This research project investigates the manner in which individuals form attitudes toward various characteristics of workplace drug testing policies and programs. The research draws on organisational justice theory to examine the effect of different program characteristics on individuals’ perceptions of procedural and distributive justice. A large sample of undergraduate students (between 500 and 700 students) will participate in an experiment in which they will receive one of a total of twelve vignettes containing a hypothetical workplace drug testing scenario. The scenario will be followed by a series of questions that have been designed to measure attitudes towards the drug testing policy, as well as perceptions of organisational justice. Each vignette will contain a different combination of three drug testing program characteristics: the type of test (random or for cause); the type of sample (urine, hair, or blood); and the consequence of a positive test (rehabilitation or termination). A number of demographic, lifestyle, and general attitudinal questions will also be included.
INTRODUCTION

Workplace drug testing is a topical yet somewhat controversial human resource management issue that finds particular relevance in the current Australian political climate. Following the recent decision in the Federal Court of Marsden v HREOC, where an addiction to an illicit drug was held to be a disability under the Disability Discrimination Act 1992 (Cth), it was thought to be illegal to discriminate against an employee on the basis of a drug addiction. Should this decision stand, there will be some clear implications for the management of workplace drug testing programs and policies. However, the Federal Government has promptly responded to the decision with the introduction of the Disability Discrimination Amendment Bill 2003 (Commonwealth). Once passed, this Bill will make it lawful to discriminate against a person who is addicted to an illegal drug in an employment setting.

Perhaps partly as a result of the proposed legislative amendments, the issue of workplace drug testing has received renewed media attention of late. Indeed, recreational drug use is purported to be on the rise in Australian society. A National Drug Strategy survey commissioned by the Federal Government reported that around 40 per cent of Australians have used non-prescription illicit drugs at some stage during their lifetime. Whilst the use of certain substances such as cannabis have seen a six percent decrease in usage since 1998, other, arguably more harmful ‘designer’ drugs such as amphetamines, ecstasy and cocaine were found to have steadily increased in popularity over the same period of time (Ministerial Council on Drug Strategy Report, 2004).

Importantly, there are high social and economic costs associated with illicit drug use, both for individuals, organisations and the wider community. The most recent available estimates put the cost to the Australian economy of illicit drug use at $6.1 billion per annum in terms of health care, law enforcement and lost productivity (Ministerial Council on Drug Strategy Report, 2004). The most significant costs for organisations include increased accident rates and absenteeism, higher medical and workers’ compensation costs, and the inevitable losses of competence and productivity that result from intoxication (Stevens et al., 1989). Given the high economic costs for organisations that are associated with illicit drug use, an increasingly common response to the issue of employee drug abuse is drug testing. Further, as testing technologies increase in sophistication, the tests themselves are becoming less expensive and more accurate as a tool to detect drug use by employees.

Before any form of workplace drug testing is instigated within an organisation, it is important to consider as many potential consequences as possible. In particular, organisations must carefully evaluate the potentially detrimental effects of drug testing for those employees who do not abuse illicit drugs. For instance, equity theory suggests that individuals who disagree with an organisation’s drug testing policy may express their dissatisfaction by, among other things, reducing their work effort (Adams, 1963, 1965). This research project will investigate the consequences of workplace drug testing policies using an organisational justice framework. Particular attention will be paid to the way in which individuals form attitudes towards workplace drug testing programs, and how various program characteristics affect individuals’ organisational justice perceptions. To date, there has been insufficient academic research that directly addresses this question for Australian organisations. This research project will be empirical and quantitative in nature. It will involve the collection of original experimental data from a large sample of over 500 undergraduate students. The results of this research project are expected to be useful to both the academic community and organisations that are faced with the decision of whether or not to drug test employees.
THEORETICAL UNDERPINNINGS: ORGANISATIONAL JUSTICE

Much of the early research on social exchange was guided by equity theory (Adams, 1963, 1965). The main proposition of equity theory is that human beings believe that rewards and/or punishments should be allocated according to an individual’s inputs or contributions. Leventhal (1980) identified three main problems with the early variants of equity theory: that it employs a uni-dimensional concept of fairness (rather than a multi-dimensional conception); that it considers only the final distribution of rewards, not the procedures by which such outcomes are determined; and that it has a tendency to overemphasise the importance of fairness in social relationships. Partly in response to the perceived inadequacies of equity theory, a new stream in social exchange theory has evolved: organisational justice theory. Concepts of organisational justice are concerned with matters of fairness in the organisational domain (Greenberg, 1990). In a general sense, organisational justice affects what employees want from their jobs and how they react to the inevitable discrepancies of organisational life.

