Factors affecting the adoption of halal assurance system (HAS) at a restaurant in sharia concept hotel

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Abstract. Sharia concept hotels should be supported by halal-certified restaurants. One of the requirements for halal certification is to implement a halal assurance system (HAS). Many restaurants at sharia concept hotels in Malang are not certified halal, so they need to be committed to adopting the HAS. This research aims to analyze the variable of HAS adoption in hotel restaurants with the sharia concept and provide alternatives to accelerate HAS adoption. The variables of this study are management commitment, materials, processing, customer experience, and attitude. The data were collected through questionnaires to 32 respondents of 8 hotel restaurants with Islamic concepts in Malang and processed using the Partial Least Square method. The analysis results showed that the variables of management commitment and attitude significantly affect the adoption of HAS. Besides, the variables of materials, processing, and customer experience do not significantly affect the adoption of HAS. There is a need for training for restaurant businesses to know the process of compiling HAS, commit to choosing halal-guaranteed ingredients, and carry out the halal production process. The restaurants at sharia concept hotels are advised to arrange and implement HAS as the initial stage of halal certification.

1. Introduction

Indonesia has the largest Muslim population in Southeast Asia, about 87% of 270.2 million people (BPS, 2020). The opportunities for halal tourism are tremendous. Malang is one of the halal tourist destinations in Indonesia. The need for halal food souvenirs, restaurants, and hotels has increased. Addina et al. [1] stated that food souvenirs needed to be halal guaranteed. The existence of a halal logo and quality affects purchasing decisions [2]. The Minister of Tourism and Creative Economic Regulation states that sharia hotel management must meet the criteria for sharia hotel businesses. Food in sharia hotels must be halal certified [3], and the food processing meets halal standards [4]. Several of research in sharia hotels already exist. Nuraini and Sucipto [5] explored halal food regulation to support halal tourism. Research focuses on restaurants in sharia hotels is still limited.

Several studies of the preparation and halal assurance system (HAS) have been conducted, such as survey of HAS practice in university canteen [6,7]. HAS is integrated into other management systems to support food industry performance [8]. Kamal et al. [7] stated bill of material analysis of the menu is efficient for halal food inspection. Marzuki et al. [8] identified the effectiveness of HAS implementation.
in small and medium enterprises (SMEs). Muhammad et al. [9] examined the views of restaurant managers on halal certificates to meet market demand. The challenges of halal certification authorities and their increasing role [10] and strategies for developing halal restaurants in hotels [11] are studied. Therefore, it needs research that influences HAS implementation in restaurants.

HAS includes Good Hygiene Practice (GHP), Good Manufacturing Practice (GMP), and Hazard Critical Control Point (HACCP) [12]. Several factors can influence the HAS implementation in restaurants. These factors are management commitment, ingredients, food processing, customer experience, and attitude. The variables were taken based on the HAS clause and supported the HAS practical. This study aimed to analyze the factors that influence HAS adoption in the restaurant at sharia concept hotels and provide an alternative to accelerating HAS adoption by restaurants.

2. Material and methods
This research was conducted in 8 hotels with the Islamic concept in Malang, East Java, Indonesia. The study used five variables and indicators in Table 1. Respondents of this study were 32 employees from 8 hotels. Data collecting uses purposive sampling through interviews, observation, questionnaires, and documentation.

### Table 1. Research variables and indicators.

| Variable | Indicator |
|----------|-----------|
| Management commitment (X₁) | Awareness (X₁₁) |
| | Regulation (X₁₂) |
| | Halal food concept (X₁₃) |
| Materials (X₂) | Supplier Choosing (X₂₁) |
| | Identity of raw material (X₂₂) |
| | Material inventory (X₂₃) |
| | Material critical point (X₂₄) |
| | Material quality (X₂₅) |
| Processing stages (X₃) | Production facilities (X₃₁) |
| | Higienity (X₃₂) |
| | Recipe standard (X₃₃) |
| The customer experience (X₄) | Sense Experience (X₄₁) |
| | Feel Experience (X₄₂) |
| Attitude (X₅) | Halal Knowledge (X₅₁) |
| | Religiosity (X₅₂) |
| Halal assurance system (HAS) implementation (Y) | Product is qualified (Y₁) |
| | Product is safe for the consumer (Y₂) |

The quantitative data were tested for feasibility using the validity, reliability, and linearity with SPSS 17.0 software. The relationship variables and hypothesis using Partial Least Square (PLS) with SmartPLS 3.0 software. This research hypothesis:

a. H₁: Management commitment has a significant effect on HAS implementation.

b. H₂: Material has a significant effect on HAS implementation.

c. H₃: The processing stages have a significant effect on HAS implementation.

d. H₄: Customer experience has a significant effect on HAS implementation.

e. H₅: Attitude has a significant effect on HAS implementation.

