CORRELATION BETWEEN LEVELS OF EDUCATION AND KNOWLEDGE OF COFFEE

UNDERGRADUATE THESIS

BY:

NADIA KARINA
6103012119

FOOD TECHNOLOGY STUDY PROGRAMME
FACULTY OF AGRICULTURAL TECHNOLOGY
WIDYA MANDALA CATHOLIC UNIVERSITY SURABAYA
SURABAYA

2018

CORRELATION BETWEEN LEVELS OF EDUCATION AND KNOWLEDGE OF COFFEE

UNDERGRADUATE THESIS

Submitted To
Faculty of Agricultural Technology,
Widya Mandala Catholic University Surabaya
to Meet Requirements for
Obtaining a Bachelor's Degree in Agricultural Technology

BY:
NADIA KARINA
6103012119

FOOD TECHNOLOGY STUDY PROGRAMME
FACULTY OF AGRICULTURE TECHNOLOGY
WIDYA MANDALA CATHOLIC UNIVERSITY SURABAYA
SURABAYA
2018

STATEMENT OF APPROVAL OF THE PUBLICATION OF A SCIENTIFIC WORK

For the development of science, as a student of Catholic University Widya Mandala Surabaya, I:

Name: Nadia Karina
NRP : 6103012119

Approve of my scientific work:

Titled:

Correlation between Levels of Education and Knowledge about Coffee

To be published/displayed on the internet or other media (Digital Library of Widya Mandala Catholic University Surabaya) for academic interest in accordance with the Copyright Act.

Thus the statement of this scientific paper publication approval I made with veracity.

Surabaya, 31 July 2018
Stated,

Nadia Karina

SHEET OF ENDORSEMENT

The thesis titled **"Correlation between Levels of Education and Knowledge about Coffee"** and written by Nadia Karina (6103012119) has been tested on 7 June 2018 and is recommended for approval and acceptance by the Examining Team.

Chief Examiner,

Indah Epriliati, PhD.
Date: 17/7/2018

Knowing,
Faculty of Agricultural Technology
Dean,

Ir. Thomas Indarto Putut Suseno, MP., IPM
Date:

SHEET OF APPROVAL

This undergraduate thesis proposal titled "**Correlation between Levels of Education and Knowledge about Coffee**", and written by Nadia Karina (6103012119), has been tested and approved by the advisors.

Thesis Advisor I,

Indah Epriliati, PhD
Date: 17/7/2018

Thesis Advisor II,

Ir. T. Dwi Wibawa Budianta, MT., IPM
Date: 17/7/2018

APPROVAL SHEET
AUTHENTICITY OF SCIENTIFIC WORK

I hereby declare that in my Thesis Proposal entitled:

Correlation between Levels of Education and Knowledge of Coffee

is my own work and no work has ever been made to obtain a degree in an Institute of Higher Education, and to the best of my knowledge there is no work or opinion ever written or published by any other person, except that expressly referred to in this text and mentioned in the bibliography.

If my work is a plagiarism, then I am willing to be subject to sanctions in the form of cancellation of graduation and / or withdrawal of title, according to the prevailing regulation (RI Law No.20 of 2003 on National Education System Article 25 paragraph 2, and Academic Regulation of Widya Mandala Catholic University Surabaya Article 30 paragraph 1 (e)).

Surabaya, 31 July 2018

Nadia Karina

Nadia Karina. 6103012119. **Hubungan antara Tingkat Pendidikan dengan Pengetahuan Mengenai Kopi**
Di bawah bimbingan: 1. Indah Epriliati, PhD.
2. Ir. Tarsisius Dwi Wibawa Budianta, MT., IPM.

ABSTRAK

Kopi adalah salah satu minuman yang paling banyak dikonsumsi di dunia. Dengan popularitasnya yang tinggi, sangat mengherankan bahwa sedikit yang tahu tentang hubungan antara tingkat pendidikan dengan kebiasaan minum kopi dan pengetahuan tentang kopi. Penelitian ini dilakukan dari Desember 2016 hingga April 2017, dengan tiga ratus lima belas (315) responden mengambil bagian. Analisis data yang dikumpulkan melibatkan dua metode: grafik deskriptif dan *partial least squares path modeling* (PLS-PM). Dua dari tiga korelasi variabel laten (tingkat pendidikan–kebiasaan minum kopi, dan kebiasaan– pengetahuan tentang kopi) memiliki tingkat korelasi yang sangat lemah (0,1014 dan 0,0051, berturut-turut), sementara satu (tingkat pendidikan–pengetahuan tentang kopi) memiliki tingkat korelasi yang sedang (0,4494). Penelitian ini diharapkan akan memberi informasi kepada masyarakat umum tentang hubungan antara tingkat pendidikan, kebiasaan minum kopi, dan pengetahuan tentang kopi.

Kata kunci: Tingkat pendidikan, Kebiasaan minum kopi, Pengetahuan kopi

Nadia Karina. 6103012119. **Correlation between Levels of Education and Knowledge of Coffee**
Advisory committee: 1. Indah Epriliati, PhD.
2. Ir. Tarsisius Dwi Wibawa Budianta, MT., IPM.