Two distinct categories of organisational justice emerge from the literature; distributive justice and procedural justice (Greenberg, 1990). Distributive justice refers to the degree to which the outcomes that people receive are fair when compared with their input costs (Leventhal, 1980). An employee will thus experience a sense of distributive justice when they receive an outcome that they perceive to be favourable. Procedural justice, on the other hand, is concerned with the fairness of the processes used to determine those outcomes, and the consistency with which such processes are applied across individuals (Thibaut & Walker, 1975; Leventhal, 1980). Procedural justice has been said to hinge on the consistency, validity, accuracy and ethicality of the decision making process itself (Greenberg, 1990; Leventhal, 1980; Thibaut & Walker, 1975).

A third category of organisational justice, interactional justice, has been argued by some researchers to exist (for a review, see Greenberg, 1990). Conceptualisations of this third species of justice seem generally concerned with the quality of interpersonal treatment that an individual receives from a decision maker (Bies and Moag, 1986). Ambrose (2000) uses the illustrative examples of being treated with dignity and respect during the drug testing process. However, interactional justice is now widely considered to be a social aspect of procedural fairness (Ambrose, 2000). Further, although the quality of interpersonal treatment that an individual receives during the allocative process is not doubted to be of importance to perceptions of procedural justice, such considerations are clearly beyond the scope of this research project. Indeed, Ambrose (2000) has reported that none of the current research on workplace drug testing has addressed issues of interactional justice.

THE CRANT AND BATEMAN MODEL OF EMPLOYEE RESPONSES TO DRUG TESTING PROGRAMS

The seminal authors in the area of drug testing in an employment context are Crant and Bateman (1989, 1990, 1993). They have developed a model (1989) to explain how the experiences of distributive and procedural justice affect employee attitudes and responses to drug testing programs. The model is reproduced in Figure 1:
According to the model, *distributive justice* will be maximised when employees perceive the benefits of participating in the drug testing program to outweigh the costs. Both *organisational characteristics* (e.g., size, industry, safety and interdependency, performance and union support) and *employee characteristics* (e.g., drug-related behaviours and attitudes, demographic variables, personality, social norms and expectations) will play a role in this cost-benefit analysis performed by employees. In terms of *procedural justice*, Crant and Bateman (1989) put forward the argument that perceived fairness will be enhanced when drug testing procedures used by the organisation conform to Leventhal’s (1980) six rules of procedural fairness; consistency, bias suppression, accuracy, correctability, representativeness and ethicality. Leventhal’s *consistency rule* dictates that procedures should be consistent over time and across individuals. The *bias-suppression rule* is concerned with preventing personal self-interest and allegiance to preconceptions in the allocative process. The *accuracy rule* demands that decisions be made on the basis of well informed opinions and grounded information. Leventhal’s (1980) *correctability rule* ensures that opportunities exist for decisions to be modified and/or reversed when necessary, and the *representativeness rule* dictates that procedures must reflect the values and concerns of all relevant subgroups. Finally, the *ethicality rule* is concerned with ensuring that allocative procedures are compatible with the fundamental ethical values of a particular individual.

The Crant and Bateman (1989) model continues, predicting that once employees have formed perceptions about the fairness of a drug testing policy, they will translate their judgments into corresponding cognitions, attitudes and behaviours. Crant and Bateman put forward a typology of potential responses, reproduced below:
Negative employee attitudes and responses towards drug testing are of special concern because of their potential to impact on constructs such as employee morale, productivity, organisational commitment and turnover intentions (Konovsky & Cropanzano, 1991). In other words, poorly conducted drug testing may certainly reduce drug use, but at the expense of other, more positive employee behaviours. To date, there has not been adequate research surrounding this issue. Interestingly, nor have there been any comprehensive empirical studies attempted in the Australian context. An opportunity thus presents itself for a systematic validation of the theory in an Australian setting.

### Extant Literature and Empirical Evidence

Whilst there are unfortunately no empirical studies that overtly test the Crant and Bateman (1989) model (outlined above), a body of empirical evidence does exist that investigates the relationship between drug testing and employees’ perceptions of fairness on a more general level. For the most part, this empirical work has been informed by notions of distributive and procedural justice. For instance, Tepper and Braun (1995) propose that employees who experience a sense of organisational justice will view compulsory drug testing in a more positive light than will employees who do not experience a sense of organisational justice. There have been a number of empirical studies that have implicitly used Crant and Bateman’s Model of Employee Responses as a theoretical basis informing the research design (see, for example, Mastrangelo & Popovich, 2000; Stone & Kotch, 1989; Tepper & Braun, 1995). However, there has been no explicit, systematic testing of the model undertaken in academic circles. Following is a review of the empirical studies in the area.