3. Results and discussion

3.1. Overview of research objects and characteristics of respondents
Malang Raya, as a halal tourist destination, requires sharia hotels and restaurants. Data from the Malang City and Regency Tourism Office in 2017 showed 120 hotels in Malang city and 151 hotels in Malang
Regency. Based on the Regulation of the Ministry of Tourism and Creative Economy of the Republic of Indonesia Number PM.53/HM.001/MPEK/2013, a hotel is a business type that provides daily accommodation in the form of rooms that can be equipped with food, entertainment, and/or other facilities. According to [4], sharia hotels apply sharia principles. Sharia concept hotels in Malang have an average age of 3-10 years. These hotels have a business license and are registered in the tourism office. According to [13], halal food does not contain haram ingredients. Therefore, halalan thoyyiban restaurants need HAS implementation.

The respondents (17 people or 53.1%) were predominantly male. The mean age of fewer than 30 years is 71.9%, the senior high school education is as many as 25 people (78%). Respondents worked for less than five years, 75%. All employees are Muslim.

3.2. Instrument testing results
Test of instrument validity to find out each item of the research instrument is valid. According to Abdullah and Taufik [14], validity means the accuracy of an instrument. Validity test using SPSS 17.0 software. The test results are valid if \( r_{xy} > r_{xy} \) [15]. The resulting test of validity and reliability (Table 2), all variables are valid. The value of \( r_{xy} > r_{xy} \) is 0.361 means each instrument item measured well.

The reliability test determines the research questionnaire's consistency. The reliability test of quantitative research uses Alpha Cronbach. If the Cronbach Alpha is at least 0.60, the instrument is reliable. Reliability test using SPSS 17.0 software in Table 2. The linearity test determines the relationship between the dependent variable and the independent variable. The variable has a linear relationship if the deviation from linearity has a value > 0.05. Linearity test results > 0.05, so variables X1 to X5 have a linear relationship with variable Y.

3.3. Partial Least Square (PLS) analysis

3.3.1. Path diagram construction. Path diagram construction uses smart PLS software. The path diagram shows the causal relationship between variables and indicators to exogenous latent variables and exogenous latent variables to endogenous latent variables. The causal relationship in the path diagram (Figure 1) is known through the outer loading value.

3.3.2. Parameter estimation results. Estimation of parameters determines the relationship between indicators and latent variables. The outer weight of the statistical calculation is based on the respondent's answer. The outer weight indicates the relationship between indicators and variables and outer loading obtained through SmartPLS 3. The outer weight of this study is in the range of 0.01 to 1. The mean value is obtained through SPSS 17.0 based on the questionnaire. The results of parameter estimation are in Table 3.

3.3.3. The goodness of fit evaluation results (evaluate the goodness of fit outer model). The evaluation phase of the outer reflective model for structural modeling of indicators is both reflective and formative. This research variable is a reflective construct. The following are the results of convergent validity, discriminant validity, and composite reliability.

a. Convergent validity. Convergent validity is to determine the indicator's ability to measure latent variables. The indicator is valid when the loading factor is > 0.6. The individual reflection is high if the correlation is > 0.70 with the construct, but a value of 0.5 to 0.6 is sufficient [16]. The convergent validity f the measurement model for reflective indicators is assessed based on the correlation between the loading factor estimated by SoftwarePLS 3.0. The convergent validity test shows that all indicators meet the requirements.

b. Discriminant validity. The discriminant validity is indicated by cross-loading. According to [17], a construct is good if the cross-loading of the latent variable is greater than the correlation to other latent variables. The results of the discriminant validity test show that the most cross-loading of the indicators for each latent variable is greater than the cross-loading of other indicators. The variable becomes a good
comparison model if the discriminant validity is > 0.5. If the cross-loading of the relevant variable is greater than the cross-loading of other latent variables, it is valid. According to [18], a construct with formative indicators assumes that each indicator explains the characteristics of its construct domain.

