение описывает ваше рабочее место. Используйте баллы от 1 до 5, чтобы как можно точнее описать ваше мнение. *Пожалуйста, заполните все пункты.* 

1	2	3	4	5
редко верно	иногда верно	верно так же часто, как и	часто верно	очень часто верно
		неверно		

№	Пункт	1	2	3	4	5
1	Если решение проблемы оказалось неудачным, я анализирую, почему это не сработало.					
2	Если я сталкиваюсь со сложной проблемой, я разрабатываю стратегию, чтобы собрать информацию для четкого определения, что это за проблема.					
3	Если мои первые попытки решить проблему оказываются неудачными, мне становится нелегко управлять ситуацией.					
4	После того, как проблема решена, я анализирую, чтобы было сделано правильно, а что – нет.					
5	Я обычно нахожу творческие и эффективные альтернативы для решения проблемы.					
6	Если пытаюсь решить проблему с помощью каких-либо действий, я сравниваю действительный результат с тем результатом, которого я ожидал.					
7	Если передо мной стоит проблема, я разрабатываю как можно больше путей для ее решения до тех пор, пока мои идеи не закончатся.					
8	Я способен решать большинство проблем даже в том случае, если изначально решение не было очевидно.					
9	Мне слишком трудно решать большинство проблем, с которыми я сталкиваюсь.					
10	Я принимаю решения и в последствии остаюсь доволен ими.					
11	При столкновении с проблемой, я стараюсь выполнить первое действие, которое мне кажется подходящим для ее решения.					
12	Иногда я не останавливаюсь и трачу время на решение моей проблемы, однако при этом происходит путаница.					
13	Принимая решение относительно какой-либо идеи или решения проблемы, я обычно не трачу время на анализ успешности той или иной инициативы.					
14	Если передо мной возникает проблема, я делаю паузу и размышляю о ней перед тем, как сделать следующий шаг.					
15	Обычно я стараюсь использовать первую идею, которая приходит мне в голову.					
16	Когда я принимаю решение, я взвешиваю последствия каждой альтернативы и сравниваю их между собой.					
17	Когда я составляю планы для решения проблемы, я почти уверен, что они будут работать.					
18	Я стараюсь предвидеть общий результат реализации какого-либо действия.					
19	Когда я пытаюсь разработать возможные пути решения проблемы, я не отрабатываю многие альтернативные варианты.					
20	Потратив достаточно времени и усилий, я верю, что могу решить большинство проблем, с которыми я сталкиваюсь.					
21	Если я сталкиваюсь с новой ситуацией, я уверен, что смогу решить проблемы, которые могут возникнуть.					
22	Даже когда я работаю над проблемой, иногда у меня возникает ощущение, что я действую «на ощупь» и у меня нет реального выхода.					
23	Я принимаю поспешные решения и впоследствии жалею о них.					
24	Я доверяю своей способности решать новые и трудные проблемы.					
25	У меня есть систематический способ сравнения альтернатив и принятия решений					
26	При столкновении с проблемой я обычно не анализирую, что из моей внешней					
	среды может способствовать ее решению.					ļ
27	Если у меня возникают сложности при решении проблемы, первое, что я делаю –					
	это оцениваю ситуацию и рассматриваю всю доступную информацию.					

28	Иногда я испытываю настолько сильные эмоции, что это мешает мне увидеть			
	различные пути решения проблемы.			
29	После принятия решения я нахожу, что действительный результат совпадает с			
	ожидаемым.			
30	При столкновении с проблемой, я не уверен, смогу ли ее решить.			
31	Когда я знакомлюсь с проблемой, первое, что я делаю – это стараюсь понять ее.			

## Принятие решения: Внутренняя динамика

Процесс принятия решений составляет часть вашей работы. Процесс принятия решений может включать определенное количество шагов. Каждый пункт, приведенный ниже, описывает какой-либо аспект процесса принятия решений. Пожалуйста, прочитайте каждый пункт, и укажите, с помощью 7-балльной шкалы, согласны Вы или не согласны с тем, что это утверждение Вам подходит. *Пожалуйста*, заполните все пункты.

1	2	3	4	5	6	7
Полностью	Не согласен	Не совсем	Мне все	Частично	Согласен	Абсолютно
не согласен		согласен	равно	согласен		согласен

No	Пункт	1	2	3	4	5	6	7
1	Определяю задания							
2	Собираю информацию							
3	Определяю цели							
4	Нахожу альтернативы							
5	Рассматриваю пути решения							
6	Выбираю путь решения							
7	Анализирую результаты							

## Личный рост

## Шкала времени

Пожалуйста, прочитайте утверждения, приведенные ниже, и оцените ваше согласие или несогласие по шкале 1-7. *Пожалуйста*, *заполните все пункты*.

1	2	3	4	5	6	7
Полностью	Не согласен	Не совсем	Мне все	Частично	Согласен	Абсолютно
не согласен		согласен	равно	согласен		согласен

No	Пункт		2	3	4	5	6	7
1	Я чувствую личный рост и развитие, когда принимаю решение							
2	Я люблю вызов, который бросает процесс принятия решений							
3	Я чувствую, что решения, которые я принимаю, способствуют продвижению моей организации.							
4	Люди, которые вовлечены в процесс принятия решений в компании, способствуют росту организации.							

## Удовлетворение от Процессов принятия решения и Уверенность в результатах

Каждое из утверждений, приведенных ниже, содержит мнение о процессах принятия решений. Пожалуйста, прочитайте каждый пункт и укажите ваше согласие с каждым из утверждений, используя ниже приведенную таблицу.

1	2	3	4	5	6	7
Полностью	Не согласен	Не совсем	Мне все	Частично	Согласен	Абсолютно
не согласен		согласен	равно	согласен		согласен

№	Пункт	1	2	3	4	5	6	7
1	Я чувствую, что те усилия, которые я трачу на принятие решения,							
	должным образом вознаграждаются.							
2	Я чувствую, что обладаю достаточными знаниями и умениями для							
	принятия решений.							
3	Я чувствую гордость после принятия решения.							
4	Иногда я чувствую, что решения, которые я принимаю на работе,							
	не имеют значения.							
5	Я чувствую себя компетентным и полностью способным							
	принимать решения, связанные с моей работой.							
6	Мои усилия для принятия правильного решения редко							
	блокируются бюрократизмом.							
7	Я чувствую уверенность в том, что обладаю достаточными							
	полномочиями для принятия решений.							
8	Я чувствую, что решения, которые я принимаю, ценятся.							
9	Обычно я удовлетворен лицом, которое руководит моими							
	процессами принятия решений.							
10	Я удовлетворен обратной связью после принятия решений.							
11	Решения, которые я принимаю в процессе работы, это							
	единственное, чего от меня ожидают.							
12	Процесс принятия решений доставляет мне удовольствие.							
13	В нашей компании немногие получают вознаграждение за							
	принятие решений							
14	Обычно я доволен лицами, которые вместе со мной участвуют в							
	процессе принятия решений.							
15	Многие правила и установки компании затрудняют процесс							
	принятия решений.							
16	Я люблю принимать решения в процессе работы.							
17	Я абсолютно удовлетворен решениями, которые я принимаю в							
	процессе работы.							
18	Я точно знаю, что от меня ожидают, когда я участвую в принятии							
	решений							
19	Я удовлетворен количеством решений, которые я принимаю в							
	процессе работы.							
20	Я удовлетворен тем признанием, которое я получил после							
	принятия хорошего решения.							

Спасибо за ваше время!