

# Adoption of Instant Messaging Technologies by University Students

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# A Brief Overview

## *Main Objective:*

*(i) to explore the various factors involved in the adoption, by university students, of IM technologies*

*(ii) to better understand the nature and patterns of students' socialization patterns in relation to the adoption of Instant Messaging (IM) systems*

*Theoretical Foundation: Extended Planned Behavior Theory (EPBT)*

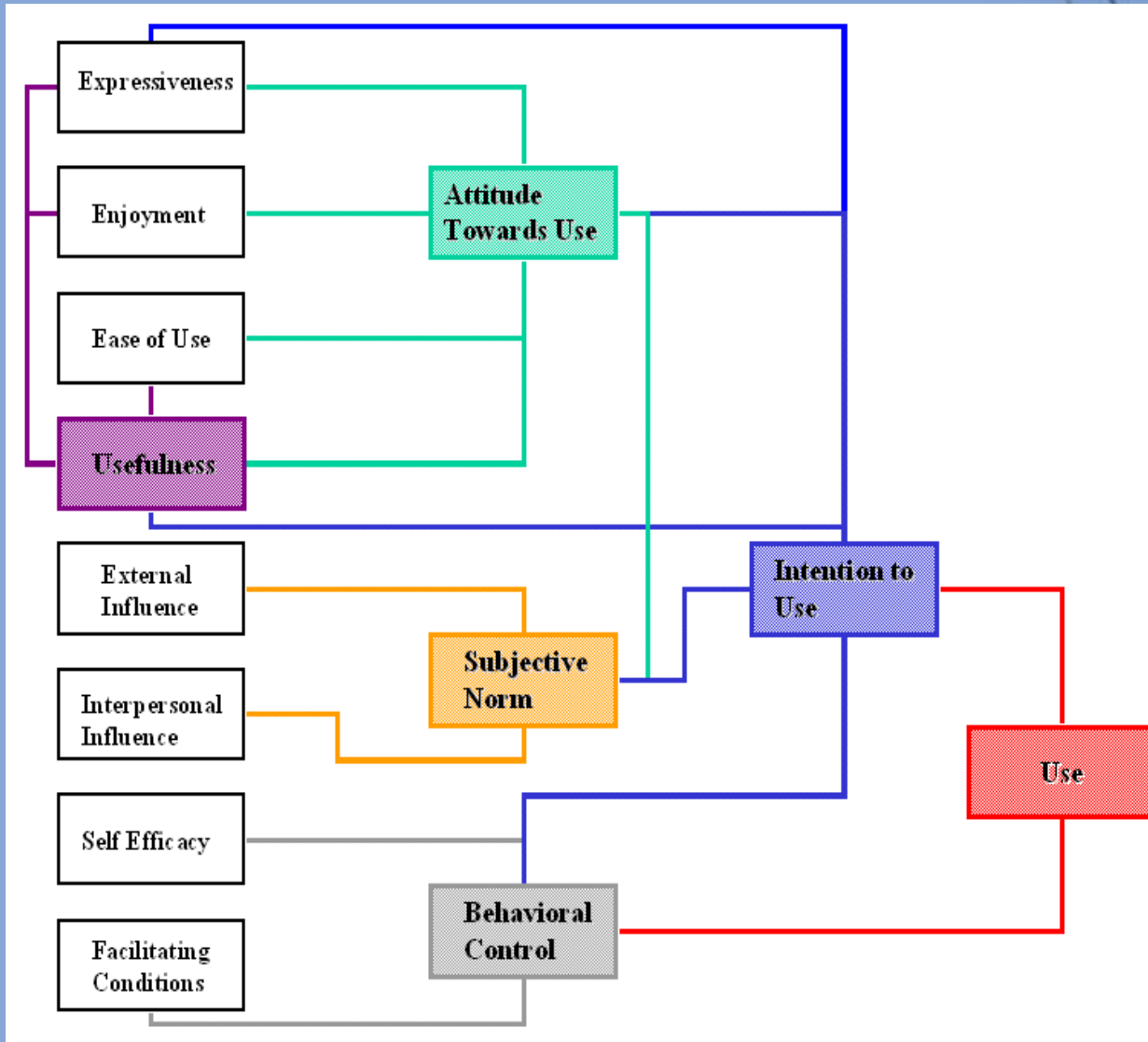
*Research Instrument: Quantitative Questionnaire*