Table 2. Result test of validity and reliability.

| Variable                     | Indicator | R statistic | Explanation | Cronbach alpha | Explanation |
|------------------------------|-----------|-------------|-------------|----------------|-------------|
| Management commitment (X₁)  | X₁1       | 0.775       | Valid       | 0.787          | Reliable    |
|                              | X₁2       | 0.902       | Valid       |                |             |
|                              | X₁3       | 0.857       | Valid       |                |             |
| Materials (X₂)               | X₂1       | 0.586       | Valid       | 0.775          | Reliable    |
|                              | X₂2       | 0.660       | Valid       |                |             |
|                              | X₂3       | 0.764       | Valid       |                |             |
|                              | X₂4       | 0.747       | Valid       |                |             |
|                              | X₂5       | 0.864       | Valid       |                |             |
| Processing stages (X₃)       | X₃1       | 0.855       | Valid       | 0.789          | Reliable    |
|                              | X₃2       | 0.866       | Valid       |                |             |
|                              | X₃3       | 0.814       | Valid       |                |             |
| Customer experience (X₄)     | X₄1       | 0.803       | Valid       | 0.632          | Reliable    |
|                              | X₄2       | 0.818       | Valid       |                |             |
| Attitude (X₅)                | X₅1       | 0.920       | Valid       | 0.810          | Reliable    |
|                              | X₅2       | 0.931       | Valid       |                |             |
| HAS implementation (Y)       | Y₁        | 0.869       | Valid       | 0.714          | Reliable    |
|                              | Y₂        | 0.869       | Valid       |                |             |

Figure 1. Result of the path diagram.
### Table 3. Parameter estimation.

| Variable                  | Indicator | Outer weight | Outer loading | Mean |
|---------------------------|-----------|--------------|---------------|------|
| Management commitment (X₁) | X11       | 0.713        | -             | 3.25 |
|                           | X12       | -0.288       | -             | 3.88 |
|                           | X13       | **0.725**    | -             | **4.31** |
| Materials (X₂)            | X21       | 0.231        | -             | 2.91 |
|                           | X22       | -0.703       | -             | **4.41** |
|                           | X23       | **0.699**    | -             | 4.16 |
|                           | X24       | -0.743       | -             | 4.13 |
|                           | X25       | 0.392        | -             | 4.41 |
| Processing stages (X₃)    | X31       | -0.986       | -             | **4.47** |
| Customer experience (X₄)  | X41       | **0.653**    | -             | **4.28** |
| Attitude (X₅)             | X42       | 0.498        | -             | 3.96 |
| HAS implementation (Y)    | Y1        | -            | 0.846         | 4.50 |
|                           | Y2        | -            | 0.915*        | 4.50 |

**c. Reliability.** The reliability test in PLS tests the accuracy and consistency of measuring instruments. Reliability was tested through Cronbach's alpha and composite reliability if it is greater than 0.6. Cronbach's alpha is used to measure the lower limit of the reliability of a construct, while composite reliability measures the actual reliability of a construct. The reliability test show AVE = 0.7765, composite reliability = 0.874, $R^2 = 0.4262$, and Cronbachs Alpha = 0.7171, suggesting the variables are reliable.

**d. Evaluate the goodness of fit inner model.** The goodness of fit inner model confirms the exogenous variables affect endogenous variables. The measuring uses the dependent latent variable $R^2$ and predictive relevance ($Q^2$) for the structural model. The $R^2$ explains the effect of an independent variable on the dependent variable. The $Q^2$ measures the model's observations and its parameter estimates [18]. The $R^2$ in this study is 0.4262, showing HAS implementation (Y) is influenced by independent variables by 42.62%. Predictive relevance ($Q^2$) of 0.1816 > 0 fulfills the requirements, has good predictive relevance, and is suitable for research.

