

IJHE

ISSN 1999-561X

International Journal of Home Economics

Volume 19 Issue 1 2026



IFHE

INTERNATIONAL FEDERATION
FOR HOME ECONOMICS

IFHE is an international Non Governmental Organisation (INGO) in consultative status with the United Nations

Kaiser-Friedrich-Straße 13
53113 Bonn
Fon +49 (0)228 9212590
Fax +49 (0)228 9212591
E-Mail office@ifhe.org

www.ifhe.org



Editorial Team

IJHE Editor	Professor Donna Pendergast	Griffith University, Australia
Editorial Administrator	Geoffrey Reynolds	Griffith University, Australia

Editorial Board

Professor Mona Sharaf Abdelgalil	Alexandria University, Egypt
Dr Jay Deagon	Central Queensland University, Australia
Dr Adri Du Toit	North-West University, South Africa
Dr Miriam R. Ismail	University of Western Ontario, USA
Professor Emerita Sue L. T. McGregor	Mount Saint Vincent University, Canada
Dr Kathryn McSweeney	St Angela's College, Ireland
Professor Kerry Renwick	University of British Columbia, Canada
Dr Melina Solaki	Secondary Education, Greece

Website

For more information, please visit the International Journal of Home Economics website:
<https://www.ifhe.org/ejournal/about-the-journal>.

Frequency of publication

The International Journal of Home Economics is published twice a year. Papers for review will be accepted throughout the year to email: intjournalhomeeconomics@gmail.com.



IFHE
INTERNATIONAL FEDERATION
FOR HOME ECONOMICS

International Journal of Home Economics

Volume 19 Issue 1 2026

Volume 19 Issue 1 2026 Editorial.....	1
<i>Donna Pendergast (Editor)</i>	
Designing the Filipino Family Well-Being Survey.....	2
<i>Conseulo Chua, Joanne Bantang, Aurora Llige, Florenda Gabriel</i>	
The Study Among College Students of Changes in Skills to Make Japanese Traditional Dishes (Washoku)	23
<i>Madoka Hirashima, Mitsuyo Hori, Yuka Isobe</i>	
Context Matters: Structural Constraints and Assessment Equity in Home and Consumer Studies	36
<i>Elina Larsson</i>	
The Domestic Scientist at the Dewey Laboratory School	50
<i>Mary Gale Smith</i>	
Notes for Contributors	65



Volume 19 Issue 1 2026 Editorial

The International Journal of Home Economics is an open-access, peer reviewed, multidisciplinary platform for engaged home economics scholars and practitioners. We encourage submissions across the broad scope of the field. This Issue of the International Journal of Home Economics includes a diverse range of refereed papers from across many continents around the globe. Enjoy this Issue.

Professor Donna Pendergast  <https://orcid.org/0000-0002-8305-6127>
Editor *IJHE* ✉ intjournalhomeeconomics@gmail.com



Designing the Filipino Family Well-Being Survey

Conseulo Chua
University of Philippines, Philippines

Joanne Bantang
University of Philippines, Philippines

Aurora Llige
University of Philippines, Philippines

Florenda Gabriel
University of Philippines, Philippines

Abstract

The objectives of the study were to design a Filipino Family Well-being Survey (FFWS) for parents and children and determine its content validity and reliability. Quantitative and qualitative methods were used, mainly a survey. Initially, 146 items were constructed, but the number was reduced to 75 items after checking for duplication and relevance. The 75 items underwent content validity assessment by six Filipino family experts and reliability analysis, resulting in a final version with a 50-item scale. The reliability of the FFWS, using Cronbach's Alpha, resulted in a high overall reliability of $\alpha = 0.957$ for the parents' version and $\alpha = 0.949$ for the children's version. The final version of the FFWS comprises 50 items across eight dimensions: resource adequacy (12 items), comfortable lifestyle (5 items), financial security and stability (9 items), good family relationships (9 items), good parenting (4 items), good health of family members (2 items), virtuous family life (6 items), and family satisfaction and contentment (3 items). The different dimensions of FFWS have a moderate to high reliability of $\alpha = 0.737$ to $\alpha = 0.929$ for the parents' version and between $\alpha = 0.680$ to $\alpha = 0.919$ for the children's version.

KEYWORDS: FAMILY WELL-BEING, FILIPINO FAMILY, INSTRUMENT DEVELOPMENT

Introduction

Background of the Study

The family is often regarded as the basic unit of society; therefore, it logically plays a crucial role in the development of larger communities and the attainment of national goals. There is considerable attention and a growing body of scholarly work aimed at conceptualizing (Chua et al., 2022; Crandall et al., 2023; Lee & Han, 2024; McGregor, 2020; Noor et al., 2014; Poston et al., 2003) and measuring family well-being (Brown et al., 2006; Hoffman et al., 2006; Isaacs et

al., 2007). Most of these studies emphasize heavily the health-related aspects of family well-being (e.g., members with special needs, disabilities, mental disorders, or chronic illnesses) (Aznar & Castañón, 2005; García-Grau et al., 2018; Sümen & Öncel, 2024; Vanderkerken et al., 2018), which is indeed important when public health rests on maintenance, prevention, and intervention that starts with the family. The vital role of the family in promoting good health is undeniable; however, its concerns, which can impact society, extend far beyond public health issues. Broader elements of well-being beyond healthcare are just as important. As explained by Bronfenbrenner's Ecological Theory (1979), the family is part of an individual's microsystem, comprising their immediate living and learning environment. In short, the family is the site of core life experiences, milestones, and challenges that impact and shape society, depending on whether struggling, surviving, or flourishing families exist. Therefore, there needs to be a holistic understanding of the family and appreciation for the myriad of things and situations that affect their well-being as a unit.

Several tools have been developed to measure family well-being, including the Beach Center Family Quality of Life Scale (Hoffman et al., 2006), which comprises five domains: family interaction, emotional well-being, material well-being, parenting, and disability-related supports. The Family Quality of Life Survey (Brown et al., 2006) was developed for families caring for members with disabilities, utilizing a five-point Likert scale and narrative report. This instrument was widely used in various countries and was translated into many languages, but it was later updated to the International Family Quality of Life Project, where the proponents refined the nine domains: family relationships, health, finances, influence of values, leisure and recreation, community interaction, careers and planning for careers, support from other people, and support from disability-related services (Isaacs et al., 2007).

While other nations can adapt these tools, the concept of family well-being is complex and multidimensional. Well-being tools measure the presence or absence of certain characteristics or situations, which will greatly vary depending on the day-to-day lives of the families. Therefore, family well-being is highly context-specific due to the differences in cultures and values that are undoubtedly entrenched in the way families form, grow, and thrive. The intricacy surrounding the family and the concept of well-being requires an understanding that is tailored, taking into account certain nuances that are not captured by prevailing Western conceptualizations and tools. In the Asian region, scholars from Hong Kong and Malaysia have developed their own Family Well-being Index. Based on Noor and colleagues (2014), the Malaysian Family Well-being has five domains: family relationships, economic situation, health and safety, community relationships, and religion/spirituality. On the other hand, Hong Kong Chinese Family Well-being has six domains: solidarity, family resources, family health, social involvement, social resources, and work-life balance (Wong et al., 2022).

The Philippines could benefit from having its own conceptualization of family well-being and a corresponding tool for its measurement. Several Filipino scholars have studied well-being, but they have primarily focused on a single aspect or an individual-based group. These are just a few of the more recent studies related to family and well-being, showing vast areas of exploration. For example, Villareal-Aguila (2010) studied family well-being in the context of happiness versus unhappiness; Chen and colleagues (2017) uncovered the implications of changes in family structure and composition on one's psychological well-being; Becina and Carpio (2019) looked into family structures and functions of Filipino families with young children; Masanda (2021) explored the dynamics of contemporary Filipino families in relation

to developing a family-oriented counseling program for the attainment of quality of life; Bandoles (2022) investigated the life satisfaction of elderly Filipinos; and Felipe and colleagues (2023) examined the connection between family health and mental well-being of undergraduate Filipinos.

The more comprehensive attempt at conceptualizing well-being in the Filipino context was made in 2000, through a project conducted by SyCip and colleagues, which involved a nationwide study and survey on *magandang buhay* or well-being. However, this emphasized the individual rather than the family. Nonetheless, it is a pioneering project that underscores the importance of studying deeply the concept of well-being within a local context. Twenty-two years later, a group of Filipino scholars proposed a pioneering holistic conceptualization of the Filipino Family Well-being (FFW) through a qualitative study that surveyed a total of 63 families from low-, middle-, and high-income brackets. Through this research, a holistic understanding of what comprises FFW was formed based on the respondents' answers. Interestingly, regardless of the socioeconomic level of the family, the dimensions that emerged were consistent in the following eight dimensions: resource adequacy, comfortable lifestyle, financial security and stability, good health of family members, good family relationships, good parenting, virtuous family living, and family satisfaction and contentment (Chua et al., 2022). The objectives of this research were to (1) design a Filipino Family Well-being Survey (FFWS) for parents and children, and (2) to determine the content validity and reliability of the instrument.

Significance of the Study

The 1987 Philippine Constitution, in Section I, Article XV, stipulates that, “The state recognizes the Filipino Family as the foundation of the nation.” The law mandates the active promotion and development of the Filipino family as its “basic autonomous social institution.” By virtue of Executive Order No. 238, dated 2003, a National Steering Committee on the Filipino Family was established to oversee all policies and programs related to strengthening and supporting Filipino families. The Department of Social Welfare and Development (DSWD) is the primary agency of the Philippine government responsible for social welfare programs (SWPs). It envisions “an empowered society where the poor, vulnerable, and disadvantaged sectors have immediate and equitable access to opportunities for an improved quality of life” (DSWD, n.d.). Some of its SWPs include the *Kapit-Bisig Laban sa Kahirapan* (Arm in Arm Against Poverty)—Comprehensive and Integrated Delivery of Social Services (*Kalahi-CIDDS*), established in 2003. It is a program that helps communities take ownership of identifying their problems, mostly related to poverty, and taking action to address them (DSWD, n.d.). Another is the *Pantawid Pamilyang Pilipino Program* (Bridging Program for the Filipino Family), a conditional cash transfer program established in 2008 to help poor families improve in areas such as health, education, and parenting, among others (DSWD, n.d.). A more recent family initiative by the DSWD is *Pamilya sa Bagong Pilipinas* (The Family in the New Philippines), a family welfare model described as “rights-based, family-oriented, and inclusive,” which features the transition of Filipino families across various stages (DSWD, 2025). Aside from the work of the DSWD, in 2015, the Philippine government outlined in its national vision called *AmBisyon Natin 2040* (Our Ambition 2040), that by this year,

we will all enjoy a stable and comfortable lifestyle, secure in the knowledge that we have enough for our daily needs and unexpected expenses, that we can plan and prepare for our own and our children’s future. Our family lives together in a place of our own, and we have the freedom to go where we desire, protected and enabled by a clean, efficient, and fair government. (National Economic and Development Authority [NEDA], 2016, para. 4)

Finally, in the most recent Philippine Development Plan 2023-2028, the administration presented the country's development roadmap, where salient points for improvement and action greatly depend on the flourishing of Filipino families (NEDA, 2023). As explained, the Philippine government has lofty goals and several agencies and programs geared toward assisting Filipinos in achieving a quality of life; however, there is no unified, comprehensive, and concrete understanding of what comprises FFW, and no measure to describe its current state until this study.

It is, therefore, the hope of the proponents that the FFWS will be used nationwide to support these national goals and initiatives in better planning, developing, implementing, and evaluating programs geared toward addressing the concerns of Filipino families. This is an essential tool because, first, it will help policymakers and social workers develop programs that are more aligned with the specific needs of Filipino families, as it is based on a validated instrument that accurately measures the construct of FFW. The previous and current government programs are based on different and most likely disjointed data collection instruments designed by various committees that may not have a complete picture of FFW. In line with this, offering this data-driven and evidence-based tool will help the officials and practitioners make informed decisions on policy interventions and public initiatives.

Second, since this instrument measures the eight dimensions of FFW, it can accurately pinpoint specific areas of concern; hence, it provides a deeper insight into the underlying issues of the family, which facilitates more specific and focused interventions. For example, when resources are low, is a livelihood program the best support? However, why are many livelihood programs often short-lived or ineffective? What does it say when, using the FFWS, families are shown to be low in resource adequacy but high in family satisfaction and contentment? How can social workers help elevate the ambitions of families? Is it even plausible to make them dream bigger, or is it a futile effort? The point is that this FFWS has considerable potential in revealing the nuances surrounding Filipino families, including their values, goals, needs, and wants.

Finally, in relation to the previous point on providing deeper insights into families, the FFWS accounts for the various notions and ways in which families achieve quality of life. Case in point, while material resources are important, in the case of Filipino families, the conceptualization of FFW takes a unique turn, where the provision of resources is not always the answer to the challenges. In fact, Filipino families reported being happy and content, despite often lacking resources, as long as the family is intact (Chua et al., 2022). Therefore, from a policymaker's point of view, it is important to acknowledge that to achieve family well-being, the assistance route should not only be economically driven. As evidenced by the earlier study on FFW, Filipino families draw on other dimensions when evaluating their well-being (Chua et al., 2022). All these points underscore the importance of developing a FFWS, the process of which is outlined next.

Methodology

Item Generation and Developing the Preliminary Scale

To ensure that the construct of Filipino family well-being (FFW) is properly articulated prior to scale development, the conceptualization of FFW (Chua et al., 2022) was adopted. The findings in this study led to the identification of eight dimensions of Filipino family well-being (Figure 1) and corresponding indicators (Table 1), which served as a framework for generating items for the FFWS. To create an item pool for the preliminary FFWS (parents' version and children's version), the four research team members separately wrote items for each FFW dimension and indicator. This process resulted in an initial pool of 146 statements, which was eventually trimmed down to 75 items after excluding repetitive items.

Content Validation

The preliminary FFWS (FFWS-75) was subjected to content validity following the six-step content validation procedures provided by Yusoff (2019)—“preparing a content validation form, selecting a review panel of experts, conducting content validation, reviewing domain and items, providing score on each item, and calculating Content Validation Index (CVI)” (p. 50). The content validation tool (CVT) involved a 4-point Likert scale that allowed the experts to indicate the relevance of each FFWS item (from high relevance to no relevance) in measuring the dimension of Filipino Family Well-being where the item belongs. The CVT also solicited the experts' comments on each survey item, as applicable.

Six experts from different sub-disciplines of home economics that deal with different aspects of family well-being were selected (i.e., home economics education, home management, family life and child development, food science and nutrition, and clothing and interior design). All experts were Filipino PhD degree holders who were either current or retired professors in home economics. The inclusion criteria ensured that the content validators were well-versed in family well-being in the Filipino context. The recommended number of content validators should be at least six and not more than 10 (Yusoff, 2019).

During the content validation process, the preliminary FFWS was sent electronically to each expert. The experts reviewed each item and domain and provided a score for the relevance of each item. The CVTs were returned to the research team within a month. Subsequently, a CVI was computed. An item was considered valid if the CVI was at least 83%. Since there were six content validators, at least five should tag the item as relevant or highly relevant to the dimension of Filipino family well-being under consideration.

A revised 70-item FFWS (FFWS-70) was created based on the CVI scores for each item and the experts' comments. After this, the FFWS was pilot tested on five parents and five adult children. Seven respondents reported no issues with the FFWS. Three respondents provided comments, which were taken into consideration when rephrasing some of the items.



Figure 1. Filipino Family Well-being Dimensions

Note. Permission granted by the International Journal of Home Economics (Chua et al., 2022). Conceptualization of Filipino family wellbeing. International Journal of Home Economics. 15(2), 103-114.)

Table 1. Dimensions and Indicators of Filipino Family Well-Being

Filipino Family Wellbeing Dimensions <i>Definition</i>	Indicators
Resource Adequacy <i>This dimension pertains to the ability of the family to acquire or access basic needs such as food, clothing, shelter, health care, and education.</i>	1. Family has sufficient food to eat every day 2. Family can send children to school 3. Family has access to medical and health needs 4. Family has sufficient resources to meet daily needs 5. Family members have adequate clothing 6. Family has a decent and safe dwelling space
Comfortable Lifestyle <i>This dimension refers to the ability of the family to enjoy simple leisure and comforts of life and their capacity to choose or acquire things that they want.</i>	1. Family can provide the simple wishes of children 2. Family has choice over basic needs (e.g. choosing the food and clothing that they like) 3. Family can enjoy simple vacations, leisure activities, and simple luxuries 4. Family can afford to celebrate special occasions 5. Family members have sufficient time to rest and relax
Financial Security and Stability <i>This dimension refers to the regularity and stability of the family's income, their capacity to acquire assets,</i>	1. Family has a regular and stable source of income

Filipino Family Wellbeing Dimensions	Indicators
Definition	
<i>and their capacity to save and financially prepare for the future.</i>	2. Family has the financial resources to acquire assets 3. Family has enough savings for emergencies and future needs
Good Health of Family Members <i>This refers to the general health of family members.</i>	1. All family members are generally healthy 2. There is absence of long-term illness in the family
Good Family Relationships <i>This dimension refers to the positive, loving, and harmonious relationships among family members, family togetherness, and their capacity to support each other and solve internal problems.</i>	1. Family can solve internal problems and challenges 2. Family has a positive, loving, and harmonious relationship 3. Family is complete (not broken) 4. Family spends time together 5. Family members help each other 6. Family has positive communication 7. Family is happy as a whole
Good Parenting <i>This refers to the ability of the parents to raise morally upright children and provide the necessary guidance.</i>	1. Parents provide proper guidance to children 2. Parents serve as good role models to children 3. Parents are able to raise good children 4. Parents can enable children to finish their education
Virtuous Family Living <i>This refers to family members practicing sound moral values and having faith in God. This entails refraining from vices and engaging in charitable acts.</i>	1. The family has faith in God 2. The family practices good moral values
Family Satisfaction and Contentment <i>This refers to the general satisfaction that family members feel with their living standards.</i>	1. The family is satisfied with their standard of living 2. The family is contented with what they have

Note. Permission granted by the International Journal of Home Economics (Chua et al., 2022). Conceptualization of Filipino family wellbeing. International Journal of Home Economics. 15(2), 103-114.)