ABSTRACT

Coffee is one of the most consumed drinks in the world. With its stellar popularity, it is astonishing that little has been said about the relationship between education levels with coffee drinking habits and coffee knowledge. This research was carried out from December 2016 to April 2017, with three hundred and fifteen (315) respondents taking part. Analysis of the gathered data involved two methods: descriptive graphs and partial least squares path modelling (PLS-PM). Two of the three latent variable correlations (education level–habits, and habits–coffee knowledge) had very weak levels of correlation (0.1014 and 0.0051, respectively), while one (education level–coffee knowledge) had a moderate level of correlation (0.4494). It is hoped this research will inform the general public about the relationship between education levels, coffee drinking habits, and coffee knowledge.

Keywords: Levels of Education, Coffee drinking habits, Coffee knowledge

PREFACE

Praise writer prayed to God Almighty for His blessings and mercy, for the completion of the thesis proposal titled "**Correlation between Levels of Education and Knowledge of Coffee**". This thesis is one of the conditions for completing the Master of Education Program Strata-1 Food Technology Study Programme, Faculty of Agricultural Technology, Widya Mandala Catholic University Surabaya.

On this occasion, the author would like to thank:

Indah Epriliati, PhD. and Ir. Tarsisius Dwi Wibawa Budianta, MT., IPM, as advisors who have guided the writing until the completion of the thesis.

My mum and sister who have supported me with words of motivation, countless threats, and memes.

Every single respondent who filled out the forms – this couldn't have happened without you!

Wyssylanya da Silva Sales for her friendship and support.

The author has tried to write this paper as best as possible but realises there are still shortcomings, therefore criticism and suggestions from readers to improve this paper are expected and welcomed. The author hopes this thesis will be of beneficial value to the reader.

Surabaya, July 2018

TABLE OF CONTENTS

Page

ABSTRAK i

ABSTRACT ii

PREFACE iii

TABLE OF CONTENTS iv

LIST OF FIGURES vi

LIST OF TABLES viii

CHAPTER I. INTRODUCTION 1
1.1. Background 1
1.2. Limiting Scope 3
1.3. . Problem Statement 3
1.4. Research Purposes 3
1.5. Benefit of Research 4

CHAPTER II. LITERATURE REVIEW 5
2.1. Coffee 5
2.1.1. Antioxidants in Coffee 9
2.1.1.1. Cafestol 10
2.1.1.2. Trigonelline 11
2.1.1.3. Chlorogenic Acids 12
2.1.1.4. Other Phenols 13
2.1.2. Caffeine 13
2.1.2.1. Physical and Chemical Properties of Caffeine 13
2.1.2.2. Biosynthesis of Caffeine 14
2.2. Myths Surrounding Coffee Drinking 15
2.2.1. Myths around the World 15
2.2.2. Myths in Indonesia 15
2.3. Traditional and Modern Coffee 16
2.4. Hypothesis 16

CHAPTER III. RESEARCH METHODS 17
3.1.Place and Time of Research 17
3.1.1. Place of Research 17
3.1.2. Time/Duration of Research 17
3.2. Research Plan 17
3.3. Respondent Stimulation 17

3.4. Research Design..... 18
CHAPTER IV. RESULTS AND DISCUSSION..... 19
CHAPTER V. CONCLUSION 53
BIBLIOGRAPHY 54
APPENDICES 58

LIST OF FIGURES

Page

Figure 2.1. Complete Green Coffee Processing 8
Figure 2.2. Structure of Different Fatty Acyl Esters 11
Figure 2.3. Structure of Caffeine 14
Figure 3.1. Research Blueprint 18
Figure 4.1. Response for Question One 20
Figure 4.2. Response for Question Two 21
Figure 4.3. Response for Question Three 22
Figure 4.4. Response for Question Four 23
Figure 4.5. Response for Question Five 24
Figure 4.6. Response for Question Six 25
Figure 4.7. Response for Question Seven 26
Figure 4.8. Response for Question Eight 26
Figure 4.9. Response for Question Nine 27
Figure 4.10. Response for Question Ten 28
Figure 4.11. Response for Question Eleven 29
Figure 4.12. Response for Question Twelve 30
Figure 4.13. Response for Question Thirteen 31
Figure 4.14. Response for Question Fourteen 33
Figure 4.15. Response for Question Fifteen 34
Figure 4.16. Response for Question Sixteen 35
Figure 4.17. Response for Question Seventeen 35
Figure 4.18. Response for Question Eighteen 36
Figure 4.19. Response for Question Nineteen 37
Figure 4.20. Response for Question Twenty 38
Figure 4.21. Response for Question Twenty-one 39

Figure 4.22. Response for Question Twenty-two 40
Figure 4.23. Response for Question Twenty-three 43
Figure 4.24. Response for Question Twenty-four..... 44
Figure 4.25. Response for Question Twenty-five 44
Figure 4.26. Response for Question Twenty-six..... 46
Figure 4.27. Response for Question Twenty-seven 47
Figure 4.28. Response for Question Twenty-eight 47

LIST OF TABLES

Page

Table 2.1. Composition of roasted coffee (medium degree of roasting) .. 5
Table 2.2. Alkaloids found in green and roasted coffee 12
Table 2.3. Chlorogenic acid content (function of degree of roasting) ... 12
Table 4.1. Correlation Matrix..... 49
Table 4.2. Correlations (Latent Variables)..... 50

LIST OF APPENDICES

Page

Appendix 1. Questionnaire 58
Appendix 2. PLS-PM Modelling..... 66