#### 3.4. Hypothesis test results

Hypothesis testing (Table 4) compares the t-statistic and the t-table of 2.056 from $\alpha = 0.05$ and degrees of freedom (df) = 26. In the PLS method, hypothesis testing needs t-statistic on the path coefficient.

| Path       | Coefficient | t-statistic | p-value | Explanation |
|------------|-------------|-------------|---------|-------------|
| X₁ → Y     | 0.314       | 2.202       | 0.036   | Significant |
| X₂ → Y     | -0.173      | 0.600       | 0.553   | Not significant |
| X₃ → Y     | 0.134       | 0.651       | 0.520   | Not significant |
| X₄ → Y     | -0.105      | 0.574       | 0.570   | Not significant |
| X₅ → Y     | 0.408       | 2.448       | 0.021   | Significant |

**3.4.1. Effect of management commitment on HAS implementation.** Management commitment (X₁) has a significant effect on HAS (Y) implementation. Management has been highly committed to implementing HAS through policies in standard operating rules and procedures. According to [19], the
HAS clause requires formulating a written halal policy. According to HAS 23102, the halal policy is a written statement regarding the company's commitment to consistently producing halal products. Management needs to appoint halal supervisors and disseminate HAS to employees. The operational management can be seen in halal chicken meat from certified chicken slaughtering [20].

3.4.2. Effect of material on the HAS implementation. Material (X₃) did not have a significant effect on HAS application. According to [21], the halalness of a product is influenced by additives when processing the product. Halal products are achieved using identified materials as halal, proper storage, not contaminated with najis (ritually unclean in Islamic terms) and haram (ritually unlawful) materials, and of the best quality. The materials for production at the hotel restaurant with the sharia concept are obtained from the head office, the nearest market, and suppliers. Materials that are not yet clear as halal are still used by restaurants, for example, chicken meat that is not halal certified. Often, in Muslim-majority countries, beef and chicken are considered halal. According to HAS 23102, not halal materials must be replaced with halal materials [22].

3.4.3. Effect of processing stages on HAS implementation. The processing stages (X₄) do not have a significant effect on HAS implementation. The processing stages at the hotel restaurant with the sharia concept have met the halal requirements even though it has not been certified halal. Employees support processing according to Islamic rules. According to [23], the processing is one of the stages that must be kept halal. Production can apply HACCP and HAS as preventive and corrective actions to maintain product halalness. According to [24], knowledge of Islamic law is essential to serve halal products. The determination of the halal product includes the provision of materials, processing, storage, packaging, distribution, sales, and serving. The processing stages do not have a significant effect because the ingredients and production processes in the hotel restaurant have a sharia concept dedicated to producing halal, even though they are not halal certified. This dedication to halal production cannot directly become the basis for a halal guarantee statement if the producer does not know and proves that the only uses materials guaranteed to be halal.

3.4.4. Effect of customer experience on HAS implementation. The customer experience (X₅) does not have a significant effect on HAS implementation. Customer experience includes feeling experience and sense experience containing restaurant decoration and human resource management, for example dressing in modest uniforms according to Islamic rules. According to [25], the customer experience at sharia hotel restaurants is a service to meet consumer expectations. Consumers should feel the difference between sharia concept hotels compared to conventional hotels. According to [26], a hotel restaurant manager with a sharia concept must wear modest and closed clothes. The employee's uniform provides comfort for both Muslim and non-Muslim guests. Halal restaurants can attach a halal certificate, Al-Quran Surah 7 verse 31, "Eat and drink but don't overdo it. Really, Allah does not like excessive people’, and halal is premium quality.

3.4.5. Effect of attitude on HAS implementation. Attitude (X₆) has a significant effect on HAS implementation. According to Abd Rahman et al. [27], attitude includes religiosity, and knowledge affects the HAS implementation. Ahmad et al. [28] stated that religiosity has a significant relationship with halal food consumption behavior because individuals practice religious teachings. Individual spiritual controls behavior. According to Ruslan et al. [29], increasing consumer halal knowledge has an impact on producers. Halal knowledge affects awareness of choosing products and increases halal product demand, encouraging producers to produce halal products. According to Sumarwan [30], Indonesian Muslim consumers' decision to consume food is influenced by culture, social, personal, and psychological. Zagata [31] stated that social factors affect consumer purchases. In this study, some Indonesian have not asked about the proof of halal food to be consumed. Consumers are still reluctant to ask because they assume that food in Muslim-majority countries is halal. Increasing public awareness of halal products will demand for the halal certificate.
3.5. Managerial implications
Accelerating HAS implementation in the hotel restaurant in Malang can be done in various ways.
(a) Increasing awareness of management and employees about the urgency of halal certification through regular education and mentoring. This increase HAS knowledge and application in restaurants.
(b) Suppliers are selected based on specific criteria, namely willingness to provide halal materials.
(c) Producers carry out the process of the halal product using clean production facilities and halal standards.
(d) Producers improve customer experience to increase consumer confidence.
(e) Producers need to prepare halal supervisors for internal audits of ingredients, processes, and serving.