Reliability Analysis of Filipino Family Well-being Survey

The FFWS-70 was administered to parents and adult children to test its reliability using online and face-to-face methods. The sample for the reliability analysis comprised 217 adult children and 60 parents. The children comprised 179 (82.5%) females and 38 (17.5%) males, with ages ranging from 18 to 25 years old. Most were Roman Catholics (60.8 %), while the rest came from other Christian denominations. Most children (77%) lived in the same household as their parents. They came from various regions in the Philippines, the majority coming from Region 1 (Ilocos Region). As for the parent respondents, 50 (83.3 %) were mothers and 10 (16.7%) were fathers. Their ages ranged from 30 to 59 years old. The majority of them (75 %) were Roman Catholics. They belonged to varied income groups, with 60% coming from the middle-income bracket. The parents were located in various regions in the Philippines. However, most came from Metro Manila, the capital of the Philippines, and nearby rural areas such as Rizal, Bataan, and Laguna. The children respondents were selected based on the criteria that they should be between 18

and 25 years old, single, and Filipinos residing in the Philippines. The same inclusion criteria were followed for the parent respondents, except that they should be between 18 and 59 years old. The respondents were reached through snowball sampling and referrals.

A Google Form version of the FFWS was designed to facilitate online data collection. Subsequently, a “Call for Respondents” notice was posted on social media, which provided an overview of the survey, the inclusion criteria, and the links to the FFWS Google Forms. Informed consent was secured before the survey by linking an Informed Consent Form (ICF) to the FFWS Google Forms. A total of 235 adult children responded to the online survey. However, 18 respondents were excluded because they did not meet the selection criteria for age, resulting in a final count of 217. On the other hand, only 56 parents answered the online survey. Face-to-face data collection was performed to reach more parent respondents. This method yielded an additional four respondents, totaling 60 parents.

The internal consistency of the FFWS and its subscales was measured using Cronbach’s Alpha (α) in SPSS version 29. The α values for the scale, if each item were deleted, were also examined. The acceptable range of α value considered for the scale is 0.7 to 0.8 (Kline, 1999; Tavakol & Dennick, 2011). For scales with fewer items, values around 0.6 are still considered reasonable and adequate (Taber, 2018). In fact, Cronbach (1951) has argued that the main point in instrument development is that the scores obtained when using the instrument have to be interpretable, and this is “often possible without needing very high values of alpha” (p. 1288).

Special attention was also given to items with very high α values since there are authors who cautioned about the high values stating that it could indicate redundant items or a lengthy scale (Panayides, 2013). There is no consensus, though, on the range of acceptable or ‘too high’ α values. There are reports that values ranging from 0.70 to 0.95 are acceptable while there are those who suggest that values >0.90 already suggest redundancy in items (Panayides, 2013; Tavakol & Dennick, 2011). There are also experts who opined that α values more than 0.95 or 0.99 are the values to watch out for (Frost, n.d.) and deleting items to shorten the test may be more efficient or usable without affecting the internal reliability of the scale. Thus, the quantitative results were examined and correlated with the item-total correlation and qualitative analysis of the items. If high α values are paired with high inter-item correlations, it may also exhibit a too specific or narrow coverage of the construct under consideration (Panayides, 2013). There seems to be a consensus that the corrected item-total correlations should range between .30 and 0.70 for a good scale (Ferketich, 1991; Field, 2018).

Four items that contributed to lower overall scale reliability were removed. Six other repetitive items were also deleted, resulting in an FFWS of 60 (FFWS-60) items. The α of the FFWS-60 was then determined. After this, a final FFWS version with 50 items (FFWS-50) was constructed, which was subjected to another round of reliability analysis.

Decision Parameters on Removing Items

Items were removed from the scale based on two criteria: redundancy and the inability to make a meaningful contribution to the scale. Items with a corrected item-total correlation of more than 0.70 were removed from the scale if they replicated another item. Similarly, items that were very similar to another item, upon visual inspection, were deleted from the scale even if their item-total correlations did not exceed 0.70. On the other hand, items with corrected item-total correlation that did not have at least 0.30 in either the total scale or the sub-scale were also removed because they contributed poorly to the reliability of the scale.

Ethical Considerations

Ethical principles were practiced throughout the study. An informed consent form was presented and secured before data collection to protect the participants' welfare. The ICF contained information on the purpose of the study, study procedures, duration of participation, voluntary participation, risks, benefits and incentives, expenses, and confidentiality.

Results

Preliminary Filipino Family Well-being Survey (FFWS-75)

The statements in the FFWS-75 were spread out across the eight dimensions of family well-being. There were 20 items under resource adequacy (RA), 9 items under comfortable lifestyle (CL), 11 items under financial security and stability (FSS), 14 items under good family relationships (GFR), 7 items under good parenting (GP), 4 items under good health of family members (GHFM), 7 items under virtuous family life (VFL), and 3 items under family satisfaction and contentment (FSC). The FFWS follows a Likert scale format, which measures family well-being based on how much an individual agrees or disagrees with specific statements in the survey. Each survey item was scored from one to five, with five as the highest score for positively stated items. Reversed scoring is followed for negatively stated items (Table 2).

Table 2. FFWS Item Scoring Guide

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Positively Stated Items	5	4	3	2	1
Negatively Stated Items	1	2	3	4	5

Content Validity of the Preliminary Family Well-being Survey

The CVI values of the preliminary FFWS items are presented in Table 3. As shown, 68 out of the 75 items had CVI values of at least 0.83, indicating that these items are relevant to the construct of FFW and to the specific FFW dimension to which the items belong. On the other hand, there were 6 items that had CVI scores of less than 0.83, which signified that these items are not highly relevant in measuring FFW. Upon inspection, 4 of these items were deleted from the item pool. However, 2 items with CVI values of 0.67—"Our family can grant the simple wishes/wants of the children" and "We can afford to eat the food that we like" were retained because these items reflect indicators that are salient among Filipino families (Chua et al., 2022). Aside from the CVI scores, the content validators also provided qualitative comments on some items in the FFWS to improve the structure of the items. Considering the quantitative and qualitative outcomes of the content validation, a revised FFWS was assembled.

Table 3. Content Validation Index Scores of the FFWS-75 Items

Dimension (Number of Items)	Number of Items According to CVI Score	
	≥ 0.83	< 0.83
Resource Adequacy (20)	19	1
Comfortable Lifestyle (9)	5	4
Financial Security and Stability (11)	11	0
Good Family Relationships (14)	14	0
Good Parenting (6)	5	1
Good Health of Family Members (4)	4	0
Virtuous Family Life (7)	7	0
Family Satisfaction and Contentment (3)	3	0
TOTAL	68	6

Note. A CVI score of at least .83 is required to consider an item as valid

Final Filipino Family Well-being Survey (FFWS-50)

The FFWS-50 is similar in format, structure, scoring scheme, and general content to the preliminary FFWS, except for the number of items. It contains items that are spread across the eight dimensions of FFW: RA (12 items), CL (5 items), FSS (9 items), GFR (9 items), GP (4 items), GHFM (2 items), VFL (6 items), and FSC (7 items). There are two versions of the FFWS—one for parents and one for children. The two versions are identical except for five statements under the dimension “good parenting.”

The FFWS-50 can be administered to Filipino families with at least one child and one parent. In the FFWS, the family refers to the immediate family, including parents, children, spouse, and siblings who may be related by blood or adoption. The FFWS is intended to measure the well-being of families from different income levels and localities (i.e., rural or urban). Further, the FFWS can be answered by either parent (or both parents) and any adult child of the family. The FFWS is designed as a self-administered instrument. However, it may also be administered by the researcher or a research assistant, depending on the nature of the research or the characteristics of the respondent.

The scoring procedures of the FFWS are straightforward. Each item is scored according to the guidelines in Table 2. To determine the total FFWS score, the average score of all items is computed, resulting in a score from one to five. For families wherein both parents are asked to separately answer the FFWS, the average of their scores should be obtained. The final FFWS scores may be interpreted based on the parameters in Table 4.

Table 4. FFWS Total Score Interpretation

Total Score	Interpretation
1 to 2.99	Low level of family well-being
3 to 3.99	Moderate level of family well-being
4 to 5	High level of family well-being

Reliability of the Final Filipino Family Well-being Survey (FFWS-50)

Both versions of the FFWS, one for parents and the other for children, were analyzed for their reliability. As seen in Table 5, the α results show that both have very good internal consistency; the scale for parents has a 0.957 α value and 0.949 for the children (Table 5). An analysis of the α values associated with each item ranges from 0.955 to 0.957 (parents' version) and 0.947 to 0.950 (children's version), which are around the same value as their respective total α . The results for both versions suggest that the retained items in this shortened scale contribute well to measuring the overall construct of family well-being. There is no specific item that will cause a substantial change in α value if removed.

Table 5. FFWS Reliability Statistics

	N items	Cronbach's Alpha	
		Parent Version	Children Version
Entire FFWS	50	0.957	0.949
<i>[Dimension]</i>			
Resource Adequacy	12	0.889	0.821
Comfortable Lifestyle	5	0.863	0.857
Financial Security and Stability	9	0.832	0.867
Good Family Relationships	9	0.929	0.919
Good Parenting	4	0.888	0.892
Good Health of Family Members	2	0.742	0.680
Virtuous Family Life	6	0.887	0.895
Family Satisfaction and Contentment	3	0.737	0.696

For the parents' version, the corrected item-total correlations are of moderate to strong correlations; all items have values of more than 0.3, indicating that items correlate well with the scale. On the other hand, the children's version of FFWS has 3 items with low corrected item-total correlations (values range from 0.219 to 0.252). These items are three of the six negatively stated items of the scale, namely: RA 10: "We have difficulty paying the necessary hospital bills" (0.252), RA 13: "We borrow money to sustain the needs of our family" (0.219), and FSC 3: "My family is not satisfied or contented with what we have." (0.225). This could mean that the items may not be contributing meaningfully to the scale's overall reliability. These 3 items, however, are retained since the reliability test for each subscale resulted in acceptable levels of corrected item-total correlations (more than 0.30), indicating their contribution to measuring the subscales. Also, the parents' version of the scale has substantial correlations for the same items.

It should be noted, nevertheless, that children's responses to negatively stated items should be addressed during the data gathering to ensure valid responses. In earlier versions of the scale, the items removed due to low corrected item-total correlations were also negatively stated. In fact, the three remaining negatively stated items (e.g., RA 19, FSS 10, and FSC 1) also have the lowest corrected item-total correlation with values ranging from 0.309 to 0.317, just slightly above the 0.30 reference.

As a multi-dimensional scale with eight dimensions, the α and the item-total correlations for each subscale are also reported. The parents' version of the scale has acceptable α values, with the GFR having the highest α value of 0.929 and the FSC α value of 0.737, even with just three items (Table 5). For the children's version, there are α values below the generally acceptable level of ≥ 0.70 . These are GHFM ($\alpha = 0.680$ with 2 items) and FSC ($\alpha = 0.696$ with 3 items). While the values for the two dimensions could be argued to be due to fewer items, since α values can increase with simply adding more items (Cortina, 1993; Nunnally & Bernstein, 1994), these values are still considered reasonable and adequate (Taber, 2018).

In light of reports indicating high α values, and considering that the overall scale and two of its dimensions have high α values (i.e., more than 0.90), the FFWS was examined to further assess items with corrected item-total correlations of more than 0.70. Specifically, the items were examined as to how they are phrased, whether they are redundant with some items, or have too specific examples.

Resource Adequacy Subscale

For the RA subscale, both versions exhibit desirable item-total correlations of more than 0.3 (Table 6). There are 3 items, however, with more than 0.70 item-total correlations; namely, RA 5: "Our family lives in a decent and comfortable house," RA 9: "Our family members have access to quality medical care when needed," and RA 12: "Our family can afford to pay utility bills on time." The items are not necessarily redundant; the topics pertain to various areas where resources are used (e.g., education, medical needs, utilities) and are not overly specific compared to other items. In this regard, the items may be retained, considering that the content validity results for these items demonstrate high relevance to measuring the subscale.

Table 6. Reliability Analysis for the Resource Adequacy Subscale

Resource Adequacy	Parents' Version		Children's Version	
	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
RA 1: Our family has enough food to eat every day.	0.524	0.884	0.525	0.805
RA 4: Our family can afford to send all children to a good school.	0.639	0.879	0.512	0.804
RA 5: Our family lives in a decent and comfortable house.	0.732	0.876	0.580	0.801
RA 6: We live in an area that is safe from natural disasters.	0.628	0.879	0.505	0.805
RA 7: We feel safe living in our neighborhood.	0.670	0.878	0.473	0.807
RA 9: Our family members have access to quality medical care when needed.	0.704	0.874	0.608	0.796
RA 10: We have difficulty paying the necessary hospital bills.	0.487	0.891	0.353	0.820
RA 11: Our family can provide adequate clothing for its members.	0.639	0.881	0.616	0.798
RA 12: Our family can afford to pay utility bills on time.	0.759	0.872	0.623	0.796
RA 13: We borrow money to sustain the needs our family.	0.596	0.884	0.338	0.824
RA 17: We are living in a place that is safe from crime.	0.446	0.888	0.497	0.806
RA 19: It's difficult for my family to make ends meet.	0.630	0.879	0.309	0.825

Comfortable Lifestyle Subscale

The CL subscale has an acceptable α of 0.863 and 0.857 for the parents' and children's versions, respectively, with 5 items (Table 5). Qualitative analysis of the items that have high item-total correlation (CL 2: "We can afford to eat the food that we like," CL 3: "Our family can go on family trips or vacations," and CL 5: "We can buy gifts for family members during special occasions." shows that these are unique items, and deleting these items will result in the lowest α value for this dimension, especially for the parents' version (Table 7). Thus, these items were retained.

Table 7 Reliability Analysis for the Comfortable Lifestyle Subscale

Comfortable Lifestyle	Parents' Version		Children's Version	
	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CL 1: Our family can grant the simple wishes/wants of the children.	0.659	0.847	0.609	0.844
CL 2: We can afford to eat the food that we like.	0.774	0.814	0.728	0.814
CL 3: Our family can go on family trips or vacations.	0.520	0.876	0.738	0.811
CL 4: Our family can enjoy simple leisure activities together.	0.711	0.832	0.641	0.836
CL 5: We can buy gifts for family members during special occasions.	0.814	0.802	0.662	0.831

Financial Security and Stability Subscale

The FFS subscale, with 9 items, has an α of 0.832 for the parents' version and 0.867 for the children's version (Table 5). The items FSS 2: "Our breadwinner can lose his/her job any moment," and FSS 10: "My family does not have financial resources during emergencies" have low corrected item-total correlation in the children's version, and removing the items can slightly improve the subscale's α . The items, however, may be retained since the values are acceptable in the parents' version. One item, FSS 3: "At least one child needs to work to support our needs," was removed due to its low reliability and correlation values. For both versions, the corrected item-total correlations are below 0.3, indicating that it does not correlate well with the overall scale (Table 8). Another item that was removed is FSS 12: "We would likely depend on other people financially after retirement" because the test showed a very weak negative correlation, i.e., corrected item-total correlation = -0.018 (children's version). Excluding those 2 items substantially improved the internal reliability of the dimension and the entire scale, especially for the children's version.

Table 8. Reliability Analysis for the Financial Stability and Security Subscale

Financial Security and Stability	Parents' Version		Children's Version	
	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
FSS 1: Our family has a stable source of income.	0.690	0.800	0.712	0.844
FSS 2: Our breadwinner can lose his/her job any moment.	0.373	0.834	0.283	0.884
FSS 4: Our family has the financial capacity to buy a house.	0.464	0.824	0.710	0.842
FSS 5: Our family can afford to buy luxuries.	0.506	0.819	0.705	0.843
FSS 6: We have enough savings for emergencies.	0.579	0.810	0.746	0.841
FSS 7: We have enough financial means to prepare for retirement (e.g. savings, social security, investments, business).	0.621	0.806	0.701	0.843
FSS 8: Our breadwinner has a permanent job or a regular source of income.	0.635	0.807	0.632	0.850
FSS 9: My family has resources to buy a car/vehicle.	0.620	0.805	0.727	0.840
FSS 10: My family does not have financial resources in case of emergency.	0.445	0.824	0.274	0.882

Good Family Relationships Subscale

The α results of the GFR subscale are already very good, with 0.929 for the parents' version and 0.919 for the children's version (Table 5). This subscale was reduced from 12 to 9 items. Three items in the children's version of the scale presented problematic values for corrected item-total correlations and were thus removed. Items GFR 2: "Our family finds it difficult to resolve internal conflicts," GFR 8: "It is difficult to get help from family members," and GFR 11: "My family finds it difficult to have open communication" have correlation values below the acceptable 0.3 (Table 9). In addition, removing the items resulted in a significantly improved internal reliability for both versions.