*Statistical Technique: Regression Analysis & Survey Analysis*



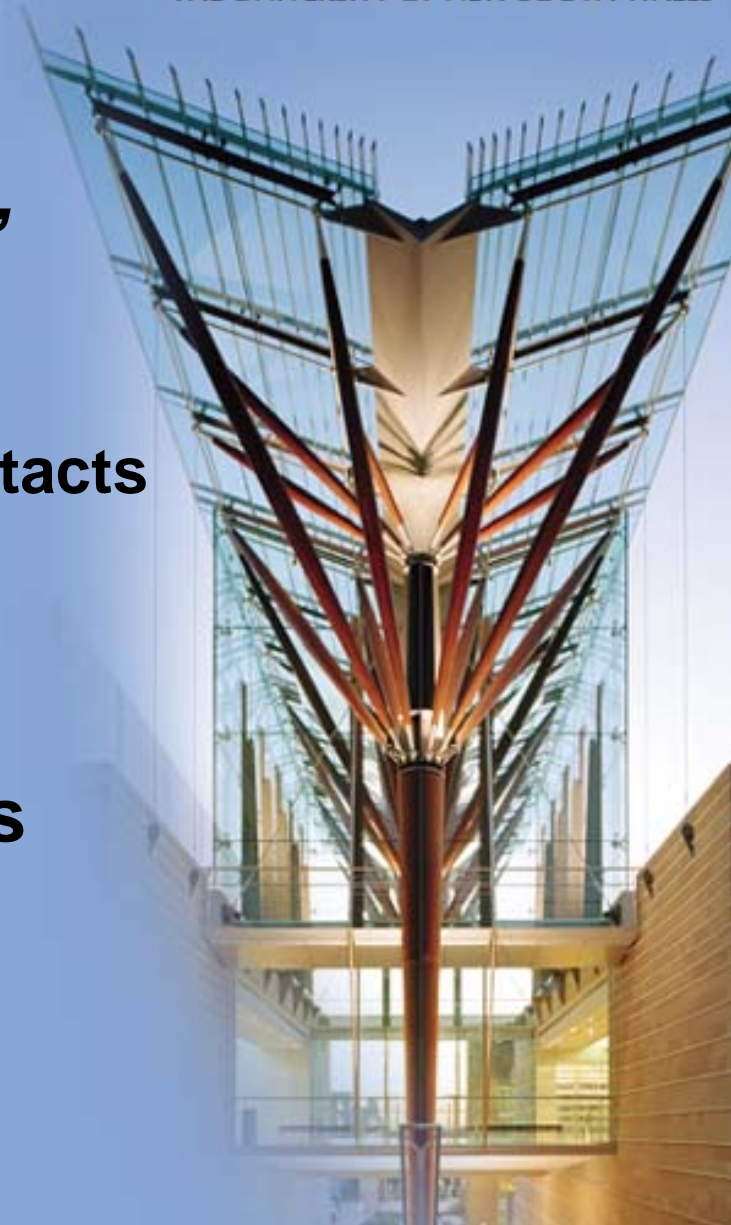
# Theoretical Model:

## *Extended Planned Behavior Theory (EPBT)*



# Research Questions

- RQ 1: What are the *character*, *function* and *style* of IM use among university students
  - intensity of use, number of contacts maintained online and feature usage
- RQ 2: What are the various usage behaviours of students



## Results: Factors Affecting IM Usage

### ■ **Dependent Variable:**

#### – Perceived Usefulness

» R-squared: 0.48

»  $A = + 0.0739$

### ■ **Independent Variables:**

#### – Ease of Use

» +0.3943

#### – Perceived Enjoyment

» +0.2491

#### – Perceived Expressiveness

» +0.2407



# Results: Factors Affecting IM Usage

- **Dependent variable:**
  - Subjective Norm
    - » R-squared: 0.38
    - »  $A = + 1.8516$
- **Independent variables:**
  - External Influence
    - » +0.0827
  - Interpersonal Influence
    - » +0.7043



