**LITERATURE SURVEY**

JOURNEL PAPERS AND INFERENCE

**TITLE: Effects and challenges of using a nutrition assistance system: results of a long term mixed-method study**

Hanna Hauptmann1 · Nadja Leipold2 · Mira Madenach2 ·Monika Wintergerst2 · Martin Lurz2 · Georg Groh2 · Markus Böhm2 ·Kurt Gedrich2 · Helmut Krcmar2

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Healthy nutrition contributes to preventing non-communicable and diet-related diseases.Recommender systems, as an integral part of Health technologies, address this task by supporting users with healthy food recommendations. However, knowledge about the effects of the long-term provision of health-aware recommendations in real-life situations is limited. This study investigates the impact of a mobile, personalized recommender system named Nutrilize. Our system offers automated personalized visual feedback and recommendations based on individual dietary behaviour, phenotype, and preferences.By using quantitative and qualitative measures of 34 participants during a study of 2–3 months, we provide a deeper understanding of how our nutrition application affects the users’ physique, nutrition behaviour, system interactions

and system perception. Our results show that Nutrilize positively affects nutritional behaviour (conditional *R*2 = *.*342) measured by the optimal intake of each nutrient.The analysis of different application features shows that reflective visual feedback has a more substantial impact on healthy behaviour than the recommender (conditional *R*2 = *.*354). We further identify system limitations influencing this result, such as a lack of diversity, mistrust in healthiness and personalization, real-life contexts, and personal user characteristics with a qualitative analysis of semi-structured in-depth interviews. Finally, we discuss general knowledge acquired on the design of personalized mobile nutrition recommendations by identifying important factors, such as the users’ acceptance of the recommender’s taste, health, and personalization.

**TITLE ;Personal Health Assistant on Android Mobile Device:**

**Sleeping, Nutrition and Exercise**

Kiatateeti Anusornpakdee1, a,\*, Matugorn Limpanadusadee1,b,

Sangsuree Vasupongayya1,c and Sinchai Kamolphiwong2,d

1Department of Computer Engineering, Prince of Songkla University, Thailand

2Center of Network Research, Prince of Songkla University, Thailand

aum.anusorn@gmail.com, bpapapung999@gmail.coml, cvsangsur@coe.psu.ac.th,

[dksinchai@coe.psu.ac.th](mailto:dksinchai@coe.psu.ac.th)

Good health can be achieved by maintaining good behaviors such as a good night sleep,enough exercise and good nutrition. However, the competitive environment nowadays prevents such good behaviors. Thus, this work aims to develop an application on mobile devices that is able to record the daily sleeping, exercise and nutrition information, (2) analyze the collected information in order to provide a notification or an alarm, and (3) present the analyzed results in a simple and easy to understand format. The proposed application can collect data from other application and from the users. A set of simple data analysis methods is performed on the collected data in order to provide a personal health advice based on the user pre-defined preferences.

Better health can be achieved by maintaining a simple lifestyle such as a good night sleep, enough exercises and good nutrition. People spend one third of their lives sleeping however most people do not understand the importance of sleep. Moreover, the lack of sleep can affect a person’s memory and emotion. The exercise habit and nutrition can also lead to good health. Daily working life can be affected by lack of sleep such as drowsiness and long-term health problems . Many researches have shown that not enough sleep or exercise can lead to many health problems such as GERD, Alzheimer’s disease, hearth disease, sleep apnea and insomnia.

TITLE: **Barriers and Enablers to Delegating Malnutrition Care Activities to Dietitian Assistants**

**Alita Rushton 1,2 , Judith Bauer 2,3 , Adrienne Young 4,5 , Heather Keller 6 and**

**Jack Bell 2,7**

1 Department of Nutrition and Dietetics, The Prince Charles Hospital, Chermside, QLD 4032, Australia;alita.rushton@health.qld.gov.au

2 School of Human Movement and Nutrition Sciences, The University of Queensland,

St. Lucia, QLD 4072, Australia; [j.bauer1@uq.edu.au](mailto:j.bauer1@uq.edu.au)

3 Department of Nutrition, Dietetics & Food, School of Clinical Sciences, Monash University,

Notting Hill, VIC 3168, Australia

4 Royal Brisbane Women’s Hospital, Department of Nutrition and Dietetics, Herston, QLD 4029, Australia;adrienne.young@health.qld.gov.au

5 Centre of Health Services Research, The University of Queensland, Herston, QLD 4029, Australia

6 Schlegel-UW Research Institute for Aging, Waterloo, ON N2L 3G1, Canada; hkeller@uwaterloo.ca

7 The Prince Charles Hospital, Allied Health, Chermside, QLD 4032, Australia

healthcare, and workforce outcomes. However, nutrition care for hospital inpatients with or at risk of malnutrition remains primarily individually delivered by dietitians—an approach that is not considered sustainable. This study aimed to identify barriers and enablers to delegating malnutrition care activities to dietitian assistants. This qualitative descriptive study was nested within a broader quality assurance activity to scale and spread systematised and interdisciplinary malnutrition models of care. Twenty-three individual semi-structured interviews were completed with nutrition and dietetic team members across seven hospitals. Inductive thematic analysis was undertaken, and barriers and enablers to delegation of malnutrition care to dietitian assistants were grouped into four themes: working with the human factors; balancing value and risk of delegation; creating competence, capability, and capacity; and recognizing contextual factors. This study highlights novel insights into barriers and enablers to delegating malnutrition care to dietitian assistants. Successful delegation to dietitian assistants requires the unique perspectives of humans as individuals and in their collective healthcare roles, moving from words to actions that value delegation; engaging in processes to improve competency, capability, and capacity of all; and being responsive to climate and contextual factors.

TITLE: **Design of a prospective, randomized evaluation of an integrated nutrition program in rural Viet Nam\***

David R. Marsh, Helena Pachón, Dirk G. Schroeder, Tran Thu Ha, Kirk Dearden, Tran Thi Lang, Nguyen Dhanh Hien, Doan Anh Tuan, Tran Duc Thach, and David Claussenius

David R. Marsh is affiliated with Save the Children Federation/US in Westport, Conn., USA. Helena Pachón,formerly at the Rollins School of Public Health, Emory University in Atlanta, Ga., USA, is now affiliated with the Division of Nutritional Sciences at Cornell University in Ithaca, NewYork. Dirk G. Schroeder is affiliated with the Rollins School of Public Health at Emory University in Atlanta, Ga., USA. TranThu Ha and Tran Duc Thach are affiliated with the Hanoi Research and Training Centre for Community Development in Hanoi, Viet Nam. Kirk Dearden, formerly at the LINKAGES Project, Academy for Educational Development in

Washington, D.C., USA, is now at the Department of Health Science, Brigham Young University in Provo, Utah, USA. Tran Thi Lang, Nguyen Dhanh Hien, Doan Anh Tuan, and David Claussenius are affiliated Save the Children Federation/US in Hanoi, Viet Nam.

Mention of the names of firms and commercial products does not imply endorsement by the United Nations University.

\* The ViSION (Viet Nam study to improve outcomes in nutrition) project evaluated the implementation and impact of an integrated nutrition program on the nutritional status,

morbidity, diet of, and care for children 5 to 25 months old in rural Viet Nam, through a partnership among Save the Children/US (Hanoi and Westport, Conn., USA), the

USAID-funded LINKAGES project (Washington, D.C.),Emory University’s Rollins School of Public Health (Atlanta,Ga., USA), and the Research and Training Center for Community

Development (Hanoi).