4. Conclusions
Investigation on factors that affecting the adoption of halal assurance system (HAS) at a restaurant in sharia concept hotel have been studied. The implementation of halal assurance system (HAS) is significantly affected by the management commitment and attitude. The materials, processing, and customer experience did not substantially affect HAS implementation. Some activities accelerate HAS implementation in the restaurant at sharia concept hotels. The periodic halal education is to increase halal awareness of management and employees. This activity can involve the tourism office, the Halal Product Guarantee Agency (BPJPH), and universities. Processing follows the halal production process. Suppliers are required to supply halal-certified materials or have a halal certificate from the material manufacturer. The guarantee of halal ingredients accelerates the process of halal certification for hotel restaurants with the sharia concept.

References
[1] Addina F N, Santoso I and Sucipto 2020 Concept of halal food development to support halal tourism: A review IOP Conference Series: Earth and Environmental Science 475 1–7
[2] Sucipto S, Kusumastuti N P A, Addina F N and Septifani R 2021 Influence of halal logo existence and quality of tempe chips on consumer purchasing decisions (Pengaruh keberadaan logo halal dan kualitas keripik tempe terhadap keputusan pembelian konsumen) J. Teknol. Ind. Has. Pertan 26 11–24 [In Indonesian]
[3] Padli R 2018 Implementation of the marketing mix in sharia hotels in the perspective of Islamic economics Sofyan Inn Hotel Unisi Yogyakarta study (Implementasi bauran pemasaran pada hotel syariah dalam perspektif ekonomi Islamstudi Sofyan Inn Hotel Unisi Yogyakarta (Yogyakarta: Univeristas Islam Indonesia) [In Indonesian]
[4] Basalamah A 2011 The presence of sharia packaging in the hospitality business in the country (Hadinya kemasan syariah dalam bisnis perhotelan di tanah air) Binus Bus. Rev.2 763–9 [In Indonesian]
[5] Nuraini S and Sucipto 2021 Comparison halal food regulation and practices to support halal tourism in Asia: A review IOP Conf. Series: Earth and Environmental Science 733 012044 pp 1–8
[6] Sucipto S, Rahman F S and Mustaniroh S A 2018 Consumer assessment analysis of performance college canteen (Analisis penilaian konsumen terhadap kinerja cantin perguruan tinggi) Ind. J. Teknol. dan Manaj. Agroindustri 7 95–106 [In Indonesian]
[7] Sucipto, Hidayati L, Perdani C G and Hasanah N 2021 Traceability of halal control point in material, production, and serving to support halal certification in Universitas Brawijaya canteen Indones. J. Halal Res. 3 75–86
[8] Puspaningtyas S D and Sucipto S 2021 Integration of halal assurance system (HAS) in the integrated management system (IMS) to support food industry performance: a review IOP Conf. Series: Earth and Environmental Science 733 012045 1–8
[9] Kamal M A, Effendi F D, Utomo M R, Sucipto S, Santoso I and Effendi U 2021 Bill of material analysis framework of food menu to increase raw material inventory efficiency and halal food inspection of culinary business IOP Conf. Series: Earth and Environmental Science 733
[10] Zannierah S, Marzuki S, Michael C H, William P and Ballantine 2014 Measurement of restaurant manager expectations toward halal certification using factor and cluster analysis *International Halal Conference, Putra World Trade Centre Kuala Lumpur*. 121 291–303

[11] Muhammad M A, Elistina A B and Ahmad S 2020 The challenges faced by halal certification authorities in managing the halal certification process in Malaysia *Food Res.* 4 170–8

[12] Ahmad A N, Abdul Rahman R, Othman M and Abidin U F U Z 2017 Critical success factors affecting the implementation of halal food management systems: Perspective of halal executives, consultants and auditors *Food Control* 74 70–8

[13] Krishnan S, Omar C M C, Zahrani, Syazwan N and Alyaa S 2017 The awareness of Gen Z’s toward halal food industry *Management* 7 44–7