### Distributive Justice

According to distributive justice theory, the inputs and outcomes of a management decision are pertinent to employee reactions to drug testing policies. There has been empirical work completed that relates to both inputs and outputs of such decisions.

In relation to inputs, factors that have been examined by researchers include the reason for testing and the type of drug testing. For instance, in relation to the reason for conducting the drug test, Stone, Stone, and Pollock (1990, unpublished; cited in Konovsky & Cropanzano, 1991) found that employees who perceived the test as being conducted due to safety concerns reported higher levels of stress than those who perceived the test as being conducted due to fairness concerns. Similarly, researchers have found that employees are more likely to perceive drug testing as being fair when the test is conducted for a legitimate reason, such as a need to ensure workplace safety, than when the test is conducted for a non-legitimate reason, such as a desire to monitor employee productivity. In relation to the type of drug testing, researchers have found that employees are more likely to perceive a test for marijuana use as being fair than a test for other drugs, such as cocaine or methamphetamine, because marijuana use is more widely considered to be a personal choice rather than a medical necessity. This suggests that employees are more likely to perceive drug testing as being fair when the test is conducted for a drug that is considered to be more socially acceptable than other drugs. Therefore, the reason and type of drug testing can both influence employees' perceptions of fairness in drug testing policies.
1995) found that drug testing was perceived to be fairer when it followed both an accident and a decrease in an employee’s performance, than where there was no performance decline and no accident. Similarly, in Crant and Bateman’s (1993) study, it was found that job applicants will be more likely to respond positively to an organisation that conducts drug testing when there is a high perceived need for testing. The type of drug tested for is another important input. Murphy, Thornton and Reynolds (1990) found that individuals will react less favourably to alcohol testing in an employment setting than to testing for illicit drugs. However, in contrast, Stone, O’Brien and Bommer’s (1989) findings indicate that individuals will make few distinctions between different types of illicit drugs.

Interestingly, employee drug use has not been found to be correlated with negative attitudes towards drug testing. Stone & Bowden (1989) demonstrated that drug use does not predict negative attitudes towards testing and Besinger (1987, unpublished; cited in Konovsky & Cropanzano, 1995) found that job applicants who are not drug users often object to testing procedures. On the other hand, Garland et al. (1989) found that students who used drugs, smoked cigarettes and stole from their employers were more likely to oppose testing. These findings were replicated by Murphy, Thornton and Reynolds (1990). On a more practical note, one could perhaps query the accuracy of the results obtained from a survey instrument that questions employees about their personal use of illicit drugs. It is proposed that fear of retribution from the employer would result in response bias.

In relation to outcomes, much of the research is focused on the action taken against individuals who return a positive drug test. Stone and Kotch (1989) found that employees perceived drug testing programs to be fairer when the outcome of a positive test was rehabilitation, rather than termination. These findings were replicated in Gomez-Mejia and Balkan’s (1987) study of human resource executives, and in Murphy, Thornton and Reynolds’ (1990) study of college students. Given the similarities in results across such different contexts, the generalisability and rigour of these findings is arguably quite high.

PROCEDURAL JUSTICE

Konovsky and Cropanzano’s (1991) work has demonstrated that perceptions of procedural justice will have an effect on the way in which employees form various attitudes in a workplace drug testing context. Their study found that fair procedural structures are positively correlated with the following variables: management trust, affective organisational commitment, job satisfaction and employee performance. Taking a slightly different approach, Gomez-Mejia and Balkin (1987) provided an overview of the factors that may affect procedural fairness perceptions. They found support for Leventhal’s (1980) rules for determining procedural fairness in a drug testing context. The accuracy and validity of the testing technology, union support (as a means of providing worker voice) and the chance to appeal a positive test result were found to positively influence perceptions of fairness. Reid, Murphy and Reynolds (1990) reported similar results, finding that test accuracy, management harassment, invasion of privacy, discrimination and humiliation (in relation to urine sample collection procedures) were the factors of the greatest concern to employees. In addition, Stone and Kotch (1989) found that employees will perceive drug testing to be fairer when advance notice of tests is provided.

