Research Article
A Study of Assessment and Acting Factors on Young Teachers’ Knowledge, Attitude and Practice (KAP) for Food Security
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Abstract: Young teachers have been a drive for development to our country’s universities. In order to follow their awareness of food security and physical status with interest, we, firstly, carry out an investigation into the young teachers’ Knowledge, Attitude and Practice (KAP) under the age of 40 by cluster sampling in the 14 universities in Anhui province, then, make analysis of the data through statistic methods of T test and the other tests concerned, with conclusions that the positive correlations lie between the knowledge and the attitude, the attitude and the practice while the knowledge and the practice have not interrelated evidently. Finally, we submit proposals for how to improve the young teachers’ consciousness for food security from the respects of KAP in universities in Anhui province.

Keywords: Factors, food security, KAP, young teachers

INTRODUCTION

In recent years, owing to the acute shortage of professional faculties with the increasing scale of high education, universities have to introduce personals with doctor and master degrees every year to strengthen their teaching staff. Therefore, the tendency of promoting younger staff has come into been gradually and they have become a pivotal drive among university teachers in our country, which determines the universities future and the nation’s talents training as well as its education tomorrow (The Requirements of the Ministry of Education, 2012). Hence, it makes great significance to concern the young teachers’ KAP for food security in universities in our country.

KAP model was firstly designed by Stevens in America in 1990s in which people’s behavior was classified into three successive procedures of acquisition of the knowledge, establishing of the attitude and carryout of the practice (Liu, 2013). Accordingly, K (knowledge) indicates the understanding of the basic knowledge of science and technology and their basic concepts, A (attitude), the attitude to the scientific and technological knowledge and their social effects, P (practice), how to live and work scientifically. Simply, KAP mode can be denoted by the formula “knowledge-attitude-practice”. This study, by the use of KAP model in the field of food security, makes a survey into young teachers’ knowledge and their attitude and practice in universities in Anhui province to make their KAP status quo and existing problems clear in order that some relevant recommendations can be made to intervene the food security strategies for them.

SUBJECTS AND METHODS

Subjects: Young teachers under the age of 40 (Li, 2013) in 14 universities in Anhui province with inclusive of Anhui University, Hefei University of Technology, Anhui Agricultural University, Bengbu University, Chuzhou University, Huangshan University, Anhui Vocational College of Electronics and Information Technology and Chuzhou Vocational and technical College.

Methods: Questionnaire: A questionnaire about young teachers’ food security and their health in Anhui province has come into being by referring relevant foreign studies and projects and combining some experts evaluation, panel discussions and pre-surveys with contents of the young teachers personal data, their food security knowledge, attitude and practice.

Rating criteria: The questionnaire consists of multiple choices of knowledge, attitudes and practice for food security with tests of 30, 6 and 14, marks of 60, 12 and 28, respectively. For the multiple choices, single correct answer, 2 marks, two-thirds multiple correct answer, 1 point, or else 0 point. The KAP scores can be obtained from adding the individual items, less than 60 would be failure, between 60 and 80 would be good, more than 80, excellent.

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participate in the investigation and they should conscientiously cooperate with the researchers and their colleagues who come from the target university. The questionnaire the investigators should explain the purpose and precautions, When the questionnaires are collected, eliminate the invalid ones to ensure the validity of the questionnaire (Kong, 2013).

**Selecting the subjects:** The subjects must be willing to participate in the investigation and they should conscientiously cooperate with the researchers and their answers authentic to ensure the reliability of the survey.

**Statistical analysis:** Before data entry, review the questionnaire for a second time and establish a database by using the statistical software SPSS18.0, then the related statistical description and inference will be made through logic debugging by the ways of Descriptive Statistics, T test and the other tests concerned.

**RESULTS AND ANALYSIS**

**The general information for questionnaire:** The study issued 528 questionnaires to young teachers under the age of 40 in 14 universities such as Anhui Agricultural University, Bengbu University, Chuzhou University, Huangshan University, Anhui Vocational College of Electronics and Information Technology and Chuzhou Vocational and technical College in Anhui province by cluster sampling, recovering 511 valid questionnaires with effective rate of 96.8%. The specific conditions are shown in Table 1.

<table>
<thead>
<tr>
<th>Category</th>
<th>Index</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Knowledge (X ± s)</th>
<th>Attitude (X ± s)</th>
<th>Practice (X ± s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Under 30</td>
<td>87</td>
<td>17.0</td>
<td>38.7±5.45</td>
<td>7.5±5.58</td>
<td>17.4±4.95</td>
</tr>
<tr>
<td></td>
<td>30-35</td>
<td>203</td>
<td>39.7</td>
<td>41.1±5.32</td>
<td>8.2±5.24</td>
<td>22.1±4.81</td>
</tr>
<tr>
<td></td>
<td>36-40</td>
<td>221</td>
<td>43.3</td>
<td>43.1±5.71</td>
<td>8.8±4.72</td>
<td>21.5±5.05</td>
</tr>
<tr>
<td>Sex</td>
<td>Male</td>
<td>235</td>
<td>46.0</td>
<td>43.4±5.57</td>
<td>8.1±5.55</td>
<td>16.4±5.13</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>276</td>
<td>54.0</td>
<td>38.5±5.43</td>
<td>8.5±4.82</td>
<td>22.2±4.51</td>
</tr>
<tr>
<td>Degrees</td>
<td>Master</td>
<td>353</td>
<td>69.1</td>
<td>40.0±5.53</td>
<td>8.2±5.53</td>
<td>18.7±4.93</td>
</tr>
<tr>
<td></td>
<td>Doctor</td>
<td>158</td>
<td>30.9</td>
<td>42.5±5.21</td>
<td>8.5±5.21</td>
<td>21.4±4.72</td>
</tr>
<tr>
<td>Professional</td>
<td>Teaching assistant</td>
<td>41</td>
<td>8.0</td>
<td>37.5±5.35</td>
<td>6.8±4.45</td>
<td>17.3±5.37</td>
</tr>
<tr>
<td>tiles</td>
<td>Lecturer</td>
<td>293</td>
<td>57.3</td>
<td>39.5±5.37</td>
<td>8.4±5.12</td>
<td>18.0±4.84</td>
</tr>
<tr>
<td></td>
<td>Assistant professor</td>
<td>148</td>
<td>29.0</td>
<td>43.3±5.42</td>
<td>8.6±5.25</td>
<td>22.5±4.51</td>
</tr>
<tr>
<td></td>
<td>Professor</td>
<td>29</td>
<td>5.7</td>
<td>45.7±5.55</td>
<td>8.2±6.23</td>
<td>23.1±4.25</td>
</tr>
<tr>
<td>Specialties</td>
<td>Liberal arts</td>
<td>242</td>
<td>47.4</td>
<td>33.2±5.51</td>
<td>7.8±5.57</td>
<td>23.4±5.34</td>
</tr>
<tr>
<td></td>
<td>Science</td>
<td>269</td>
<td>52.6</td>
<td>47.6±5.42</td>
<td>8.8±5.53</td>
<td>16.0±4.32</td>
</tr>
</tbody>
</table>