There are items (GFR 5, 9, & 10) that have very high corrected item-total correlations, but upon examining the statements, they are unique and present varied descriptions of having good relationships. In fact, the descriptions *buo* (complete), *masaya* (happy), and having a loving relationship were articulated by the respondents during the FFWS conceptualization study, and therefore, can be considered salient concepts and were favorably validated by experts. Thus, these items are retained.

Table 9. Reliability Analysis for the Good Family Relationships Subscale

Good Family Relationships	Parents' Version		Children's Version	
	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
GFR 1: Our family collectively finds solutions to our problems.	0.684	0.924	0.482	0.923
GFR 3: Members of my family have a harmonious relationship.	0.703	0.924	0.495	0.924
GFR 4: Our family makes it a point to spend quality time together.	0.673	0.926	0.730	0.909
GFR 5: We consider our family as complete.	0.811	0.916	0.699	0.912
GFR 7: Our family members help each other during difficult times.	0.754	0.920	0.752	0.907
GFR 9: In general, we are a happy family	0.837	0.915	0.870	0.898
GFR 10: We have a loving relationship as a family.	0.825	0.915	0.884	0.897
GFR 12: Members of my family treat each other with respect.	0.708	0.923	0.723	0.910
GFR 13 Members of my family enjoy bonding moments together.	0.702	0.924	0.814	0.903

Virtuous Family Life Subscale

The VFL subscale has much better internal reliability and corrected item-total correlations results among all others (Table 10). For both versions, the α values are within the acceptable range of 0.70 to <0.90, with the α values of the individual items around the same value for the dimension and have more than 0.3 minimum correlation. Although some correlation values for both versions have more than 0.7 corrected item-total correlation values, indicating possible redundancy with other items, a qualitative analysis of the items shows various aspects of virtuous living, from belief in God to having good moral values. These items do not overlap with other dimensions, and even with items within the VFL dimension. If items VFL 1: "We are God-fearing," VFL 2: "Our family has a strong faith in God," as well as VFL 5: "We are able to sustain or support spiritual needs of the family," and VFL 6: "Our family is guided by good moral values" are removed simply because of the high correlation values, the FFWS may lose its power to anchor the family well-being to faith in God and moral values, indicators that are unique to the Filipino culture and have been prominent themes emanating from the conceptualization stage of the instrument. The CVI results from experts also support the retention and inclusion of the above-mentioned items.

Table 10. Reliability Analysis for the Virtuous Family Life Subscale

Virtuous Family Life	Parents' Version		Children's Version	
	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
VFL 1: We are God-fearing.	0.835	0.849	0.711	0.879
VFL 2: Our family has a strong faith in God.	0.839	0.848	0.699	0.88
VFL 3: Our family members behave according to good moral values.	0.711	0.866	0.712	0.878
VFL 5: We are able to sustain or support the spiritual needs of the family.	0.589	0.891	0.783	0.867
VFL 6: Our family is guided by good moral values.	0.746	0.86	0.777	0.868
VFL 7: Our family makes it a point to help those in need.	0.559	0.888	0.642	0.89

Good Parenting Subscale

The GP subscale, reduced to 4 items, also has acceptable α values with 0.888 for the parent version and 0.892 for the children's version (Table 5). All the corrected item-total correlations are more than 0.3, though most items have more than 0.7 values, indicating a possible redundancy with other items within the GP dimension (Table 11). Examining the items, GP 3: "We look up to our parents as good role models," and GP 5: "Our parents serve as good role models to us," indeed appear similar, and they both have correlation values greater than 0.7 for both versions. Thus, 1 of the items (i.e., GP 3) was removed.

Table 11. Reliability Analysis for the Other Subscales

Good Parenting, Good Health of Family Members and Family Satisfaction and Contentment	Parents' Version		Children's Version	
	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
GP 1: Our parents provide guidance for us to finish our education.	0.832	0.829	0.795	0.848
GP 2: Our parents fulfill their duties for our educational needs.	0.646	0.898	0.796	0.848
GP 4: Our children are being raised with good moral values.	0.829	0.829	0.691	0.889
GP 5: Our parents serve as good role models to us.	0.727	0.868	0.789	0.851
GHFM 1: Our family members are generally healthy.	0.594	.	0.517	.
GHFM 4: Members of our family enjoy good health.	0.594	.	0.517	.
FSC 1: We are discontented with our current standard of living.	0.626	0.57	0.603	0.477
FSC 2: My family is satisfied with whatever blessings we have.	0.491	0.752	0.381	0.753
FSC 3: My family is not satisfied or contented with what we have.	0.641	0.568	0.605	0.475

Good Health of Family Members and Family Satisfaction and Contentment Subscales

The last two subscales, GHFM and FSC, although consisting of only 2 and 3 items, respectively, have acceptable levels of α (Table 5). All the values under the corrected item-total correlations are also above 0.3 (Table 11), indicating a good correlation between the items and the dimension. There are no specific issues in including these items for the scale.

Conclusion and Recommendations

This study developed a metric that measures FFW based on salient dimensions and indicators that capture the real meaning of family well-being for Filipinos. The FFWS statements demonstrate good content validity, indicating that each item effectively contributes to measuring FFW. In addition, the generally high reliability levels of each dimension and the entire scale demonstrate the FFWS's ability to consistently measure FFW.

In improving the overall scale and the dimensions, selected items, which do not correlate well with other items within the dimension and the overall scale, should be removed. Items that may be redundant based on quantitative and qualitative analyses may be removed to further shorten the scale without significantly reducing the internal reliability. These same items may be retained to serve as consistency checks and to retain the content validity and discriminating power of the scale.

A study on how negatively phrased statements in measuring family well-being may be further conducted. While it is generally recommended that negatively stated items should be included to reduce item response bias, it is essential to assess how respondents, particularly child respondents, generally understood the statements. Does it really address item response bias, or does the phrasing of the items confuse respondents and unnecessarily encumber them in shifting their mindset of the appropriate response anchor to tick or encircle?

To ensure its usability and capture more members of the population, it is recommended that the scale be translated into the major languages of the Philippines. This is particularly useful since self-administration of the instrument is the most efficient way of gathering data.

Finally, the study recommends utilizing the scale for educational, research, and program planning purposes for Filipino families in different locales. The FFWS is an appropriate and useful tool in determining the effectiveness of family programs in the Philippines aimed at improving family life.

Funding Declaration

This research received funding support from the University of the Philippines-Diliman Office of the Vice Chancellor for Research and Development through the Outright Research Grant.

Biographies

Professor **Consuelo Chua** holds a PhD in Education, major in Research and Evaluation, from the University of the Philippines Diliman. Before this, she pursued two Master's degree programs: the Master of Business and Commerce from the University of Western Sydney and the Master of Arts in Educational Psychology from the University of the Philippines Diliman. She also graduated with a Bachelor of Science in the Home Economics program at UP Diliman. Her expertise includes Research Methods, Household Resource Management, Entrepreneurship and Livelihood Education, and Well-being. **Email:** ctchua@up.edu.ph

 <https://orcid.org/0000-0003-0279-7415>

Professor **Joanne Bantang** holds a PhD in Education, major in Research and Evaluation, and a Master's in Education, major in Educational Psychology, from the University of the Philippines Diliman. She also graduated with a Bachelor of Science in the Home Economics program at UP Diliman. Her expertise includes Research Methods, Consumer Education, Supervision and Evaluation, and Program Quality Assessment. **Email:** jrbantang@up.edu.ph

 <https://orcid.org/0009-0002-6228-0493>

Aurora Llige is an Associate Professor from the College of Home Economics, University of the Philippines. She obtained her doctoral degree in International Studies from the Graduate School of International Studies, Ewha Womans University in Seoul, South Korea. She is trained in home economics, teacher education and curriculum development, and development cooperation. **Email:** asllige@up.edu.ph

 <https://orcid.org/0000-0003-2607-8116>

Florenda Gabriel was an assistant professor in the College of Home Economics, University of the Philippines. She taught at the university for 29 years, beginning as an instructor in 1994. She served as the College Graduate Program Coordinator (August 2019-August 2021) and before that, as College Secretary (July 2013-December 2019). She also chaired the Department of Home Economics Education (June 2003-May 2006). She was an advocate of home economics, serving not just the University as a professor, but also her local communities through public service initiatives. She passed away in 2023, but she will always be remembered for her deep wisdom and love for teaching and learning.

References

- Aznar, A. S., & Castañón, D. G. (2005). Quality of life from the point of view of Latin American families: A participative research study. *Journal of Intellectual Disability Research*, 49(10), 784-788. <https://doi.org/10.1111/j.1365-2788.2005.00752.x>
- Bandoles, G. G. (2022). Determinants of life satisfaction among elderly Filipinos: A mixed-method analysis. *Asian Studies: Journal of Critical Perspectives*, 58(2), 29-69. https://ac.upd.edu.ph/acmedia/zgallery/asj_58_2_2022/ASJ_58_2_2022_FINAL/03_Bandoles_-_Article_ASJ_58-2-2022.pdf
- Becina, A. P. J., & Carpio, L. P. D. (2019). Developmental tasks, family structures and functions of selected Filipino families with young children: A cross-sectional study. *The Filipino Family Physician*, 57(2), 86-92. <https://thepafp.org/journal/wp-content/uploads/2022/04/PAFP-Journal-2019-2-22-28.pdf>
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.

- Brown, I., Brown, R. I., Baum, N. T., Isaacs, B. J., Myerscough, T., Neikrug, S., Roth, D., Shearer, J., & Wang, M. (2006). *Family Quality of Life Survey: Main caregivers of people with intellectual or developmental disabilities*. Surrey Place Centre. <https://www.surreyplace.ca/documents/FQLS%20Files/FQOLS-2006%20ID%20DD%20Version%20Aug%2009.pdf>
- Chen, F., Bao, L., Shattuck, R. M., Borja, J. B., & Gultiano, S. (2017). Implications of changes in family structure and composition for the psychological well-being of Filipino women in middle and later years. *Research on Aging*, 39(2), 275-299. <https://doi.org/10.1177/0164027515611181>
- Chua, C., Gabriel, F., Bantang, J., & Llidge, A. (2022). Conceptualization of Filipino family wellbeing. *International Journal of Home Economics*, 15(2), 103-114. https://www.ifhe.org/fileadmin/user_upload/e_Journal/Vol_15_2_corr/P11_1.pdf
- Const. (1987) art. XV, § 1 (Phil.).
- Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology*, 78(1), 98-104. <https://doi.org/10.1037/0021-9010.78.1.98>
- Crandall, A., Holmes, E. K., Villalon, S. E., Weiss-Laxer, N. S., & Berge, J. M. (2023). A conceptual model of family well-being: Bridging constructs, fields, and practice applications. *Journal of Family Theory & Review*, 16(1), 431-448. <https://doi.org/10.1111/jftr.12543>
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334. <https://doi.org/10.1007/BF02310555>
- Department of Social Welfare and Development. (n.d.). *Through the years: A short history of DSWD*. <https://www.dswd.gov.ph/dswd-through-the-years/>
- Department of Social Welfare and Development. (2025). *Unveiling new initiatives to empower Filipino families during the DSWD 74th anniversary celebration*. <https://standards.dswd.gov.ph/2025/03/unveiling-new-initiatives-to-empower-filipino-families-during-the-dswd-74th-anniversary-celebration/>
- Felipe, J. J. G., Cleofas, J. V., & Pua, J. S. L. C. (2023). Family health and mental well-being among young Filipino undergraduates: The mediating role of self-care. *The Family Journal*, 32(2), 241-248. <https://doi.org/10.1177/10664807231205578>
- Ferketich, S. (1991). Focus on psychometrics: Aspects of item analysis. *Research in Nursing & Health*, 14, 165-168. <https://doi.org/10.1002/nur.4770140211>
- Field, A. (2018). *Discovering statistics using IBM SPSS Statistics*. Sage.
- Frost, J. (n.d.). *Cronbach's alpha: Definition, calculations, and example*. Statistics by Jim. https://statisticsbyjim.com/basics/cronbachs-alpha/#google_vignette
- García-Grau, P., McWilliam, R. A., Martínez-Rico, G., & Grau-Sevilla, M. D. (2018). Factor structure and internal consistency of a Spanish version of the Family Quality of Life (FaQoL). *Applied Research in Quality of Life*, 13(2), 385-398. <https://doi.org/10.1007/s11482-017-9530-y>
- Hoffman, L., Marquis, J., Poston, D., Summers, J. A., & Turnbull, A. (2006). Assessing family outcomes: Psychometric evaluation of the Beach Center Family Quality of Life Scale. *Journal of Marriage and Family*, 68(4), 1069-1083. <https://doi.org/10.1111/j.1741-3737.2006.00314.x>
- Isaacs, B. J., Brown, I., Brown, R. I., Baum, N., Myerscough, T., Neikrug, S., Roth, D., Shearer, J., & Wang, M. (2007). The International Family Quality of Life Project: Goals and description of a survey tool. *Journal of Policy and Practice in Intellectual Disabilities*, 4(3), 177-185. <https://doi.org/10.1111/j.1741-1130.2007.00116.x>
- Kline, P. (1999). *A handbook of psychological testing (2nd ed.)*. Routledge.
- Lee, S. Y., & Han, K. S. (2024). Family strength: A concept analysis. *Journal of Korean Academy of Psychiatric and Mental Health Nursing*, 33(2), 124-137. <https://doi.org/10.12934/jkpmhn.2024.33.2.124>
- Masanda, A. B. (2021). The contemporary Filipino family life: Towards a comprehensive family-oriented counseling program. *Journal of Humanities, Arts and Social Science*, 5(1), 16-22. <https://doi.org/10.26855/jhass.2021.01.003>
- McGregor, S. L. T. (2020, May). *Conceptualizing family well-being* (McGregor Monograph Series 202001). McGregor Consulting Group. https://consultmcmgregor.com/documents/publications/conceptualizing_family_wellbeing.pdf
- National Economic and Development Authority. (2016). *The life of all Filipinos in 2040: Matatag, maginhawa at panatag na buhay*. <https://2040.depdev.gov.ph/about-ambisyon-natin-2040/>
- National Economic and Development Authority. (2023). *Philippine Development Plan 2023-2028*. <https://www.neda.gov.ph/philippine-development-plan-2023-2028/>
- Noor, N. M., Gandhi, A. D., Ishak, I., & Wok, S. (2014). Development of indicators for family well-being in Malaysia. *Social Indicators Research*, 115(1), 279-318. <https://doi.org/10.1007/s11205-012-0219-1>
- Nunnally, J., & Bernstein, L. (1994). *Psychometric theory*. McGraw-Hill Higher.

- Office of the President. Executive Order No. 238, s. 2003: Amending Executive Order No. 241 by expanding the powers and functions and membership of the National Steering Committee of the Family Week, (2003)(Phil.), <https://elibrary.judiciary.gov.ph/thebookshelf/showdocs/5/5509>
- Panayides, P. (2013). Coefficient alpha: Interpret with caution. *Europe's Journal of Psychology*, 9(4), 687-696. <https://doi.org/10.5964/ejop.v9i4.653>
- Poston, D. J., Turnbull, A. P., Park, J., Mannan, H., Marquis, J., & Wang, M. (2003). Family quality of life: a qualitative inquiry. *Intellectual and Developmental Disabilities*, 41(5), 313-28. [https://doi.org/10.1352/0047-6765\(2003\)41<313:FQOLAQ>2.0.CO;2](https://doi.org/10.1352/0047-6765(2003)41<313:FQOLAQ>2.0.CO;2)
- Sümen, A., & Öncel, S. (2024). Examination of the psychometric properties of the short and long forms of the Family Health Scale in Turkish culture. *Journal of Pediatric Nursing*, 79, 249-255. <https://doi.org/10.1016/j.pedn.2024.10.022>
- SyCip, L. Y., Asis, M. B., & Luna, E. M. (2000). *The measurement of well-being: Technical report*. University of the Philippines Center for Integrative and Development Studies. <https://cids.up.edu.ph/download/measurement-filipino-well-being/>
- Taber, K. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48(6), 1273-1296. <https://doi.org/10.1007/s11165-016-9602-2>
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53-55. <https://doi.org/10.5116/ijme.4dfb.8dfd>
- Vanderkerken, L., Heyvaert, M., Onghena, P., & Maes, B. (2018). Quality of life in Flemish families with a child with an intellectual disability: A multilevel study on opinions of family members and the impact of family member and family characteristics. *Applied Research in Quality of Life*, 13(4), 779-802. <https://doi.org/10.1007/s11482-017-9558-z>
- Villareal-Aguila, M. C. (2010). Well-being in the Filipino family. *Miriam College Faculty Research Journal*, 32(1). Philippine EJournals. <https://ejournals.ph/article.php?id=3490>
- Wong, M. M. C., Ma, J. L. C., Wan, P. S., Xia, L. L., & Fok, M. H. T. (2022). The development and validation of a Family Wellbeing Index for Hong Kong Chinese families. *Journal of Child and Family Studies*, 31, 1683-1697. <https://doi.org/10.1007/s10826-022-02281-6>
- Yusoff M. S. B. (2019). ABC of content validation and content validity index calculation. *Education in Medicine Journal*, 11(2), 49-54. <https://doi.org/10.21315/eimj2019.11.2.6>



The Study Among College Students of Changes in Cooking Skills to Make Japanese Traditional Dishes (Washoku)

Madoka Hirashima
Mie University, Japan

Mitsuyo Hori
Gifu City Women's College, Japan

Yuka Isobe
Mie University, Japan

Abstract

Purpose: Washoku, the traditional dietary cultures of the Japanese, is designated a UNESCO Intangible Cultural Heritage. However, younger people have less interest in cooking and eating washoku. In this study, the effects of taking cooking classes on cooking skills to prepare washoku were investigated.