# Results: Factors Affecting IM Usage

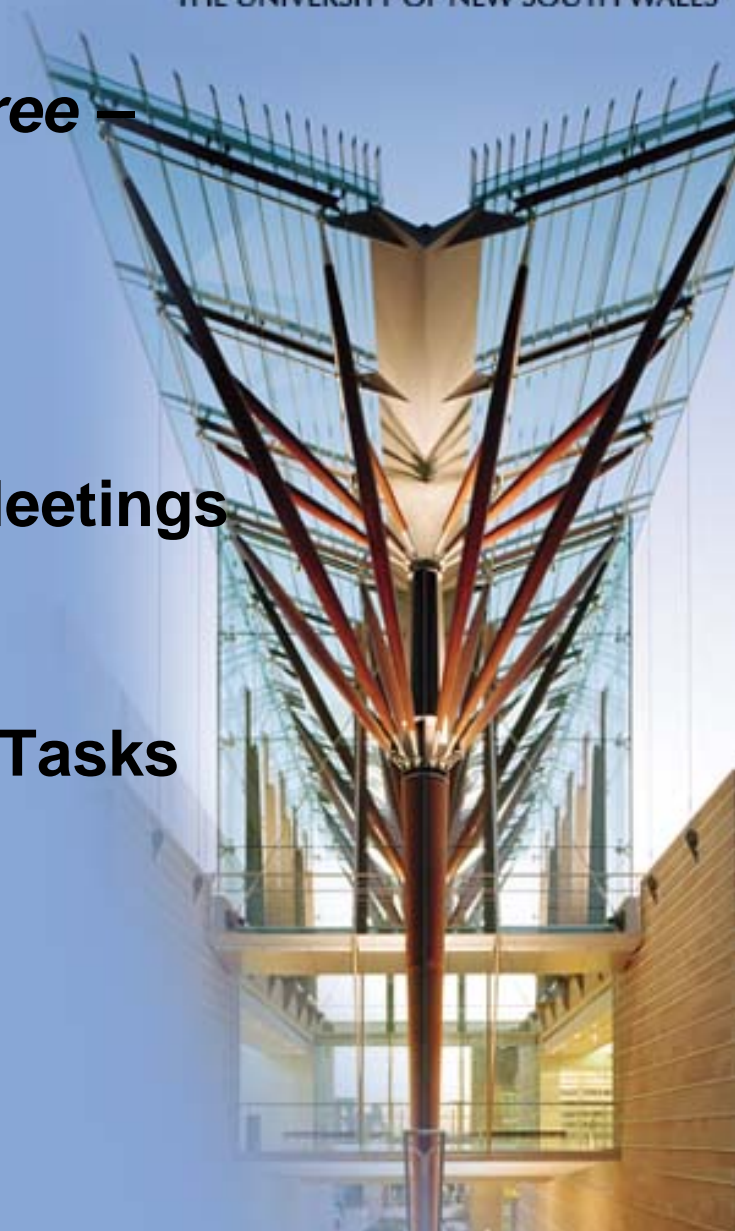
- **Dependent variable:**
  - Behavioural Control
    - » R-squared: 0.16
    - »  $A = + 0.6191$
  
- **Independent variables:**
  - Self Efficacy
    - » +0.4580
  - Facilitating Conditions
    - » +0.2180



# Results: Character, Function, and Patterns of IM Use

- *On the scale of 1 – 7 (strongly agree – strongly disagree)*
  1. **Quick Questions/ Clarifications**
    1. Mean: 2.197183;
    2. Std Dev: 1.600176
    3. Variance: 0.728
  2. **Coordinating Impromptu Social Meetings**
    1. Mean: 2.774648
    2. Std Dev: 1.868515
    3. Variance: 0.673
  3. **Coordinating & Scheduling Work Tasks**
    1. Mean: 2.619718
    2. Std Dev: 1.676443
    3. Variance: 0.639

<more ...>



# Results: Character, Function and Pattern of IM Use

## 1. Collaborating with Classmates

1. Mean: 2.478873
2. Std. Dev: 1.680639
3. Variance: 0.677

## 2. Socialising

1. Mean: 2.774648
2. Std. Dev: 1.623023
3. Variance: 0.585

## 3. Multi-tasking

1. Mean: 2.619718
2. Std. Dev: 1.767696
3. Variance: 0.674

## 4. Staying in touch with classmates

1. Mean: 2.492958
2. Std. Dev: 1.689237
3. Variance: 0.678



# Results: Intensity of IM Usage

- Less than 1 hour per day: 18%
- 1 – 2 hours per day: 23%
- 2 – 3 hours per day: 13%
- 3 – 4 hours per day: 10%
- 4 – 5 hours per day: 6%
- 5 – 6 hours per day: 10%
- More than 6 hours per day: 23%