[14] Hosanna M A and Nugroho S A 2014 Implementation of law number 33 of 2014 concerning guarantee of halal products on the registration of halal certificates on food products (Pelaksanaan undang-undang nomor 33 tahun 2014 tentang jaminan produk halal terhadap pendaftaran sertifikat halal pada produk makanan) *J. Huk. Adigama* 4 174–83 [In Indonesian]

[15] Abdullah S and Sutanto T E 2015 *Stress-free implementation of law number 33 Statistics (Statistika tanpa stres)* (Jakarta: Trans Media Pustaka) [In Indonesian]

[16] Sitinjak T, Durianto D, Sugianto and Yunarto H I 2004 *The consumer matrix model to create superior customer value (Model matriks konsumen untuk menciptakan superior customer value)* (Jakarta: Gramedia Pustaka Utama) [In Indonesian]

[17] Latifah I 2018 *The effect of work-family conflict on turnover intentions with satisfaction work as variable (Pengaruh konflik pekerjaan keluarga terhadap turnover intentions dengan kepuasan kerja sebagai variabel)* (Universitas Diponegoro) [In Indonesian]

[18] Bahri S and Zamzam F 2014 *Model penelitian kuantitatif berbasis SEM-Amos* (Yogyakarta: Deepublish) [In Indonesian]

[19] Ghozali I 2012 *Effects of work-out conflictsApplication of multivariate analysis with IBM SPSS 20 program program (Aplikasi analisis multivariate dengan program IBM SPSS 20)* (Semarang: Badan Penerbit Universitas Diponegoro) [In Indonesian]

[20] Prabowo S and Rahman A A 2016 Halal certification in the agricultural product processing industry (Sertifikasi halal sektor industri pengolahan hasil pertanian) *Forum Penelit. Agro Ekon.* 34 57–70 [In Indonesian]

[21] Abubakar 2009 Halal cutting technology and its application in traditional RPA (Teknologi pemotongan halal dan penerapannya di RPA tradisional) *J. Litbang Pertan.* 22 33–9 [In Indonesian]

[22] Pane R M 2017 Analysis of consumer behavior on the application of halal labeling in a product (case study UD. Sariwangi Tangerang) (Analisis perilaku konsumen atas penerapan labelisasi halal dalam suatu produk (studii kasus UD. Sariwangi Tangerang)) *J. Mozaik* 9 142–50 [In Indonesian]

[23] LPPOM MUI 2015 *HAS 23102 Guidelines for Compliance with the Criteria for the Halal Assurance System in Restaurants* (Pedoman Pemenuhan Kriteria Sistem Jaminan Halal di Restoran) (Jakarta: Amanah Prima Abadi) [In Indonesian]

[24] Syafrida 2015 Halal certificates on food and beverage products provide protection and legal certainty of Muslim consumer rights (Sertifikat halal pada produk makanan dan minuman memberi perlindungan dan kepastian hukum hak-hak konsumen muslim) *J. Huk.* 7 160–72 [In Indonesian]

[25] Ilyas M 2017 Certification and labeling of halal products from the perspective of the benefit of Al-Qadau (Sertifikasi dan labelisasi produk halal perspektif maslahat Al-Qadau) 4 357–76 [In Indonesian]

[26] Payne A and Frow P 2005 A strategic framework for customer *J. Mark.* 69 167–76

[27] Ismail M and Karebet M 2002 *Menggagas bisnis islam* (Jakarta: Gema Insani) [In Indonesian]
[28] Abd Rahman A, Asrarhaghghi E and Ab Rahman S 2015 Consumers and halal cosmetic products: Knowledge, religiosity, attitude and intention J. Islam. Mark. 6 148–63
[29] Ahmad A N, Rahman A A and Rahman S A 2015 Assessing knowledge and religiosity on consumer behavior towards halal food and cosmetic products Int. J. Soc. Sci. Humanit. 5 10–4
[30] Ruslan A A A, Kamarulzaman N H and Sanny M 2018 Muslim consumers’ awareness and perception of Halal food fraud Int. Food Res. J. 25 S87–96
[31] Sumarwan U 2003 Perilaku konsumen: Teori dan penerapannya dalam pemasaran (Jakarta: Ghalia Indonesia) [In Indonesian]
[32] Zagata L 2012 Consumers’ beliefs and behavioural intentions towards organic food. Evidence from the Czech Republic Appetite 59 81–9