Methodology: Surveys were conducted among 1,126 freshmen (age 18-20) and 970 graduating seniors (age 19-23) at college and vocational school in Japan to investigate the knowledge and confidence of 23 types of washoku dishes. The students were divided into two groups by whether or not they took cooking classes at college or vocational school.

Findings: From the results, it was found that on average, 24.9 % of the surveyed freshmen who took cooking classes could not make washoku and only 18.5 % were confident in making them. On the other hand, an average of 39.6 % of the surveyed seniors were confident about making them. Namely, taking cooking classes increased their confidence of making all 23 types of washoku dishes ($p < 0.001$). Therefore, making many washoku dishes in cooking classes would lead students to eat washoku on a daily basis.

KEYWORDS: JAPANESE TRADITIONAL DISHES, COOKING KNOWLEDGE, COOKING SKILLS, COOKING CLASSES, COLLEGE STUDENTS

Introduction

Washoku, the traditional dietary cultures of the Japanese, is designated a UNESCO Intangible Cultural Heritage. There are four features of washoku (Kumakura & Ehara, 2015; Komiya, 2020). (1) A rich variety of fresh ingredients and respect for inherent flavors. (2) Nutritional balance that supports a healthy diet. (3) Expressions of the beauty of nature and changing seasons. (4) A close connection to annual celebrations such as New Year.

Typical Japanese meals, which are comprised of cooked rice, miso soup, some main and side dishes, contain many vegetables. It is also said that washoku is healthier because it has been characterized by high consumption of vegetables and seafood, and low consumption of animal fat and meat (Gabriel et al., 2018). However, the frequency of eating washoku has been decreasing in Japan while the frequency of eating western or other foreign dishes is increasing. Thus, people in Japan have been consuming more animal products, and less rice and vegetables. Therefore, as washoku is a healthy diet, it is important to preserve it. It is said that something similar has been happening along the Mediterranean coast, where the Mediterranean diet is also designated a UNESCO Intangible Cultural Heritage. Although the Mediterranean diet is rich in fruits, vegetables, legumes and whole grains, and one of the healthiest patterns to deal with obesity, the young adults have not eaten the Mediterranean diet with less frequently in Türkiye. (Gökçe, 2024). In Spain, around 60 % of the college students had a low adherence to the Mediterranean diet and high risk of alcohol consumption (López-Moreno; 2021).

It is widely known that acquiring cooking skills promotes better health (Caraher & Lang, 1999). For example, the students with higher cooking skills did better in the Mediterranean Diet Adherence Screener Scores in Türkiye (Gökçe, 2024), and people of all ages in Australia, who had higher cooking skills and food skills confidence, also had significantly better in the Australian Recommended Food Scores (Lavelle et al., 2019). It was also reported that preparing food and having higher cooking skills were related to healthier food choices such as fruits and vegetables, and a lower intake of fat (Larson et al., 2006; Hartmann et al., 2013; Lavelle et al., 2016; McGowan et al., 2016). On the other hand, people with lower cooking levels was associated with unhealthy diets (Tani et al., 2020).

Therefore, this study investigated the effects of taking cooking classes on the knowledge and cooking skills of washoku among Japanese college and vocational school students to examine ways of not only preserving our traditional culture but also having a healthier diet.

Methods

Respondents

Surveys were conducted between 2014 and 2021 to investigate the cooking skills of washoku, using self-administered questionnaires distributed by the drop-off and pick-up method. The correspondents were 1,126 freshmen (age 18-20) who enrolled between 2014 and 2017, and 970 graduating seniors (age 19-23) who graduated between 2016 and 2021 at college and vocational school in Japan. Academic periods were 2 or 4 years. The number of the students for each year is shown in Table 1.

Table 1. Number of Survey Respondents for Each Year

	Year of Enrollment				Total
	2014	2015	2016	2017	
Freshmen	268	252	371	235	1126
Seniors	216	236	330	188	970

Survey Details

There are various kinds of washoku. In this study, washoku was defined as follows. (1) dishes which were steamed, boiled or simmered, or (2) dishes using Japanese broth or soy sauce or miso, and (3) dishes eaten with chopsticks. Twenty-two types of dishes and green tea (total 23) were selected as washoku. The description of 23 washoku dishes is shown in Table 2.

Table 2. 23 Selected Types of Washoku Dishes

No.	Name	Description
1	Mixed rice	Rice dish with many ingredients, seasoned with soy sauce and sugar.
2	Chicken and egg bowl	Simmered chicken, eggs and onion seasoned with sugar and soy sauce served on rice and garnished with trefoil.
3	Garnished sushi	Several seasonal toppings are sprinkled aesthetically on sushi rice. A festive dish.
4	Sushi rolls	Several fillings are wrapped in sushi rice and seaweed laver.
5	Inari sushi	Sushi rice stuffed in sweet, thinly deep-fried tofu pouches.
6	Clear soup	Japanese broth seasoned with salt and soy sauce. There are various kinds using different ingredients.
7	Egg drop soup	Japanese broth seasoned with salt and soy sauce thickened with beaten eggs and starch.
8	Miso soup	Basic Japanese soup thickened with miso paste. Tofu, vegetables, and some seasonal ingredients are added.
9	Miso soup with pork and vegetables	Pork, deep-fried thin tofu, vegetables, konjac added in miso soup.
10	Simmered chicken and vegetables	Simmered chicken and root vegetables with sugar and soy sauce.
11	Meat and potato stew	Simmered beef, potato, onion, carrot and konjac, seasoned with sugar and soy sauce.
12	Japanese rolled omelet or sushi egg	Beaten eggs, Japanese broth, sugar and salt and soy sauce, cooked and rolled up in a rectangular frying pan.
13	Savory egg custard	Savory custard dish made with steamed eggs, Japanese broth, chicken, prawns, shiitake mushroom, etc.
14	Grilled fish	Salt-grilled fish such as horse mackerel, sardine, Pacific saury, mackerel, small sea bream, etc.
15	Simmered mackerel in miso	Simmered mackerel fillet in miso, sugar and ginger.
16	Teriyaki yellowtail	Grilled yellowtail soaked in sugar, soy sauce and ginger juice. Also made with chicken, pork, meatballs, tofu, etc.
17	Tempura	Batter deep-fried seafood and vegetables
18	Simmered Japanese pumpkin	Simmered Japanese pumpkin with sugar, salt and soy sauce.
19	Vegetables with tofu dressing	Boiled vegetables such as carrots, spinach, shiitake mushrooms, konjac, etc. with tofu and sesame dressing.
20	Spinach with sesame dressing	Boiled spinach with ground sesame dressing. Also made by other green leaves and green kidney beans.
21	Vinegared cucumber and seaweed	Marinated cucumber and <i>wakame</i> seaweed with sweet vinegar sauce. Also made with boiled octopus etc.
22	<i>Kimpira</i> burdock root	Stir-fried burdock root and carrots with sugar, soy sauce and sesame.
23	Green tea	Most typically consumed tea in Japan.

The knowledge of 23 dishes was surveyed, with respondents indicating whether they “know” or “don’t know” each. If respondents answered “know” for a dish, they were then asked to select from “can (very confident),” “mostly (confident),” “somewhat (not very confident),” “slightly (no confident),” or “cannot” cook to assess their confidence in cooking that dish. The response rate from students was calculated for each dish.

Data Analysis

The students were divided into two groups by whether or not they took cooking classes at college or vocational school. The personal profiles of respondents, who took and did not take cooking classes, are shown in Table 3. The surveyed freshmen and graduating seniors who took cooking classes for more than one semester in college or vocational school were 446 (39.6 %) and 409 (42.2 %), respectively. There were far more female students than male students. Few students cooked every day, thus, the cooking frequency for the students were not high. However, there were many students who liked cooking.

The knowledge and cooking skills among freshmen and seniors who did or did not take cooking classes were statistically compared by chi-square test and analyzed for the effects of taking cooking classes. A *p*-value of less than 0.05 was considered statistically significant. Additionally, differences were examined by calculating expected frequencies and conducting residual analysis.

Table 3. Profiles of Survey Respondents who Took Cooking Classes at College or Vocational School

Cooking classes		Took		Did not take	
		Freshmen (%)	Seniors (%)	Freshmen (%)	Seniors (%)
Total		446	409	680	561
Age	18-19	443 (99.3)	79 (19.3)	677 (99.6)	64 (11.4)
	20-22	3 (0.7)	327 (80.0)	3 (0.4)	482 (85.9)
	23-24	0	3 (0.7)	0	15 (2.7)
Gender	male	54 (12.1)	42 (10.3)	177 (26.0)	126 (22.5)
	female	392 (87.9)	367 (89.7)	503 (74.0)	434 (77.5)
	no response	0	0	0	1
Living arrangement †	home	323 (73.1)	285 (72.5)	489 (72.3)	369 (67.3)
	away	119 (26.9)	110 (27.5)	207 (27.3)	179 (32.7)
	no response	4	14	4	13
Cooking frequency †	almost everyday	106 (23.8)	82 (20.1)	96 (14.1)	43 (7.7)
	3-5 times a week	94 (21.1)	111 (27.1)	87 (12.8)	98 (17.5)
	1-2 times a week	140 (31.5)	121 (29.6)	145 (21.4)	137 (24.5)
	rarely	105 (23.6)	95 (23.2)	351 (51.7)	281 (50.3)
	no response	1	0	1	2
Cooking attitude and interest †	like	339 (76.2)	286 (70.4)	268 (39.8)	236 (42.5)
	dislike	7 (1.6)	13 (3.2)	58 (8.6)	74 (13.4)
	indifferent	99 (22.2)	107 (26.4)	348 (51.6)	244 (44.1)
	no response	1	3	6	7

Note. † Percentage was calculated by not including surveys with no response.

Ethical Considerations

The surveys were conducted in accordance with the Helsinki Declaration and was approved by the Ethics Committee of Faculty of Education, Mie University (no. 2025-29) on Nov. 25th, 2025. The respondents were assured that the survey results would not be used solely for research purposes, that individuals would not be identified, and that cooperation with the questionnaire was voluntary.

Results

Changes in the Knowledge of Washoku Among Students

Figure 1 shows the knowledge of washoku among freshmen and graduating seniors who took cooking classes. An average percentage of answering “know” for the 23 selected types of washoku dishes for freshmen and seniors was 92.7% and 99.4%, respectively. Students knew most of the selected washoku dishes. Only three of the washoku dishes were known by less than 90 % of the freshmen, which were “clear soup” (No. 6 in Table 2), “simmered chicken and vegetables” (No. 10) and “vegetables with tofu dressing” (No. 19). All washoku dishes were known by more than 90 % of the seniors. This result corresponded to previous reports (Hirashima et al., 2021).

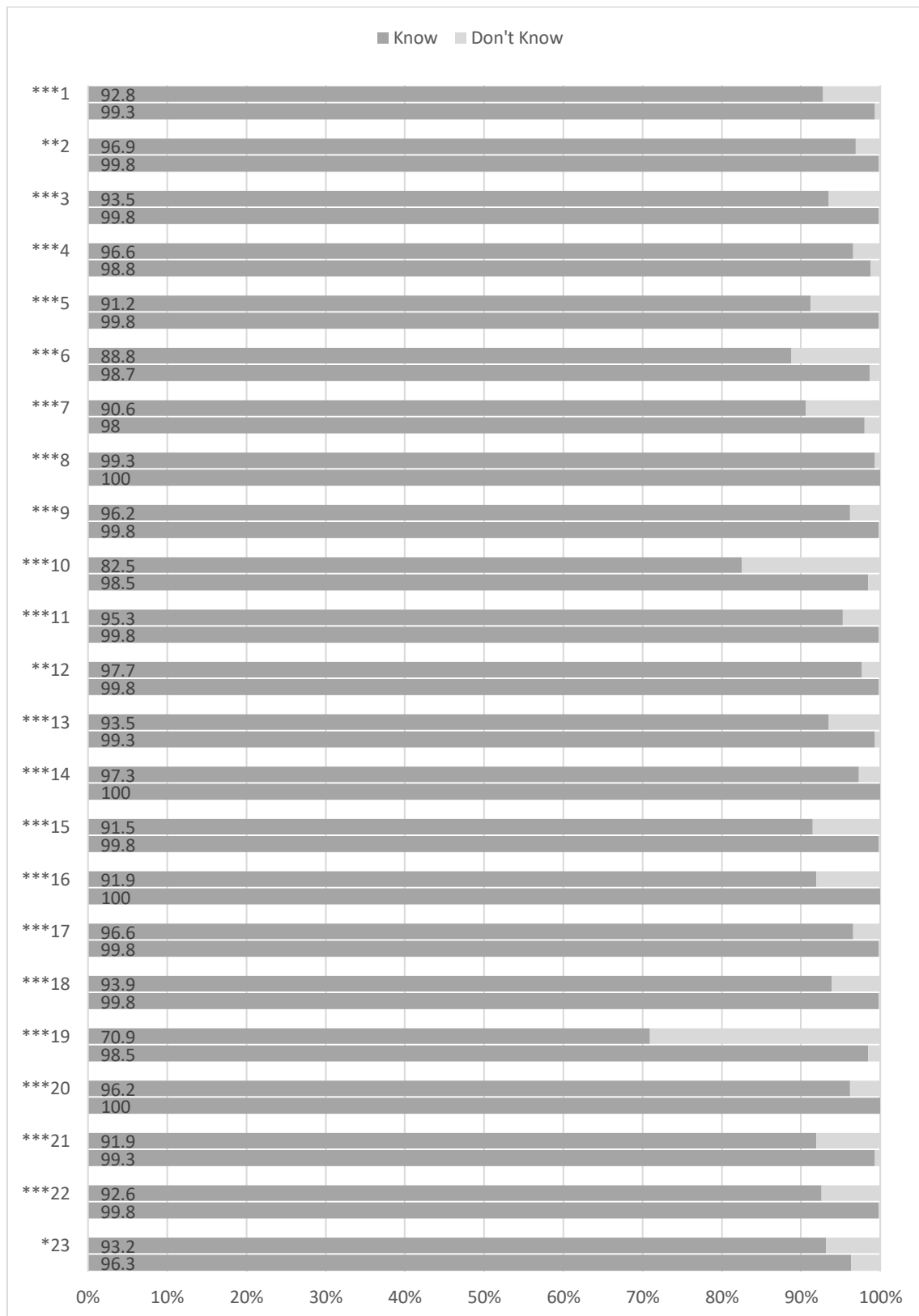
On the other hand, the knowledge of washoku among freshmen and seniors who did not take cooking classes were lower than those who took cooking classes (Figure 2). However, many students knew washoku. An average percentage of answering “know” for the 23 washoku dishes for freshmen and seniors was 87.7 % and 95.2 %, respectively. Although 13 washoku dishes were known by less than 90 % of freshmen, only four of the washoku dishes were known by less than 90 % of seniors.

The knowledge of all of the selected washoku dishes for students who took cooking classes increased while attending college or vocational school ($p<0.05$, Figure 1). For students who did not take cooking classes, the knowledge of the 22 washoku dishes also increased ($p<0.01$, Figure 2), while that of “green tea” (No. 23) did not change.

Students seemed to have chosen their meals by themselves compared to when they were high school students. Judging from these results, they had more opportunities to eat washoku and knew washoku that they had never eaten before attending college or vocational school.