# Results: Number of IM Contacts

■ 10 – 40:	32
■ 40 – 70:	20
■ 70 – 100:	20
■ 100-130:	14
■ 130-160:	7
■ More than 160:	7



# Results: Distribution of IM Feature Usage by Students

■ Web Search:	10%
■ SMS:	16%
■ Voice Chat:	36%
■ Video Chat:	35%
■ File Transfer:	87.5%
■ Emotions:	87.5%
■ Calendar Sharing:	2.5%
■ Whiteboard:	26%



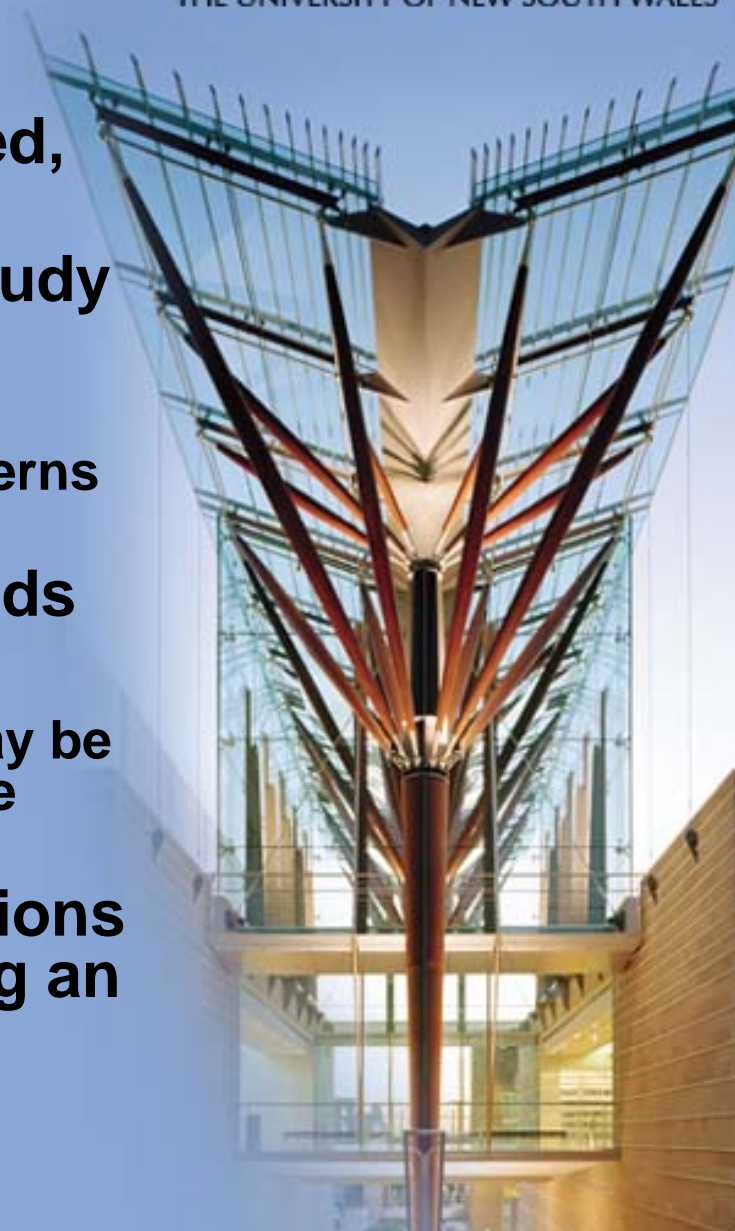
# Significance of this study

- **First study in applying the adoption models to IM**
- **Insights into adoption of IM among university students**
- **Guides design of eLearning Portals based on students' usage patterns**



# Future Work

- Improvements in reliability and consistency of the instrument used, PLUS a larger sample size
- How students' sex, age, year of study and background of students may affect IM usage among students
  - As an attempt for finding hidden patterns not explained by this research.
- Use of advanced statistical methods
- Incorporating qualitative methods
  - Interviews and discussion groups may be useful in clarifying and comparing the results and findings
- Further study on 'character, functions and patterns of IM usage' adopting an ethnographic approach



■ THANK YOU

