

# Feedback to Respondents on the GSTM Survey, The Postgraduate Research Experience

### Background

- The primary goal of the GSTM survey was to map the research experience of graduate students across the continuum from the choice of dissertation/thesis topic through training in research methodology to the utilisation of the research findings.
- The respondent population consisted of master's and doctoral graduates of the Graduate School of Technology Management (GSTM; University of Pretoria) and Da Vinci Institute for Technology Management (DV).
  - Number of emails (and completed questionnaires) GSTM=355 (108) and DV=133 (66)
  - o Undeliverable questionnaires: 85 and questionnaires opened but not completed: 65
  - Item 14 caused problems in some cases, since certain browsers did not give access to the response options.
- The questionnaire was kept on the web for 11 days.

The response rate of 35% was relatively high for a web survey.

# **Reliability and validity**

Important criteria research should comply with are reliability (*'Will more or less the same results be obtained upon re-testing?'*), internal validity (*'Did I measure what I intended measuring?'*) and external validity (*'Can I generalise my findings to the relevant population?'*)

- No less than 85% of the respondents indicated that they were interested in participating in future research undertaken by GSTM.
- Convergence rates of between 100% and 66% were found between different items measuring the same construct.
- The external validity or generalisability was sufficiently high with a margin of error of 5.96% at a 95% confidence level.

The results of the reliability and validity tests were satisfactory.

#### Progress to date

To date, exploratory analyses of the responses to the multiple-choice items, i.e. closed questions, have been included in a paper that has been submitted to an international conference. We are currently busy with further statistical analyses that will form the core of another paper that should be completed in early April. Content analyses of the open questions should be finished before the end of March.

These first analyses focus on the relationship between training in research methodology and the utilisation of research findings.

### Selected findings

The following bits of information are intended to give respondents an idea of the preliminary information generated by the survey.

- Ninety per cent of the respondents took a course in research methodology as part of their M or D programmes
- Did training in research methodology prepare you to do independent research after graduation?
  - To a certain extent: 49%
  - Absolutely yes: 44%
- Did your dissertation/thesis address work related problems?
  - Yes, directly: 63%
  - Indirectly: 30%
  - Not at all: 7%
- Did your dissertation/thesis include work-related recommendations?
  - Extensively: 38%
  - In part: 52%
  - No: 10%
- Were the recommendations implemented?
  - Yes, fully: 9%
  - Partially: 42%
  - Still plan to do so: 26%
  - No and there are no such plans: 16%
- What have been the outcomes of your dissertation/thesis?
  - Started an own business: 5%
  - Scholarly publication/conference paper: 19%
  - New technology/prototype/patent/technical design: 16%
  - Other more general and non-specific outcomes: 60%

#### Next steps

In the course of the next two months a series of further statistical analyses will be done on the complete data set, including the data generated by the open questions, to add depth and texture to our first exploratory analyses. It is anticipated that at least two further publications will result from these analyses. Once the analyses have been completed, will we consider the implications of the findings for advanced research training.

#### Word of appreciation

The research team would like to thank all of you most sincerely for your participation in this survey and your contribution to the further exploration of the important issue of research at advanced postgraduate level.

Bok Marais Simon Gathua Magdal Pienaar-Marais 15 March 2011