Another interesting aspect of procedural fairness is the methods used to select employees for drug testing. These are generally either: randomly; ‘for cause’; pre-employment; or post-accident. Stone and Bowden (1989) discovered that fairness perceptions are lower when testing is performed randomly, as opposed to testing in a pre-employment situation or ‘for cause’. Murphy et al. (1990) came to very similar conclusions, however, they found that
random testing was viewed more positively than testing only those suspected of using drugs. Complementing this research is the study by Stone, O’Brien and Bommer (1990), which provides evidence that the explanations and justifications given by management for the testing will affect employees’ responses.

**RESEARCH QUESTIONS**

The intention of this research project is to use Crant and Bateman’s (1989) Model of Employee Responses to Drug Testing Programs as a theoretical basis informing the research design. Clearly, it is not feasible to test the entire model, as there would be a vast number variables that would need to be controlled for. Therefore, a small section of the model (reproduced below) has been chosen for empirical verification:

![Diagram of Perceptions of Fairness Model](image)

**Figure 2:** PERCEPTIONS OF FAIRNESS MODEL (ADAPTED FROM CRANT AND BATEMAN, 1989)

Following examination of the model, a series of research questions were designed according. These are as follows:

1. Which specific components of an organisation’s drug testing program influence perceptions of procedural fairness (e.g., who is tested, when they are tested (random testing vs. ‘for cause’ testing), the consequences of testing positive (termination vs. rehabilitation), avenues for appeals and other safeguards such as confidentiality assurances and automatic re-tests)?

2. How do the various program components of a workplace drug testing policy influence an individual’s attitudes toward the policy?

3. To what extent does the type of sample that is used for the drug test (such as urine, hair, saliva, and blood) affect an individuals’ perceptions of organisational justice and their general attitudes toward a drug testing policy.
4. Which form of justice is more significant in an individual’s overall perception of the fairness of an organisational drug testing program: procedural justice or distributive justice?

5. To what extent does organisational justice act to mitigate the range of possible negative employee responses to a drug testing policy?

**METHODOLOGY**

The sample that has been chosen for this research project is first year undergraduate students at the University of Melbourne. Our preliminary research indicates that this generation of individuals (aged 18 to 25) have attitudes towards the use of illicit drugs that vary significantly from their older counterparts that are currently in the workforce. Therefore, markedly different results are expected from the existing empirical studies that examine the attitudes of current workforce participants. The rationale and justification for our choice of sample is that it is forward thinking and should generate research findings that will be of interest to Australian organisations when designing drug testing policies for the future. Further, the choice of sample is justified on the basis that a number of empirical studies that examine organisational justice in the context of workplace drug testing programs have used a similar sample (see, for example, Ambrose, 2000; Crant and Bateman, 1990, 1993; Kulik and Clark, 1993; Murphy, Thornton and Reynolds, 1990).

However, the limitations in this choice of sample must also be acknowledged. Although the sample is expected to be quite large for statistical purposes, undergraduate students may be said to represent a very small cohort of the future workforce. The research community may thus benefit from future research that better addresses the views of different age groups, occupations, and socio-economic status in order to gain a clearer understanding of the wider community’s attitudes towards the issue workplace drug testing.

The experiment will be undertaken in several group sessions. Given the sensitive nature of the subject matter, respondents will be assured that any responses that they provide will be completely confidential and anonymous, and will be encouraged to be completely frank and honest in responding. The experiment will be divided into three sections:

1. The first section will take the form of a series of questions that have been adapted from established scales that measure three components of an individual’s general attitudes toward the issue of workplace drug testing (perceptions of justice, invasion of privacy and consequences/outcomes).

2. In the second section, respondents will be randomly assigned one out of twelve different vignettes containing a hypothetical workplace drug testing scenario at “OrgCo” (a made up workplace). In each of the twelve vignettes, the following three drug testing program characteristics will be systematically varied: the type of drug testing used (random or for cause); the type of sample required (urine, hair, or blood); and the consequence of a positive test (rehabilitation or termination).

3. The third section of the experiment will contain various demographic, lifestyle, and employment history questions.
ATTITUDES TOWARD WORKPLACE DRUG TESTING POLICIES

NEXT STEPS...

We expect the experiment to generate some interesting and innovative findings. It is hoped that our research will be of interest and significance to the academic community and organisations across Australia faced with the issues inherent in designing and implementing workplace drug testing policies.

We would greatly appreciate your feedback on our research as a work in progress, and invite you to email Elizabeth Sloane at e.sloane@ugrad.unimelb.edu.au or Catherine Maguire at cmaguire@unimelb.edu.au with any comments or suggestions.

REFERENCES