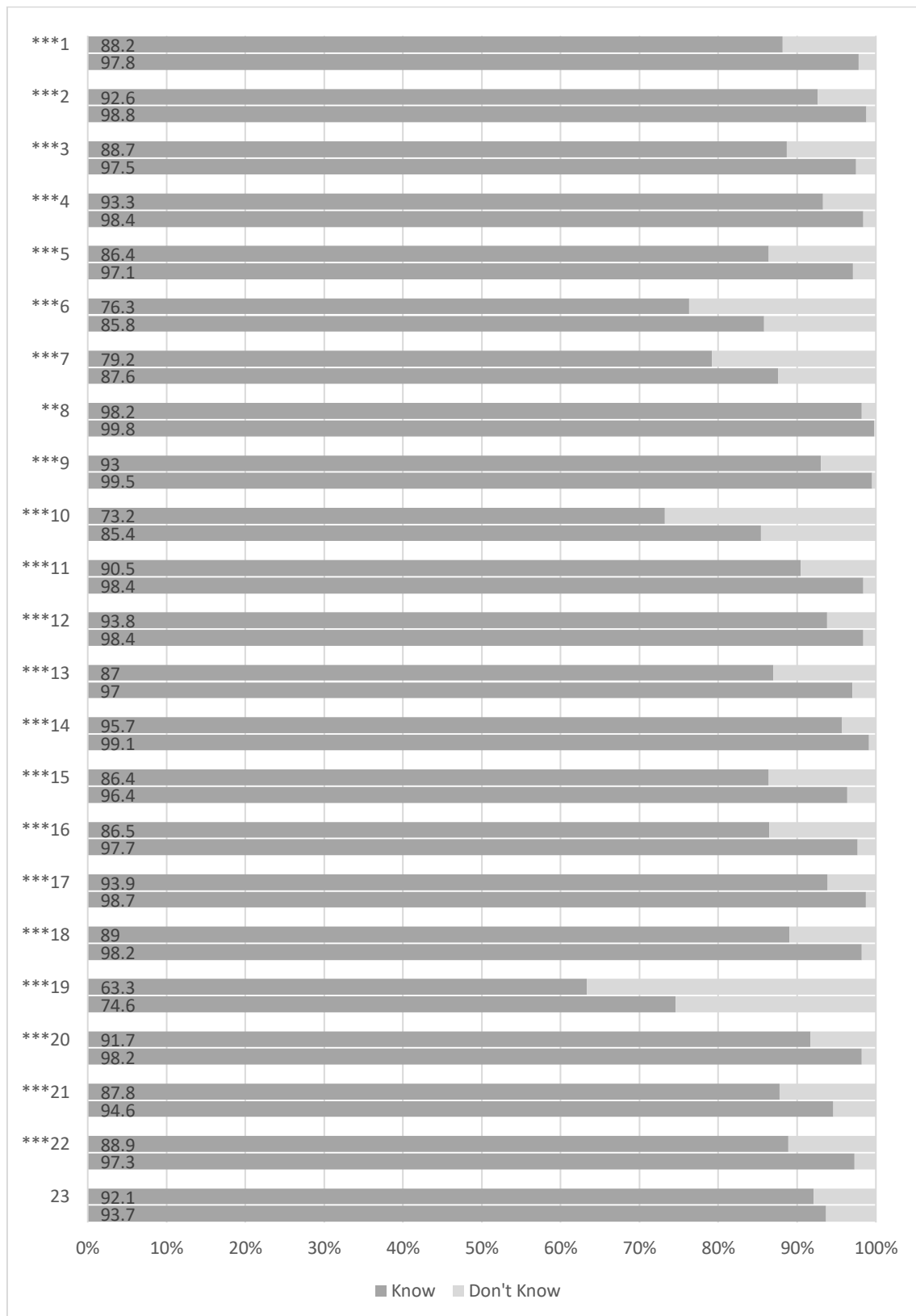
Furthermore, all senior students who took cooking classes (100%) knew “miso soup” (No. 8), “grilled fish” (No. 14), “teriyaki yellowtail” (No. 16) and “spinach with sesame dressing” (No. 20). Taking cooking classes greatly contributed to increasing their knowledge ($p<0.05$, Figure 1). These washoku dishes were made in cooking classes in college or vocational school which resulted in their greater knowledge. However, there were no dishes that 100 % of students who did not take cooking classes knew. Thus, taking cooking classes attributed to acquiring knowledge of washoku compared with not taking cooking classes. Moreover, comparing the knowledge of the senior students who took and did not take cooking classes, the knowledge of students who took cooking classes was higher in 16 types of dishes ($p<0.05$, data details not shown).

Figure 1. Changes in knowledge of washoku among college freshmen (upper, $n = 446$) and graduating seniors (lower, $n = 409$) who took cooking classes at college or vocational school



Note. See Table 2 for dishes corresponding to numbers 1 through 23, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure 2 Changes in knowledge of washoku among college freshmen (upper, n = 680) and graduating seniors (lower, n = 561) who did not take cooking classes



See Table 2 for dishes corresponding to numbers 1 through 23, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

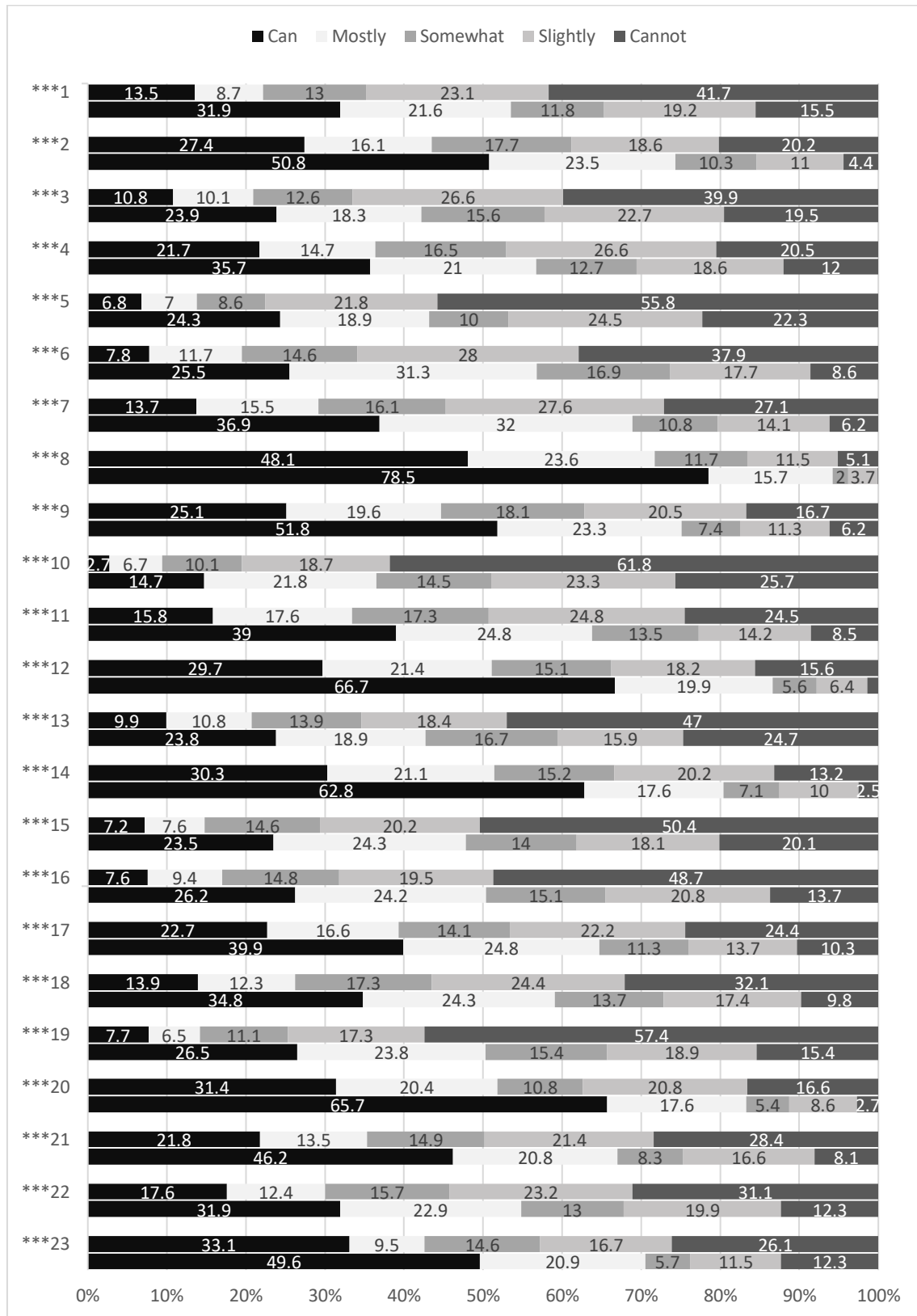
Changes in the Cooking Skills of Washoku Among Students

As mentioned above, many students knew most of the selected washoku dishes. However, on average percentage, 32.7 % of freshmen who took cooking classes could not make the 23 washoku dishes and only 18.5 % of freshmen were confident in making them (refer to Figure 3). Among the 23 washoku dishes, there were six dishes that about 40 % freshmen answered they “cannot” make (Figure 3). These were “*inari* sushi” (No. 5 in Table 2), “simmered chicken and vegetables” (No. 10), “savory egg custard” (No. 13), “simmered mackerel in miso” (No. 15) and “teriyaki yellow tail” (No. 16). The frequency of eating these six washoku dishes was about once to a few times a year, and many students had purchased them or dined them out (Hori et al., 2020). Moreover, “simmering” is needed to make “*inari* sushi”, “simmered chicken and vegetables” and “simmered mackerel in miso.” Simmering is considered to take time and effort (Nisshin Oillio, 2014). Therefore, it was difficult for freshmen to make them. From these results, it was found that many freshmen knew washoku but could not make them.

In regards to students who did not take cooking classes, on average percentage, 44.4 % of freshmen and 48.0 % of seniors could not make the 23 washoku dishes and only 16.4 % of freshmen and 22.4 % of seniors were confident in making them (refer to Figure 4). There were 15 dishes that more than about 40 % seniors answered they “cannot” make (Figure 4). Their confidence in making some of the washoku dishes decreased while attending college or vocational school ($p<0.01$). These were “garnished sushi” (No. 3), “sushi roll” (No. 4), “clear soup” (No. 6), “grilled fish” (No. 14), “spinach with sesame dressing” (No. 20) and “vinegared cucumber and seaweed” (No. 21). It is considered if students who did not take cooking classes or had not prepared their meals while attending college or vocational school, then their cooking skills decreased.

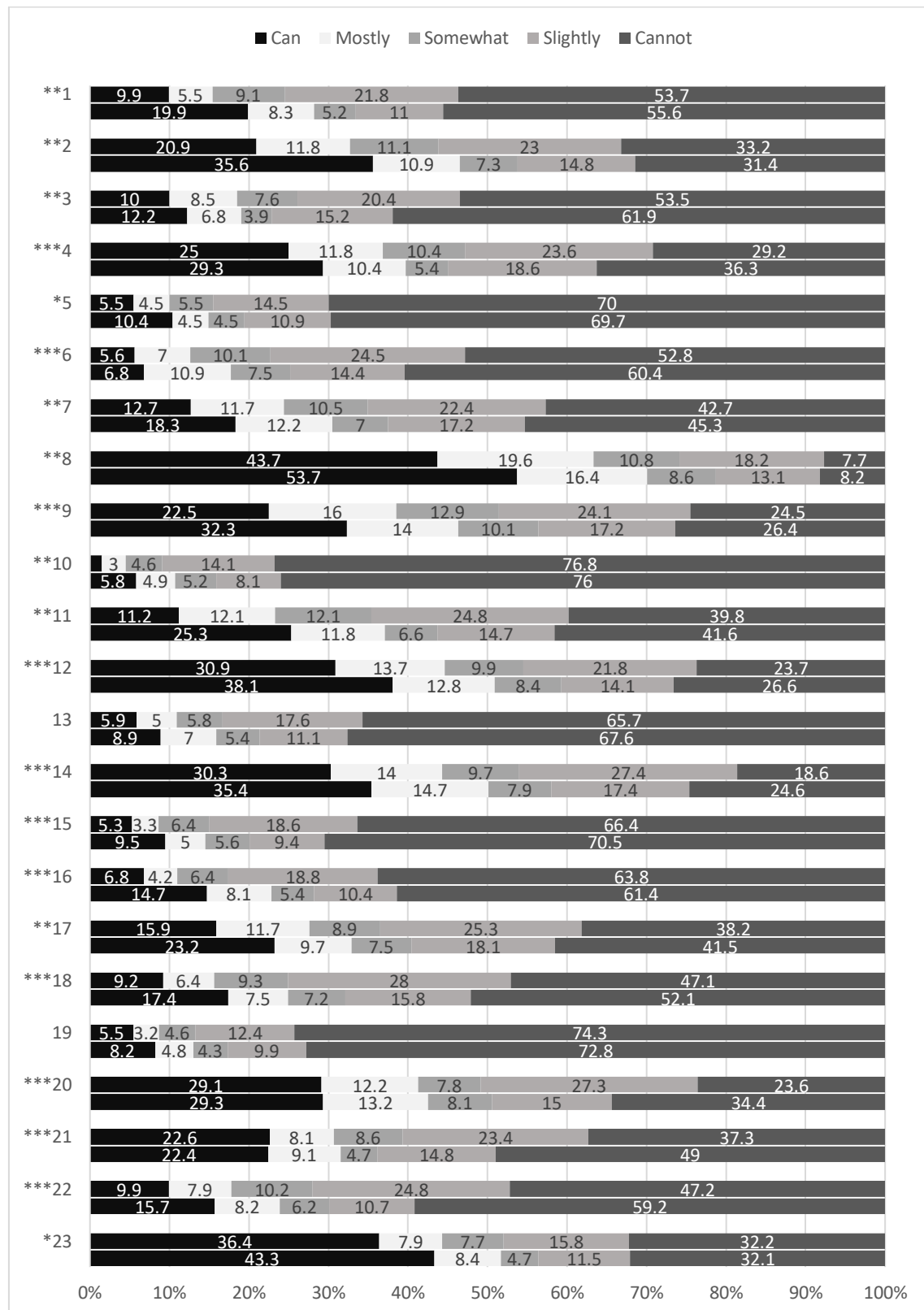
On the other hand, an average percentage of answering “can make” for seniors who took cooking classes was 39.6 % (refer to Figure 3). Five dishes that more than 50 % of seniors answered “can make” and less than 5 % answered “cannot make” were “chicken and egg bowl” (No.2), “miso soup” (No. 8), “Japanese rolled omelet” (No. 12), “grilled fish” (No. 14) and “spinach with sesame dressing” (No. 20) (Figure 3). Taking cooking classes increased their cooking skills and their confidence of all 23 types of washoku dishes ($p<0.001$, Figure 3).

Figure 3 Changes in confidence of making washoku among college freshmen (upper, n = 446) and graduating seniors who took cooking classes (lower, n = 409)



See Table 2 for dishes corresponding to numbers 1 through 23, ***p<0.001

Figure 4 Changes in confidence in making washoku among college freshmen (upper, n = 680) and graduating seniors (lower, n = 561) who did not take cooking classes



See Table 2 for dishes corresponding to numbers 1 through 23, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Discussions

The knowledge and cooking skills of 23 types of washoku dishes were higher for college seniors, who took cooking classes at college or vocational school, compared to freshmen and seniors who did not take cooking classes. It means taking cooking classes contributed to increased their knowledge and cooking skills. There are many research results showing that taking cooking classes increased the cooking skills of students. One of them showed that children (5th graders) had greater knife cutting skills after taking their first class (Kawamura & Yoshikawa, 2014), and children (age 12 and under) and/or teenagers (age 13-18) had significantly greater confidence in their cooking and food skills (Lavelle et al., 2016). Also, college students (age 18-23) had confidence in their cooking skills (Hirashima et al., 2021).

Although all 23 types of washoku dishes were not dealt with in cooking classes, and foreign dishes such as Western and Chinese dishes were also made in cooking classes, it is thought that increasing cooking skills led to the ability to make many kinds of dishes. Students who took cooking classes cooked more frequently than students who did not take cooking classes. ($p < 0.001$, refer to Table 3). It means the students who took cooking classes might have been preparing their meals more often than students who did not take cooking classes did.

Moreover, in cooking classes, students eat many kinds of washoku they made, and they realized the palatability of Japanese seasonings and their pleasant taste. It was reported the students belonging to the departments related to health had higher cooking skills (Gökçe, 2024). Over the 80 % of nutritionists could prepare many dishes and liked to experiment with new recipes (Hertzler & Bruce, 2002). It would be important for increasing their cooking skills to have interest in foods.

On the other hand, the need to cook washoku at home also has been decreasing and eating prepared food at home is increasing (MAFF, 2026). Actually, cooking time at home has decreased for the last 2 decades (Watase, 2021), and many people did not want to spend more time for cooking (Cleanup Co, 2019; Nisshin Oillio, 2014). This is one of the reasons washoku has not been cooked at home. Thus, the frequency of eating washoku especially among younger people has been decreasing and they have less interest in cooking and eating washoku, in particular those who did not take cooking classes.

However, the number of Japanese restaurants abroad increased threefold over the past decade and twice over the past 2 years (MAFF, 2023) and it is said that the many tourists coming to Japan look forward to eating regional cuisines in Japan (Komiya, 2020). We need to acquire the knowledge and cooking skills not only to keep our traditions but also to introduce washoku to people abroad.

In this study, the respondents were all Japanese students in college or vocational school, and they were from the Tokai area in Japan. The geographical area was limited, thus, there were a limitation of research analysis. However, the curriculum of home economics for them to learn from elementary school to high school was not specific in Japan. Therefore, taking cooking classes would be expected to contribute to increasing their cooking knowledge and cooking skills in Japan.

Therefore, it is considered that acquiring cooking skills by making many washoku dishes in cooking classes would lead students to choose healthier foods such as washoku, and to eat washoku on a daily basis. It is expected to contribute to preserving these traditional Japanese dishes.

