

## Summary of Project

Plagiarism –failure to give proper credit when taking ideas from outside sources (Snapper, 1999) – is a common practice among university students (Park, 2003). Worryingly, research suggests a large portion of university students engage in plagiarism (Owunwanne, Rustagi, & Dada, 2010; Selwyn, 2008) or other dishonest acts, including exam cheating and data fabrication (Brimble & Stevenson-Clarke, 2006). Troublingly, engagement in plagiarism and wider dishonesty is related to dishonesty outside university, for example, students that engage in dishonest acts at university are more likely to engage in socially disruptive activities; as well as obstructive behaviours at work (Martin, Rao, & Sloan, 2009). Thus, there is a pressing need to determine the factors driving student plagiarism and dishonesty. Determining these factors will enable the well-informed interventions that deter dishonesty and promote integrity.

Previous research has connected certain characteristics to students' engagement in plagiarism and associated dishonesty. These include personal qualities such as gender, age and culture (Whitley, 1998) and academic status; including discipline, success and level of study (Harding, Mayhew, Finelli, & Carpenter, 2007). However, this study focused on the broader environmental and personal factors triggering plagiarism.

Such factors are often included in behavioural prediction models, which combine these factors into a single, interconnected structure. These reflect the interaction between the individual and the environment they reside in. The driving theory behind a behavioural prediction model is that combinations of factors contribute to a persons' decision to engage in any given behaviour.

The model used as the basis of this study was the 'theory of planned behaviour'(TPB). The theory of planned behaviour suggests that personal attitudes, perceptions of social norms and perceived behavioural control (a person's perception of how easy or difficult it is to perform behaviour) predict intentions to engage in a behaviour, which in turn predicts behaviour. Previous studies indicated the theory of planned behaviour was a strong predictor of plagiarism and academic dishonesty (e.g. Alleyne & Phillips, 2011; Stone, Jahawar, & Kisamore, 2010)

This study added three components to the base model. Firstly, two sources of social norms were examined, including the perception of actual behaviour (descriptive norms), and perception of approved behaviour (injunctive norms). These two social norms constructs replaced the subjective norms component contained in the base model. Individually, studies indicated that perception both of descriptive and injunctive norms were related to plagiarism and academically dishonest acts (e.g. Hard, Conway & Moran, 2006; McCabe & Trevino, 1993). Although previous studies indicated that distinguishing descriptive and injunctive norms improved models (Lapinski & Rimal, 2005), the impact of this distinction had not been examined in a TPB model predicting plagiarism

In addition, the extended model also incorporated self-control, a well-known predictor of deviant behaviour (Gottfredson & Hirschi, 1990). Self-control refers to an individual's ability to regulate his or her own behaviour (Duckworth & Seligman, 2006). Previous research indicated that students with low self-control are more likely to engage in academically dishonest acts (e.g. Cochran, Aleska, & Chamlin, 2006), though this had not been tested alongside other factors within a model.

We intended to determine whether the integration of these factors into a TPB model predicting student plagiarism would improve the power and reliability of a TPB model predicting. Furthermore, we intended to discover which arrangement of the model most potently and reliably predicted plagiarism among students.

It was hypothesised that: 1) The default theory of planned behaviour model would provide a robust and reliable account of student plagiarism. 2) Integrating two sources of norms into the model would improve upon the default model 3) Alongside perceived behavioural control, the inclusion of self-control would significantly explain both intention to plagiarise and engagement in plagiarism directly and 4) That a model consisting of all five components linked to intention, with intention, perceived behavioural control and self-control linked to behaviour would provide the most robust and reliable account of student engagement in plagiarism.

Participants were recruited through the Murdoch University Research Portal and various social media outlets. A single online survey was used to gather data for this study. The survey comprised three sections. The first section contained descriptions of three common forms of plagiarism. Participants then answered questions (based on a 5 point scale), in relation to these descriptions. These questions related to the components of the extended theory of planned behaviour detailed above. Self-control was measured in a separate section, using a self-control scale. From these responses, each individual was provided with a total score for each of the variables examined. To test the base model, a subjective norms component was generated by combining the scores of descriptive norms and injunctive norms.

Statistical and modelling software was used to determine the contribution of each factor of the model, as well as the overall reliability of the models themselves. Testing the hypotheses and arriving at the best model configuration involved analysing eleven unique models.

The base model was poor, in contrast to what was hypothesised. Although previous research indicated that this model was a strong predictor of plagiarism and associated acts, the additional measures of model reliability examined in this study indicated that this model was not sufficiently dependable. Subsequent models incorporating the additional components examined in this study improved model reliability, thus justifying their inclusion into a TPB model for predicting student plagiarism.

Extensive analysis uncovered a model that reliably and powerfully predicted the plagiarism intentions and behaviour of students, though this was not the model that was hypothesised.

Though all five tested components were included in this model, the norms components explained additional aspects of behaviour directly; and not the two control components as hypothesised. Injunctive norms and perceived behavioural control had the greatest overall effect within the models tested.

The outcomes of this study advocated the implementation of honour codes and educational interventions as the most effective methods for curtailing plagiarism behaviour in students.

However, effective implementation of such measures requires strong promotion, student engagement and a long-term strategy.