**Quality control:**

**Questionnaire reliability measurement:** Repeated measures will be taken to the subjects accounting for 50% eligible group in their university with the intervals of 30 days. By analyzing the results of the two measurements, the reliability coefficient is 0.91, indicating that the correlation is high and is in line with the research requirements.

**Questionnaire quality control:** The questionnaire is done by the researchers and the three trained investigators who come from the target university. Before the questionnaire the investigators should explain the purpose and precautions, When the questionnaires are collected, eliminate the invalid ones to ensure the validity of the questionnaire.

**Investigation and analysis of knowledge for food security:** The questionnaire describes the general status of the young teachers’ KAP for food security in universities in Anhui province by the methods of taking average, standard deviation and T tests. The average KAP scores in 511 valid samples in Table 2, with the higher scores, the better knowledge, the more positive attitude and the more sensible practice.

The average scores of food security for the young teachers in universities in Anhui province is 40.76±5.46. The result is generally plain. Meanwhile, the T test in Table 1 shows that there is no statistic significance in comparing average scores by the young teachers’ age, gender and their professional titles (p > 0.05), however, there is, according to their degrees and specialties (p < 0.05). The calculated data shows that the higher the degree, the more scores of food security knowledge, while science teachers score higher than arts teachers. The young teachers in universities in Anhui province recognize the food security knowledge better from the perspective of mastering the content of the knowledge but for some common-sense knowledge such as “What does the sign QS on the food packing indicate?” “Have you heard of McDonald chicken coke in 2010?” “What reasons generate sitotoxism?” “What diseases can be prevented by eating skinned fruits?”.

The average scores for such questions are less than 50%, indicating that young teachers do not know enough of their own food security (Yang, 2011). On the other hand, it shows that they lack of some common
Investigation and analysis of the attitude for food security: Table 4 is a questionnaire form of attitude for food security and specific scores. The average scores of attitude for food security for the young teachers in universities in Anhui province is 8.32±5.03. The result is generally plain. Meanwhile, the T test in Table 1 shows that there is no statistic significance in comparing average scores by the young teacher’s gender, degree and their professional titles (p>0.05), however, there is, according to their age and specialties (p<0.05). The calculated data shows that the age among 30-35 will get the highest scores of food security practice and those assistant professors always score highest than the other professional titles. We come to the conclusion that the attitude for food security of the young teachers in universities in Anhui province is in general from the view point of obtaining the specific content of a food security practice. The score rate for half of the questionnaires is less than 50%.

Correlation analysis of the subjects’ KAP: As the scores of KAP are continuous variables, the coefficients are calculated and significantly tested by the way of product-moment correlation between any two of the three variables. The results (Table 6) shows that the positive correlations occur between K and A (r = 0.828, p<0.01), A and P (r = 0.785, p<0.01), while no correlation exists between K and P, which is in line with the KAP theoretical model, that is, the higher standard of food security knowledge, the better of...
attitude, on basis of which good practice comes into being (Nutbeam, 2008).

CONCLUSION AND PROPOSALS

Conclusions: The research shows that the factors play pivotal role in the K standard of young faculties in universities in Anhui province are degrees and specialties, The more of literate, the higher of corresponding food security knowledge. Compared to the liberal arts, science young teachers have a relatively higher K level. Meanwhile, The higher standard of food security knowledge has a greater impact on the food security attitudes and practice with the higher level of knowledge, the better of attitudes and practice, on the contrary, good attitude will enable knowledge to convert easily to rational food security practice, which has been proved to be by the theory of Knowledge-Attitude-Practice (KAP) that the increasing knowledge will lead to the change of attitude and practice, these will in turn be bound to promote the accumulation of knowledge (Zhai, 2007).

Proposals: School’s management should raise awareness through the media such as radio stations, newspapers, magazines, websites and lectures to strengthen the publicity of the food security knowledge to enlarge the channels for the young teachers to obtain food security information in order to help them form good atmosphere to acquire the knowledge.

Lead the young teachers to concern their diets, encourage them to participate sports actively and change their unhealthy habits and additions gradually, advocate them to guide their diet with food security knowledge and improve their philosophy of food security.

Strengthen food security surveillance to young teachers, understand their food security status to discover and solve problems timely, help them to develop good eating behaviors and habits to improve their dietary quality and make their eating behavior more rational.

ACKNOWLEDGMENT

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