Conclusions

The knowledge of washoku for all graduating seniors increased while attending college or vocational school, and taking cooking classes at college and vocational school greatly contributed. Their cooking skills of washoku were also acquired by taking cooking classes.

It is considered that students who took cooking classes would be able to choose healthier foods because of their higher cooking skills. Also, they would prepare more washoku because increasing cooking skills would lead to the ability to make many kinds of washoku dishes. Therefore, taking cooking classes among Japanese college and vocational school students would contribute to preserving our traditional culture and having a healthier diet. On the other hand, cooking skills of some dishes for the students who did not take cooking classes decreased while attending college or vocational school. Then, it would be beneficial to offer cooking lessons in general education classes.

It was found that it is important to incorporate washoku in cooking classes at college and vocational school to keep eating washoku in the future. The findings of this study may be applicable to other nations facing challenges in preserving their traditional cultures.

We thank the participating students for their cooperation with the questionnaire.

Biographies

Madoka Hirashima

Email: madoka@edu.mie-u.ac.jp

 <https://orcid.org/0009-0004-6523-5932>

Mitsuyo Hori

Email: mhori@gifu-cwc.ac.jp

 <https://orcid.org/0009-00047-1790-3457>

Yuka Isobe

Email: isobe@edu.mie-u.ac.jp

 <https://orcid.org/0009-0001-4311-6017>

References

- Caraher, M., & Lang, T. (1999). Can't cook, won't cook: A review of cooking skills and their relevance to health promotion. *International Journal of Health Promotion and Education*, 37, 89-100. DOI: 10.1080/14635240.1999.10806104
- Cleanup Co. (2019). *Kitsuchiso Hakusho 2019* [Kitchen Annual Report 2019]. <https://cleanup.jp/oikura/pdf/kitchen-hakusho2019.pdf>
- Hartmann, C., Dohle, S., & Siegrist, M. (2013). Importance of cooking skills for balanced food choices. *Appetite*, 65, 125-131. DOI: 10.1016/j.appet.2013.01.016
- Hertzler, A. A., & Bruce, F. A. (2002) Cooking, recipe use and food habits of college students and nutrition educators. *International Journal of Consumer Studies*, 26, 340-345. DOI: 10.1046/j.1470-6431.2002.00248.x

- Hirashima, M., Isobe, Y., & Hori, M. (2021). Gakusei no 'kiri-kata' ni taisuru ninchi-do to jishin-do no henka [Study on changes in knowledge and confidence of knife cuts among students in college and vocational school]. *Journal of Cookery Science of Japan*, 54(5), 234-243. DOI: 10.11402/cookeryscience.54.234
- Hori, M., Hirashima, M., & Isobe, Y. (2020). Gakusei no washoku (Nihon no katei ryōri) no kisshoku jōkyō [The study of the eating circumstances of washoku (Japanese traditional homemade meals) among college students]. *Journal of The Japan Association for the Integrated Study of Dietary Habits*, 31(3), 151-158. DOI: 10.2740/jisdh.31.3_151
- Gabriel, A. S., Ninomiya, K., & Uneyama, H. (2018). The Role of the Japanese Traditional Diet in Healthy and Sustainable Dietary Patterns around the World. *Nutrients*, 10(2), 173. DOI: 10.3390/nu10020173
- Gökçe, Ü. (2024). Cooking and food skills and their relationship with adherence to the Mediterranean diet in young adults attending university: A cross-sectional study from Türkiye. *Nutrition Bulletin*, 49, 492-500. DOI: 10.1111/nbu.12704
- Kawamura, M., & Yoshikawa, R. (2014). Shōgakusei no chōri ginō no jittai to sono gakushū kōka: Hōchō ginō no shūtoku o chūshin ni [Cooking classes in elementary school and their efforts: with a focus on acquiring knife skills]. *Journal of the Japan Association of Home Economics Education*, 57(2), 94-102. DOI: 10.11549/jjahee.57.2_94
- Komiya, E. (2020). Washoku bunka no hogo keishō no torikumi [Measures to promote the protection and inheritance of traditional Japanese dietary cultures]. *Japanese Society for Food Science and Technology*, 67, 242-244. DOI: 10.3136/nskkk.67.242
- Kumakura, I., & Ehara, A. (2015). Washoku to Wa Nani Ka: Unesco Mukeisan Bunka Isan Ni Tōroku Sareta Washoku [What Is Washoku? Culture Booklet]. Kyoto; Shibunkaku.
- Larson N. I., Story, M., Eisenberg, M. E. & Neumark-Sztaniner, D. (2006). Food preparation and purchasing roles among adolescents: Associations with sociodemographic characteristics and diet quality. *Journal of the American Dietetic Association*, 106, 211-218. DOI: 10.1016/j.jada.2005.10.029
- Lavelle, F., Spence, M., Hollywood, L., McGowan, L., Surgenor, D., McCloat, A., Mooney, E., Caraher, M., Raats, M., & Dean, M. (2016). Learning cooking skills at different ages: a cross-sectional study. *International Journal of Behavioral Nutrition and Physical Activity*, 13, 119. DOI: 10.1186/s12966-016-0446-y
- Lavelle, F., Bucher, T., Dean, M., Brawn, H. M., Rollo, M. E., & Collins, C. E. (2019). Diet quality is more strongly related to food skills rather than cooking skills confident: Results from national cross-sectional survey. *Nutrition and Dietetics*, 77, 112-120. DOI: 10.1111/1747-0080.12583
- López-Moreno, M., Garcés-Rimón, M., Miguel, M., & López, M. T. I. (2021). Adherence to Mediterranean diet, alcohol consumption and emotional eating in Spanish university students. *Nutrients*, 13, 3174. DOI: 10.3390/nu13093174
- McGowan, L., Pot, G. K., Stephen, A. M., Lavelle, F., Spence, M., Raats, M., Hollywood, L., McDowell, D., McCloat, A., Mooney, E., Caraher, M., & Dean, M. (2016). The influence of socio-demographic, psychological and knowledge-related variables alongside perceived cooking and food skills abilities in the prediction of diet quality in adults: a nationally representative cross-sectional study. *International Journal of Behavioral Nutrition and Physical Activity*, 13, 111. DOI: 10.1186/s12966-016-0440-4
- MAFF, Ministry of Agriculture, Forestry and Fisheries. (2023). *Kaigai ni okeru nipponshoku resutoran no gaisū* [Estimated number of Japanese restaurants overseas]. https://www.maff.go.jp/j/press/yusyutu_koku_sai/kikaku/attach/pdf/231013_12-3.pdf
- MAFF, Ministry of Agriculture, Forestry and Fisheries. (2026). *Hirogaru washoku* [Expanding ready-made meals]. https://www.maff.go.jp/j/pr/aff/2606/spe1_01.html
- Nisshin Oillio. (2014). *Shōtorepōto No. 27* [Short Report No. 27], <https://www.nisshin-oillio.com/report/report/images/no27/140424.pdf>
- Tani, Y., Fujiwara, T., & Kondo, K. (2020). Cooking skills related to potential benefits for dietary behaviors and weight status among older Japanese men and women: a cross-sectional study from the JAGES. *International Journal of Behavioral Nutrition and Physical Activity*, 17. DOI: 10.1186/s12966-020-00986-9
- Watase, N. (2021). *Shinbun no rensai ryōri reshipi kiji ni arawareru chōri jikan no tanshuku* [Cooking time reduction as seen in serialized recipe articles in newspapers]. *Journal of Family Resource Management of Japan*, 56, 38-44.



Context Matters: Structural Constraints and Assessment Equity in Home and Consumer Studies

Elina Larsson
Umeå University, Sweden

Abstract

This study examines how contextual factors affect the quality, validity, and equity of assessment in Swedish Home and Consumer Studies, applying Messick's (1996) theory of assessment validity. Multi-year survey data (2020-2024) were collected from a voluntary, geographically diverse sample of home and consumer studies teachers across Sweden, with repeated iterations and triangulation with prior studies providing longitudinal insight. Findings show that material resources, class size, time allocation, workload, and access to professional development significantly shape assessment practices. Inadequate kitchen equipment, insufficient preparation time, and overcrowded classrooms hinder teachers' ability to observe, support, and evaluate students effectively, constraining both formative and summative processes. While broad participation was achieved, voluntary sampling may have introduced self-selection bias, and self-reported data involve risks of subjectivity and recall error. Although results are not statistically generalisable, they are strengthened by sample size and design. The study calls for systemic reforms in resource allocation, clearer structural guidelines, and expanded professional training to ensure assessments reflect actual competence, thereby promoting fairness and equal educational opportunity.

KEYWORDS: HOME AND CONSUMER STUDIES; HOME ECONOMICS STUDIES; ASSESSMENT VALIDITY; ASSESSMENT EQUITY; CONTEXTUAL FACTORS; RESOURCE LIMITATIONS

Introduction

Purpose

Assessment is a central component of teaching and learning, yet in practical, process-oriented subjects such as Home and Consumer Studies (HCS), it presents unique challenges. Unlike traditional academic subjects, HCS combines cognitive, psychomotor, and affective domains of learning, requiring students to apply theoretical knowledge through hands-on, often collaborative activities. This makes assessment in HCS inherently complex, as it must account for both final products (e.g., a completed meal, a budget plan) and the learning process itself—such as planning, cooperation, problem-solving, and reflection (Höijer et.al, 2013). In Sweden, Home and Consumer Studies is governed by the national curriculum Lgr22, which emphasises competence development through active participation, critical thinking, and sustainable decision-making. The curriculum promotes a constructivist, inquiry-based pedagogy, where

Larsson, E. (2026). Context Matters: Structural Constraints and Assessment Equity in Home and Consumer Studies.

International Journal of Home Economics, 19(1), 36-49.

Elina Larsson ✉ elina.larsson@taby.se

© 2026 International Federation for Home Economics

students gradually shift from teacher-guided activities to more autonomous exploration and learning (Skolverket, 2022; Banchi & Bell, 2008).

This article explores how contextual and structural factors influence assessment quality in HCS, with particular attention to issues of equity and validity. Drawing on teacher perspectives and current research, the study aims to answer the following questions:

1. How do contextual conditions, such as time, resources, and group size, affect teachers' capacity to conduct valid and fair assessments in HCS?
2. What systemic or organisational changes are needed to support equitable assessment practices in process-oriented subjects?

By highlighting the impact of external conditions on internal classroom practice, the article seeks to inform both pedagogical approaches and policy development in Home Economics education. The findings have broader relevance for any educational system aiming to implement competency-based, practical learning in equitable ways.

Assessment in practical and process-oriented subjects has long been recognised as particularly challenging. Unlike many theoretical subjects, assessment must capture not only subject knowledge, but also practical skills, decision-making, collaboration, and reflection demonstrated during learning activities (Black & Wiliam, 1998; Andrade, 2010). Researchers have also highlighted the importance of validity and fairness in assessment, particularly when external conditions such as resources, time allocation, class size, and access to appropriate learning environments may influence students' opportunities to demonstrate their competence (Messick, 1996; De Ron & Feldt, 2022). These challenges are not unique to Sweden but are relevant across educational systems that seek to assess practical competencies in authentic learning situations. Against this background, the Swedish subject HCS provides an interesting context for examining how structural conditions influence assessment quality and equity.

This study draws on Messick's (1996) unified theory of validity, which underlines that assessment outcomes cannot be separated from the conditions under which they are produced. From this perspective, validity includes considerations of fairness and equity, making contextual factors such as resources, time allocation, and learning environments central to understanding assessment quality.

Literature and Background: Home and Consumer Studies in the Swedish Curriculum Lgr22

The nature of Home and Consumer Studies as a process-oriented and practical subject, as defined in Lgr22 and supported by constructivist pedagogy, directly influences how assessment should be designed and implemented. Since the subject emphasises active participation, reflection, and the development of transferable skills through real-life tasks, traditional assessment methods focused solely on final products or written exams are insufficient. Assessment in HCS must therefore capture not only the end results, such as a completed meal or a household budget, but also the learning process, including students' problem-solving abilities, collaboration, creativity, and reflective thinking throughout the lesson phases (Bohm, 2021; Banchi & Bell, 2008). This aligns with the curriculum's focus on developing competencies such as responsible decision-making, sustainability awareness, and practical skills in everyday life. Moreover, the gradual progression from teacher-guided to student-led inquiry requires formative and authentic assessments that provide ongoing feedback and allow students to demonstrate their knowledge, skills, and attitudes in varied and meaningful contexts (Andrade, 2010). Such assessments support the development of lifelong learning skills and help ensure that students meet the holistic aims of HCS as described in Lgr22.

Elements of the findings presented in this article have previously informed a broader synthesis of structural and material conditions in Swedish HCS published in a professional reference volume (Larsson, 2024). The present article differs from that work by focusing specifically on assessment validity and equity through the analytical lens of Messick's (1996) validity framework and by synthesising findings across four survey periods conducted between 2020 and 2024.

Purpose and Core Content of HCS

Lgr22 articulates HCS's purpose as preparing students for everyday life through the integration of practical skills, theoretical knowledge, and value-based learning (Skolverket, 2022). Core content areas include:

- Cooking and household management, including meal planning and preparation.
- Nutrition and healthy eating, with attention to food quality and origins.
- Physical, mental, and social wellbeing, encompassing work-life balance.
- Sustainable consumption and environmental responsibility.
- Personal finance, such as budgeting and economic decision-making.
- Social and cultural dimensions, including family roles, cooperation, and gender equality.
- Societal impacts of individual choices in sustainability and cultural traditions.

Structural Conditions and Teaching Methods

Optimal HCS instruction requires a safe and well-equipped environment. Functional kitchens with adequate appliances, ventilation, hygiene facilities, and ergonomic workspaces are essential. Sufficient kitchen stations and space for practical work and shared meals support collaborative learning and safety (Skolverket, 2022). The teaching approach follows a five-phase lesson structure: establishment, introduction, student work, meal, and conclusion, emphasising experiential learning and reflection (Bohm, 2021). Pedagogy is rooted in inquiry-based learning, progressing from guided to open inquiry, fostering critical thinking, problem-solving, and autonomy (Banchi & Bell, 2008).

Assessment in Home and Consumer Studies

Assessment in Home and Consumer Studies must reflect the subject's practical and process-oriented nature by capturing not only final products but also students' learning processes, including collaboration, problem-solving, creativity, and reflection. Formative assessment plays a central role, providing ongoing feedback that supports student development and aligns with curriculum goals (Black & Wiliam, 1998; Bohm, 2021; Andrade, 2010). Positioning students as active evaluators of their own learning fosters self-regulation and reflective practice, while making learning visible helps both students and teachers adjust strategies throughout the learning process (Havnes et al., 2012).

Summative assessments, meanwhile, evaluate the extent to which students have acquired the knowledge, skills, and attitudes outlined in Lgr22. However, the complexity of assessing practical skills and processes poses challenges for ensuring validity, reliability, and fairness. These challenges are often compounded by contextual factors such as material resources, class size, time allocation, and teacher workload (De Ron & Feldt, 2022; Ingvarsson & Wallin, 2015; Messick, 1996). Addressing these challenges often requires sustained professional development to enhance teachers' assessment literacy and support effective implementation of formative practices (Avalos, 2011; Guskey, 2002). Understanding how these factors influence assessment practices is crucial for developing equitable and high-quality evaluation methods in Home Economics education.

Methodology

This study employs a qualitative research approach that foregrounds the lived experiences and professional perspectives of teachers in Home and Consumer Studies. Integrating theoretical frameworks related to curriculum implementation and workplace safety, the study offers a multifaceted understanding of how institutional, regional, and legal contexts shape instructional practices and influence student learning outcomes within the HCS discipline.

Methodological Rationale

A longitudinal qualitative survey design was selected to balance depth, scope, and practical feasibility. While classroom observations and individual interviews can provide rich contextual insights, they are often limited by resource constraints and restricted to a small number of sites, thus limiting generalisability. In contrast, the survey method enabled participation from a geographically diverse cohort of HCS teachers across multiple regions and municipalities over a four-year period. Repeated data collection allowed for tracking changes in resource availability, professional experiences, and perceptions of institutional constraints over time. Open-ended questions captured rich qualitative data comparable to interview narratives, while the substantial sample size enhanced the robustness and transferability of the findings.

Research Design

The investigation utilised a longitudinal qualitative survey methodology with four waves of data collection conducted between 2020 and 2024. The survey instruments combined closed-ended multiple-choice questions with open-ended items, facilitating a mixed-methods approach. This design supported quantitative descriptive analyses alongside in-depth thematic exploration of qualitative responses, thereby enabling examination of key factors such as resource allocation, working conditions, and teachers' subjective experiences longitudinally.

Instrument Development

Survey instruments were developed collaboratively with experts from the Swedish Teachers' Union for Home and Consumer Studies to ensure content validity, clarity, and relevance. The questionnaires addressed both quantifiable aspects of framework conditions and elicited nuanced reflections on daily pedagogical practices. Inclusion of open-ended questions provided respondents with opportunities to elaborate on their experiences beyond fixed-response options.

Population and Demographics

Participants were active home and consumer studies teachers across Sweden, recruited via the Teachers' Union registry. The material encompasses four studies. The first study, conducted in 2020, was completed by 368 practicing teachers from across the country ($n = 368$). The second study, carried out in 2021, involved 176 teachers ($n = 176$), while the third, in 2023, was completed by 328 teachers ($n = 328$). Finally, the fourth study, conducted in 2024, focused on 372 home and consumer studies teachers ($n = 372$). Approximately 85% of respondents reported more than 3 years of teaching experience, with the majority holding formal qualifications in home and consumer studies or related fields. The sample was geographically diverse, representing a broad spectrum of educational contexts and resource distributions nationwide.

The present article does not report the results of a single survey. Instead, it provides a synthesis of findings from four related national surveys conducted between 2020 and 2024. The surveys were designed around a common set of themes concerning framework conditions, teaching practices, and assessment in Home and Consumer Studies. Although some survey items were adapted between data collection rounds to address emerging issues, the overall design enabled comparison of recurring patterns across the four survey periods.

Sampling Procedure

An open, non-probability sampling strategy was employed to maximise inclusivity and representativeness. Invitations were disseminated through Sveriges Lärare (formerly the Swedish Teachers' Union), leveraging its extensive network to engage a wide cross-section of experienced and committed HCS educators.

Data Collection

Quantitative data from closed questions were analysed using descriptive statistics, including frequency distributions and percentages. Qualitative data from open-ended responses underwent systematic thematic analysis guided by Braun and Clarke's (2006) framework. Data processing and interpretation were conducted with reflexivity and critical self-assessment, ensuring credibility. Findings were triangulated with prior research and aligned with a Finnish Home and Consumer Studies educational framework for enhanced validity.

Data Analysis

Descriptive statistical methods summarised quantitative data from multiple-choice items, while qualitative data were analysed through rigorous thematic coding. The analysis was iterative and reflexive, enabling critical engagement with the data. Triangulation against existing literature and the Finnish model strengthened the interpretive trustworthiness of the results.

Ethical Considerations

The study adhered strictly to ethical guidelines established by the Swedish Research Council, including obtaining informed consent, ensuring participant confidentiality and anonymity, and maintaining voluntary participation. All data were anonymised at the point of collection and securely stored, with access restricted exclusively to the researcher.

Limitations

Although the study design facilitated broad participation and longitudinal insight, several limitations must be acknowledged. The open, voluntary sampling approach may have introduced self-selection bias, potentially overrepresenting teachers actively engaged in professional networks or with strong views on framework conditions. Self-reported data carry inherent risks of subjective bias and recall inaccuracies. Despite geographic diversity, findings are not statistically generalisable to the entire population of Swedish HCS teachers. These limitations are common in qualitative educational research and were mitigated through a large sample size, repeated survey iterations, and triangulation with prior studies.

Findings

Contextual Factors

Material Resources

Across all survey years (2020-2024), teachers consistently reported that worn or outdated kitchen tools compromised instruction and assessment. In 2020, 51% of teachers noted inadequate kitchens, slightly improving to 46% in 2024, indicating a persistent issue. Insufficient or substandard equipment meant that students sometimes worked under lacking conditions, creating risks of unfair evaluation. Teachers highlighted that practical skills risked being assessed inaccurately if tools were missing or malfunctioning, potentially skewing the representation of student competence. Several teachers stressed that the validity of assessments was impacted when the conditions under which skills were tested did not reflect realistic or intended learning situations. This concern was consistent across multiple years, indicating a persistent problem with material resources in Home and Consumer Studies.

Time Constraints and Workload

Time limitations emerged as a prominent and persistent challenge in the assessment of Home and Consumer Studies. Scheduling and lesson duration have impacted teaching and assessment. The length of lessons can vary significantly across Sweden due to the absence of standardised regulations. Teachers perceive this as a major issue; for example, 42% of teachers in 2022 and 36% in 2024 reported that scheduling is a problem. Across all survey years, teachers consistently reported that the allocated instructional time, typically 75 to 80 minutes per lesson, was insufficient for comprehensive teaching, formative assessment, and meaningful student feedback. Limited transition periods between classes, sometimes less than 10 minutes, which 40-44% of teachers reported as too short, further exacerbated the pressure on both planning and execution.

Several teachers described substantial reductions in subject hours at their schools, in some cases exceeding the 20% reduction permitted by the National Agency for Education. This resulted in a compressed instructional schedule and limited opportunities to support student learning or collect evidence for assessment. One participant reported:

The school has reduced the subject by more than the 20% allowed by the National Agency for Education... Lesson time is insufficient, and students receive no compensation during other times. (Teacher, Survey 2024).

Other participants similarly noted that reduced lesson time affected their ability to provide feedback and monitor student progress consistently.

Several teachers reported that limited time for feedback and documentation affected their ability to provide individualised guidance and to collect sufficient evidence for assessment. Several participants described the cumulative effect of these time constraints as physically and cognitively exhausting. One teacher stated:

I have three days a week that are so intense with a lot of teaching that I'm really exhausted, both during the day and especially when I get home. (Teacher, Survey 2020).

Other participants noted that the lack of follow-up time made it challenging to monitor student progress consistently and support learning effectively.

Group Size and Learning Environment

Class size and the overall learning environment were reported by teachers as important factors affecting instruction and assessment in Home and Consumer Studies. Across the surveyed years, teachers consistently described challenges associated with large student groups, often ranging from 14 to 20 students per session. With only four to five fully equipped kitchen stations available, students frequently had to share workspaces. According to survey data from 2020-2024, between 12% and 17% of teachers reported that three or more students regularly shared the same station, which limited task variety, reduced exposure to different cooking methods, and prevented full participation in intended activities. In some cases, as many as five students shared a station. One teacher noted:

It becomes harder for me to praise each student's effort when there are so many in the same group. (Teacher, Survey 2024).

Several participants reported that large group sizes and limited resources also reduced opportunities for formative feedback and individual observation. Teachers described increased noise levels and greater challenges in classroom management, which diverted attention from instruction. One respondent explained:

The classroom is like a hall filled with a large group of bustling students: I can hardly hear them or myself during the practical work. Extremely exhausting. (Teacher, Survey 2020).

Physical Layout of Facilities

The physical design of classrooms was reported by teachers as an important factor affecting instruction and assessment in HCS. Participants described how spatial arrangements, such as split kitchen areas, obstructed sightlines, and overcrowded workstations, created challenges for monitoring and supporting students. Several teachers noted concerns regarding safety and supervision, indicating that they could not maintain visual contact with all students at the same time. One teacher stated:

The HCS classroom consists of different spaces where students are present at the same time. However, I cannot be in all spaces simultaneously and do not have oversight of the students. (Teacher, Survey 2022).

Participants also reported that limited visibility and constrained layouts reduced opportunities to observe student practices and provide immediate feedback. Tight spaces and insufficient access to equipment, such as sinks or ovens, disrupted the flow of tasks and instructional activities.

Assessment Practices

Formative Assessment

Formative assessment was consistently reported by teachers as a key strategy in Home and Consumer Studies. Teachers described using continuous observation, verbal feedback, reflective questioning, and guided discussion to support student learning throughout the term. Despite widespread use of these practices, several factors were reported to limit their implementation:

- **Limited instructional time:** Reductions in subject hours and tight timetables left little room for individualised feedback or reflective dialogue. Teachers reported that formative moments were frequently rushed or omitted due to the pressure to cover content and manage classroom logistics. As one of the teachers explained:

I have several lessons with very short transition times and two with zero transition time, students have to leave at the exact moment new ones are coming in! I am extremely stressed because I don't have time to prepare the new lesson and never know if the others will finish on time. How am I supposed to have time to reflect on what was done and how it went for each student? (Teacher, Survey 2020).

- **High student-to-teacher ratios:** Large groups made it difficult to monitor each student closely. One participant noted:

It's challenging to see what every student is doing when I have such a large group and only a short time with them. (Teacher, Survey 2023).

- **Variation in student readiness:** Teachers reported that some students arrived tired, unprepared, or with limited kitchen skills, which disrupted the flow of lessons and reduced opportunities for formative feedback. These conditions also made it harder to sustain student engagement during instructional activities.

Summative Assessment

Summative assessment in Home and Consumer Studies was typically conducted at the end of instructional periods to evaluate students' knowledge and practical competencies. Teachers reported that assessments included both theoretical understanding and hands-on performance, with grading based on cumulative evidence collected throughout the term. A recurring challenge reported across all survey years was the limited number of assessable lessons within the academic calendar. Several teachers noted having as few as eight lessons per year for formal assessment, which restricted their ability to collect sufficient and representative evidence of student learning. One teacher explained:

Having to cover all goals in about eight assessable lessons during the school year and then grade afterwards... Even grades for Christmas must be set after only 3-4 lessons. (Teacher, Survey 2024).

Teachers also highlighted the extensive documentation requirements involved in summative assessment. Recording both practical and theoretical performance was described as administratively demanding, especially for those teaching multiple groups. One participant stated:

I have far too many students in different types of group configurations. Some have only theory for one semester, others both theory and practical. 11 groups and many adaptations that must be documented, and everyone has to be assessed! (Teacher, Survey 2021).

Several teachers reported that heavy workloads limited time for reflection, moderation, and cross-checking of grades.

Validation of Assessment and Equity in Assessment Conditions

Teachers reported using a broad range of strategies to support assessment in Home and Consumer Studies. These included written tests, practical exercises, long-term projects, and ongoing classroom observation. Classroom observation was the most frequently used method for each lesson session. Practical tests and theoretical exams were also used regularly, with approximately 90% of teachers in the 2024 survey reporting using these methods at least once per term. Teachers described clear criteria, transparent communication, peer dialogue, and student feedback as important components for supporting valid and fair assessment. Involving students in reflective discussions around performance was reported to contribute to a shared understanding of assessment criteria.

Despite these strategies, teachers identified contextual limitations that sometimes restricted the application of nuanced assessment methods. Limited resources, time, and large class sizes were reported as factors that occasionally led to the use of more simplified approaches. Several teachers raised concerns about unequal assessment conditions between schools, noting that differences in group size, equipment quality, lesson frequency, and classroom layout created varying opportunities for observation, feedback, and demonstration of skills. One teacher explained:

It's not fair that students in better-equipped schools or smaller groups have an advantage in showing what they know and can accomplish. (Teacher, Survey 2024).

Professional Development and Assessment Quality

A significant proportion of surveyed teachers, ranging from 65% to 85% across 2020-2024, reported a strong need for subject-specific professional development, particularly regarding assessment. Teachers described limited access to training that addressed both formative and summative assessment strategies in HCS. In the 2024 survey, 58% of respondents indicated that school leadership did not provide sufficient support or time to engage with new developments in assessment methodology. Teachers highlighted that ongoing professional learning was necessary to maintain effective assessment practices. They identified three main areas where professional development was needed:

- Curriculum Alignment: Ensuring assessment practices reflect current knowledge requirements and subject goals.
- Formative and Summative Strategies: Improving understanding of diverse and integrated assessment methods suitable for practical and theoretical learning.
- Confidence and Consistency: Strengthening the ability to apply grading criteria fairly across different student groups and learning contexts.

Discussion

Contextual Factors

Contextual conditions in Home and Consumer Studies significantly influence teaching and assessment quality. Insufficient equipment, reductions in subject hours, and compressed schedules limited opportunities for individualised guidance, formative feedback, and the collection of reliable evidence for summative assessment (Klenowski, 2009; Looney, 2011). Large class sizes and shared workspaces further constrained observation and participation, creating potential safety risks and inequities. High student-teacher ratios reduce feedback frequency and depth, compromising both formative and summative assessment (OECD, 2020;

Harlen, 2007). The physical environment, therefore, actively shapes assessment validity, as suboptimal layouts increase cognitive and physical load, restricting engagement and fair evaluation (Woolner et al., 2007; Black & McCormick, 2010; Brookhart, 2011). Structural factors, such as group size, resources, and scheduling, are integral to equitable and pedagogically meaningful assessment. These findings align with practical implications that highlight the critical role of material resources, time allocation, and classroom design in enabling teachers to implement curriculum goals effectively (De Ron & Feldt, 2022; Ingvarsson & Wallin, 2015).

Formative Assessment

Teachers emphasised formative assessment as crucial for clarifying goals, supporting skill development, and scaffolding learning (Black & Wiliam, 2009). However, limited time, large groups, and variable student readiness mirrored previously reported barriers in practice-based subjects (Carless, 2007; Havnes et al., 2012). Effective formative assessment depends on supportive conditions, highlighting the interplay between structural resources and pedagogical success. Overloaded schedules, frequent lesson interruptions, and reduced instructional hours further constrained opportunities for student-centred inquiry, differentiation, and individual feedback (Black & Wiliam, 1998; Banchi & Bell, 2008), limiting development of competencies emphasised in Lgr22, such as sustainability awareness and responsible decision-making.

Summative Assessment

Summative assessment was similarly affected by structural and administrative constraints. Limited makeup opportunities, compressed timetables, and extensive documentation demands risked undermining reliability and completeness, particularly in subjects combining practical and theoretical evaluation (Wyatt-Smith & Klenowski, 2013). Despite teachers' efforts to align assessments with curriculum standards, systemic limitations often impeded valid and equitable evaluation. Physical and spatial barriers, such as obstructed sightlines and limited kitchen stations, restricted teachers' ability to observe critical skills like hygiene, collaboration, and safe equipment handling, further undermining fairness (Gelinder, 2020; Lindblom, 2016).

Validation and Equity

Transparent criteria, student involvement, and peer dialogue were reported to enhance assessment validity and fairness (Sadler, 1989; Andrade, 2010). Nevertheless, contextual limitations occasionally necessitated simplified approaches, compromising depth and consistency. Variation in group size, equipment quality, lesson frequency, and classroom layout created inequities, supporting Messick's (1996) assertion that assessment must measure competencies under equitable conditions. Research also indicates that variability in learning environments can distort outcomes, meaning grades may reflect context as much as competence (Popham, 2003; Tierney, 2013). Teachers emphasised the need for standardised baseline conditions, adequate time, resources, and training, to ensure fair assessment. Structural inequities in resources, class size, instructional time, and professional development can exacerbate disparities among students from different socioeconomic backgrounds (Lundahl & Folke-Fichtelius, 2010; OECD, 2020). Policy interventions addressing these systemic barriers are necessary to align assessment practices with curriculum goals and social equity objectives.

Professional Development

Ongoing professional development was critical for maintaining assessment quality. Teachers reported limited access to training in formative and summative strategies, risking outdated practices and misalignment with curricular expectations (Guskey, 2002; Avalos, 2011). Key areas included curriculum alignment, diverse assessment methods, and consistent grading, echoing research showing that targeted professional development enhances assessment literacy, instructional quality, and student outcomes (DeLuca et al., 2016; Heritage, 2010). Uneven access to training, often dependent on local leadership and resources, remains a systemic barrier. System-level investment in professional learning is crucial to ensure teachers can implement equitable and valid assessment practices.

Research Limitations/Implications

While this study offers valuable insights into the contextual conditions shaping assessment in Home and Consumer Studies, it is important to acknowledge several limitations. The data was collected within a specific Swedish national context, which may limit the generalisability of findings to other countries or education systems. Moreover, although multiple teacher perspectives were included, student voices and quantitative performance data were not part of the study. Incorporating these additional perspectives could provide a more comprehensive understanding of how contextual inequities influence learning outcomes (Carless, 2007; Havnæs et al., 2012; Black & Wiliam, 2009). These limitations suggest that further research is needed to examine the interplay between structural conditions and assessment practices across diverse educational contexts. Comparative studies could also explore how different policy frameworks, resource allocations, and pedagogical cultures affect equity and validity in practical, process-oriented subjects such as HCS (Stiggins, 2005; 2007; Harlen, 2007).

Practical Implications

The findings have important implications for educational practice and school organisation. While curriculum frameworks such as Lgr22 highlight competency-based and process-oriented assessment, teachers' ability to implement these intentions depends on the structural conditions in which teaching takes place. Consistent with Messick's (1996) view of validity, assessment quality is influenced not only by assessment design but also by students' opportunities to demonstrate their knowledge and skills under equitable conditions.

Physical and spatial barriers also impede equitable assessment. Obstructed sightlines, split layouts, and limited kitchen stations restrict teachers' ability to observe critical skills like hygiene, collaboration, and safe equipment handling. Overcrowded classrooms reduce teacher attention per student and heighten noise levels, further diminishing the reliability and fairness of assessment outcomes (Gelinder, 2020; Lindblom, 2016). Access to professional development emerged as another key factor influencing assessment quality. Limited opportunities for ongoing, subject-specific training impede teachers' ability to maintain consistency and align practices with current curriculum and pedagogical research (Guskey, 2002; Avalos, 2011; DeLuca et al., 2016; Heritage, 2010). System-level investment in professional learning is therefore crucial to enhance teacher competence and promote equity across schools. Continued investment in subject-specific professional learning is therefore important for maintaining equitable assessment practices across schools.

Social Implications

Beyond classroom practice, the findings raise broader questions about educational equity and access to learning opportunities. Differences in resources, instructional conditions, and professional support may influence students' opportunities to demonstrate competence, potentially affecting the fairness of assessment outcomes across schools (Lundahl & Folke-Fichtelius, 2010; OECD, 2020).

Policy interventions are necessary to address these systemic barriers. Without equitable distribution of resources, limits on group size, sufficient teaching hours, and structured professional development, curriculum goals remain aspirational. These findings support frameworks of educational equity that emphasise the need to tackle structural disadvantages to ensure fair and valid outcomes for all learners (Messick, 1996; Popham, 2003; Tierney, 2013). By linking micro-level classroom practices to macro-level policy, the study underscores that fostering social equity in HCS requires coordinated attention to both pedagogical and structural conditions (Sadler, 1989; Andrade, 2010).

Overall, the study demonstrates that teachers' ability to conduct valid and equitable assessments in HCS is heavily shaped by contextual factors such as time, resources, and class size. Addressing these challenges requires systemic support, including professional development, resource allocation, and policy-level interventions, to ensure that assessment practices reflect students' true competencies rather than contextual advantages or disadvantages.

Conclusion

This study highlights that valid and equitable assessment in Home and Consumer Studies cannot be understood, or improved, without accounting for the broader structural and contextual conditions in which teachers operate. While curriculum reforms like Lgr22 promote competence-based, inquiry-driven learning and assessment, their implementation is undermined by practical constraints such as insufficient time, inadequate material resources, overcrowded classrooms, and limited opportunities for professional development. Such barriers shape both the content and methods of assessment, as well as whose learning is most faithfully captured, prompting urgent concerns about equity and fairness in educational outcomes. The findings support a growing consensus that structural equity is a prerequisite for pedagogical equity. Policymakers, school leaders, and curriculum developers must recognise that assessment design alone is not enough. Ensuring the validity and fairness of assessment in practical subjects like HCS requires sustained investment in teacher support, classroom infrastructure, and time for reflective, student-centred practice.

Future research should explore the perspectives of students and examine how structural disparities affect their experiences and outcomes. Comparative studies across countries could also offer insights into how different educational systems navigate the intersection of structure, pedagogy, and assessment in life-oriented subjects such as HCS.

Biography

Elina Larsson is a Swedish lecturer and researcher in home economics education and sustainable living. She promotes critical thinking, active citizenship, and inclusive learning environments. Her work develops teaching methods that support practical skills, sustainability, social responsibility, and lifelong learning, equipping students to tackle global challenges and contribute to a more equitable and sustainable future. Email: elina.larsson@taby.se

 <https://orcid.org/0009-0009-8276-8470>

References

- Andrade, H. (2010). Students as the definitive source of formative assessment: Academic self-assessment and the self-regulation of learning. In H. L. Andrade & G. J. Cizek (Eds.), *Handbook of formative assessment* (pp. 90-105). Routledge.
- Avalos, B. (2011). Teacher professional development in teaching and teacher education over ten years. *Teaching and Teacher Education*, 27, 10-20. <https://doi.org/10.1016/j.tate.2010.08.007>
- Banchi, H., & Bell, R. (2008). The many levels of inquiry. *Science and Children*, 46(2), 26-29. https://www.researchgate.net/publication/281990828_The_many_levels_of_inquiry
- Black, P., & Wiliam, D. (1998). *Inside the black box: Raising standards through classroom assessment*. GL Assessment.
- Black, P., & Wiliam, D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability*, 21(1), 5-31. <https://doi.org/10.1007/s11092-008-9068-5>
- Black, P., & McCormick, R. (2010). Reflections and new directions. *Assessment and Evaluation in Education*, 37(1), 5-13. <https://doi.org/10.1080/02602938.2010.493696>
- Bohm, I. (2021). We can never close the book and say, 'We'll continue next week' - The rhythms of cooking and learning to cook in Swedish home economics. *Food, Culture & Society*, 25(3), 604-619. <https://doi.org/10.1080/15528014.2020.2002057>
- Brookhart, S. M. (2011). Educational assessment knowledge and skills for teachers. *Educational Measurement: Issues and Practice*, 30(1), 3-12. https://doi.org/10.1111/10.2505/3/sc08_046_02_26_j.1745-3992.2010.00195.x
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp0630a>
- Carless, D. (2007). Learning-oriented assessment: Conceptual bases and practical implications. *Innovations in Education and Teaching International*, 44(1), 57-66. <https://doi.org/10.1080/14703290601081332>
- DeLuca, C., LaPointe-McEwan, D., & Luhanga, U. (2016). Teacher assessment literacy: A review of international standards and measures. *Educational Assessment, Evaluation and Accountability*, 28(3), 251-272. https://doi.org/10.2505/3/sc08_046_02_26_0.1007/s11092-015-9233-6
- De Ron, L., & Feldt, M. (2022). *Lära och bedöma i hem- och konsumentkunskap Lgr22: nya handboken* [Teaching and Assessing in Home and Consumer Studies (Lgr22): The New Handbook]. Liber.
- Gelinder, L. (2020). *Smak för hållbar mat? Undervisning för hållbar matkonsumtion i hem- och konsumentkunskap* [Taste for sustainable food? Teaching for sustainable food consumption in Home and Consumer Studies] [Doctoral dissertation, Uppsala University]. Digital Comprehensive Summaries of Uppsala Dissertations from the Faculty of Educational Sciences (No. 20). <https://uu.diva-portal.org/smash/get/diva2:1417766/FULLTEXT01.pdf>
- Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching*, 8(3), 381-391. <https://tguskey.com/wp-content/uploads/TT-02-Prof-Dev-Tchr-Change.pdf>
- Harlen, W. (2007). *Assessment of learning*. SAGE Publications. <https://doi.org/10.4135/9781446214695>
- Havnes, A., Smith, K., Dysthe, O., & Ludvigsen, K. (2012). Formative assessment and feedback: Making learning visible. *Studies in Educational Evaluation*, 38(1), 21-27. <https://doi.org/10.1016/j.stueduc.2012.04.001>
- Heritage, M. (2010). *Formative assessment: Making it happen in the classroom*. Corwin Press. <https://doi.org/10.4135/9781452219493>
- Höijer, K., Fjellström, C., & Hjalmskog, K. (2013). Learning space for food: Exploring three home economics classrooms. *Pedagogy, Culture & Society*, 21(3), 449-469. <https://doi.org/10.1080/14681366.2013.809374>

- Ingvarsson, P., & Wallin, K. (2015). *Hur sker bedömning i hem- och konsumentkunskap? Hem- och konsumentkunskapslärares förhållningssätt kring bedömning* [How is assessment conducted in Home and Consumer Studies? Home and Consumer Studies teachers' approaches to assessment]. [Bachelor's thesis, University of Gothenburg]. University of Gothenburg.
<https://gupea.ub.gu.se/handle/2077/38705>
- Klenowski, V. (2009). Assessment for learning revisited: An Asia-Pacific perspective. *Assessment in Education: Principles, Policy & Practice*, 16(3), 263-268.
<https://doi.org/10.1080/09695940903319646>
- Larsson, E. (2024). *Ramfaktorer i hem- och konsumentkunskap och deras betydelse samt optimering för hög utbildningskvalitet* [Framework conditions in Home and Consumer Studies: Their significance and optimization for high educational quality]. Books on Demand.
- Lindblom, C. (2016). *Skolämnet hem- och konsumentkunskap på 2000-talet: Förutsättningar för elevers möjlighet till måloppfyllelse* [The school subject Home and Consumer Studies in the 2000s: Conditions for pupils' opportunity to reach the goals in the subject] [Doctoral dissertation, Umeå University]. Umeå University.
<https://www.skolporten.se/app/uploads/2016/05/fulltext01-12.pdf>
- Looney, J. (2011). *Integrating formative and summative assessment: Progress toward a seamless system?* (OECD Education Working Papers, No. 58). OECD Publishing.
<https://files.eric.ed.gov/fulltext/ED529586.pdf>
- Lundahl, C., & Folke-Fichtelius, M. (Eds.). (2010). *Bedömning i och av skolan: Praktik, principer, politik* [Assessment in and of Schools: Practice, Principles, Policy]. Studentlitteratur.
- Messick, S. (1996). Validity of performance assessments. In G. W. Phillips, (Ed.), *Technical issues in large-scale performance assessment* (pp. 1-19). National Center for Education Statistics. <http://nces.ed.gov/pubs/96802.pdf>
- OECD. (2020). *Education at a Glance 2020: OECD indicators*. OECD Publishing.
<https://doi.org/10.1787/69096873-en>
- Popham, W. J. (2003). *Test better, teach better: The instructional role of assessment*. ASCD.
- Skolverket. (2022). *Läroplan för grundskolan, förskoleklassen och fritidshemmet 2022 (Lgr22): Hem- och konsumentkunskap* [Curriculum for the compulsory school, preschool class and school-age educare 2022 (Lgr22): Home and Consumer Studies]. Skolverket.
<https://www.skolverket.se/undervisning/grundskolan/laroplan-lgr22-for-grundskolan-samt-for-forskoleklassen-och-fritidshemmet/curriculums/LGR22/GRGRHK01?tosHeading=Kursplaner&hasSubjects=true&schoolType=GR#course-plan>
- Sadler, D. R. (1989). Formative assessment and the design of instructional systems. *Instructional Science*, 18(2), 119-144.
<https://doi.org/10.1007/BF00117714>
- Stiggins, R. (2005). From formative assessment to assessment for learning: A path to success in standards-based schools. *Phi Delta Kappan*, 87(4), 324-328.
<https://doi.org/10.1177/003172170508700414>
- Stiggins, R. J. (2007). Assessment for learning: A key to motivation and achievement. *EDge*, 2(2). State of Michigan. https://www.michigan.gov/-/media/Project/Websites/mde/2007/03/02/Kappan_Edge_Article.pdf
- Tierney, R. D. (2013). Fairness in educational assessment. In J. H. McMillan (Ed.), *SAGE handbook of research on classroom assessment* (pp. 125-144). SAGE.
<https://doi.org/10.4135/9781452218649.n8>
- Woolner, P., Hall, E., Higgins, S., McCaughey, C., & Wall, K. (2007). A sound foundation? What we know about the impact of environments on learning and the implications for building schools for the future. *Oxford Review of Education*, 33(1), 47-70.
<https://doi.org/10.1080/03054980601094693>
- Wyatt-Smith, C., & Klenowski, V. (2013). Explicit, latent and meta-criteria: Types of criteria at play in professional judgment practice. *Assessment in Education: Principles, Policy & Practice*, 20(1), 35-52.
<https://doi.org/10.1080/0969594X.2012.725030>



The Domestic Scientist at the Dewey Laboratory School

Mary Gale Smith
British Columbia University, Canada

Abstract

What has become known as the Dewey Laboratory School was established at the University of Chicago in 1896 and was in operation until 1904. There is an abundance of literature about its founder, John Dewey and the educational philosophy of the school but the contribution of the women teachers who implemented the lessons and reported on their daily work, has been relatively unnoticed. Thirty-two years after the school closed, two of the teachers wrote of their experience at the school (Mayhew & Edwards, 1936) and more recently Durst (2010a) investigated four of the teachers—Anna Camp, Katherine Camp, Althea Harmer and Mary Hill. As a home economics educator, my interest was drawn to Althea Harmer. She was a graduate of domestic science whereas the other teachers had degrees in science and history. In particular, I analyze five of the articles that she published between 1900 and 1904 when she was employed at the school as a domestic science teacher and department head. My purpose is two-fold: to make visible the contribution of the domestic scientist who taught at the Laboratory School; and to explore the ways her reports can inform contemporary thinking about the curriculum and pedagogy of home economics.

KEYWORDS: HOME ECONOMICS HISTORY; DEWEY LABORATORY SCHOOL; HOME ECONOMICS CURRICULUM AND PEDAGOGY

Setting the Context—The Laboratory School

In 1894, John Dewey was hired as head of the department of philosophy at the newly founded University of Chicago. The department also included pedagogy which would eventually become a separate department that he also headed. Dewey then founded University College Elementary School, also known as the University Laboratory School, or just the Laboratory School or even the Dewey School (Knoll, 2015).

The school opened in 1896 and Dewey directed it until he left Chicago in 1904. It was designed as a space to experiment with his evolving theorizing of education outlined in *My Pedagogic Creed* (Dewey, 1897) and further developed in *The School and Society* (Dewey, 1899), and *The Child and the Curriculum* (Dewey, 1902). He believed that the child's interests should be central to pedagogy and the goal of education was to nurture social and moral dispositions, individual responsibility and democracy. He believed that education should develop a child's capacities that enable them to become an active and constructive participant in the life of society. Rather than passive conformity or rote learning, he advocated learning grounded in active exploration and experimentation in practical real-world experiences; an education for living. This is often described as learning by doing or hands-on learning. He believed that education should begin with common experiences. Subjects were integrated connecting reading, writing, history,

Smith, M. G. (2026). The Domestic Scientist at the Dewey Laboratory School. *International Journal of Home Economics*, 19(1), 50-64.

Mary Gale Smith ✉ mary.smith@ubc.ca

© 2026 International Federation for Home Economics

spelling, arithmetic, and science to everyday life (Tanner, 1991). “At the Laboratory School the ‘common center’ of the curriculum was located in the study of the ‘social occupations’—cooking, textile work, and shopwork” (Durst, 2010a, p. 5) giving prominence to domestic science and manual arts.

It was the teachers at the school who provided the pedagogical mechanisms to implement Dewey’s theoretical perspectives (Durst, 2005, 2010a, 2010b; Hai, et al., 2020). Dewey advocated connecting thought and action through collective inquiry. Emphasis was placed on experimentation with teachers researching and reporting on their work at the school (Durst, 2005)—a forerunner of what is now teacher inquiry or teacher action research (Benn, 2010; Peterat & Smith, 2001; Smith & de Zwart, 2016). Thirty-two years after the school closed, two of the teachers wrote of their experience at the school (Mayhew & Edwards, 1936). More recently, Durst (2010a) investigated four of the teachers—Anna Camp, Katherine Camp, Althea Harmer and Mary Hill—in order to get a better understanding of the life of teachers in the school. Katherine Camp is also mentioned as one of the 10 women who influenced Dewey (Aldridge et al., 2014).

As a home economics educator, my interest was drawn to Althea Harmer, who taught domestic arts and sciences at the Dewey School from 1897 to 1904, and also served as director of that department (Durst, 2010a). She was the only teacher with a background in what is now known as home economics. Althea Harmer had studied domestic science at the Drexel Institute and Pratt Institute. Both were private universities set up by businessmen and philanthropists who wanted to promote practical education for the working class. Anthony J. Drexel founded the Drexel Institute in 1891 in Philadelphia (Drexel University, 2026) whereas the Pratt Institute was founded in 1887 by Charles Pratt in Brooklyn who set out to create:

a school in which students should receive a thorough technical training along various lines of industry, which training should uphold the dignity of manual labor, and at the same time develop an appreciation of the artistic beauty of work done in the best possible way. (Manahan, 1905, p. 342)

Two-year degree programs in departments of Domestic Sciences and Domestic Arts were established at the Pratt Institute during its first complete school year in 1888. Domestic Arts included topics such as sewing, dressmaking, millinery, and physical culture. “Besides instruction involving methods, these courses are designed to cultivate the pupils’ taste” (Manahan, 1905, p. 343). Domestic Science was held in a laboratory with kitchens that were a “housekeepers’ dream” well suited to “practical experiments in cookery” (Manahan, 1905, p. 343). The two schools of Domestic Science and Domestic Arts were eventually merged into School of Household Science and Arts, and in 1941 became the School of Home Economics (Pratt Institute Libraries, n.d.).

Althea Harmer graduated in 1896 from Pratt Institute's Normal Course in Domestic Science where Katherine Camp Mayhew was chemistry instructor (Durst, 2010a; Durst, 2010b; Mayhew & Edwards, 1936). In that same year she is listed as a post-graduate scholarship student in charge of the Maids' Class and Saturday morning classes for young children (Pratt Institute, 1897). The Saturday morning classes are described as "the most interesting" (Pratt Institute, 1897, p. 60). A description of two of her lessons provides an example of her approach to teaching:

Miss Harmer told them some interesting stories about chocolate; where and how it grows, the process by which it is made into the form in which we know it, and how it is adulterated. She had specimens to illustrate her points, and then allowed the children to prepare a cup of chocolate (Pratt Institute, 1897, p. 60).

Next, the little ones received a gift, a potato, which was followed by a series leading questions. The children were led to discover some of the facts the composition of the potato. For practical work they boiled it and mashed it having a very good time at the "taste" of one another's dishes which followed the cooking (Pratt Institute, 1897, p. 60).

In the fall of 1897, she joined the staff at the Dewey Laboratory School in Chicago (Durst, 2010a; Mayhew & Edwards, 1936). During her time at the school, Althea Harmer published six articles, one in the *American Kitchen Magazine*, one in the *Elementary School Record*, and four in *The Elementary School Teacher* journal (Knoll, n.d.). Each described how the curriculum was organized around domestic arts and domestic science content, specifically food preparation and textile arts. These reports were evidence of Dewey's philosophy that teachers should research their practice. In his words: "Unless a teacher is such a student, he [sic] may continue to improve in the mechanics of school management, but he [sic] cannot grow as a teacher" (Dewey, 1904, p. 256).

Purpose and Research Design

I characterize this as historical research. According to McBreen (1984), "the use of historical research in the field of home economics has not been particularly prevalent" (p. 539). Historical research is qualitative, interpretive research that seeks to "obtain a historical perspective on particular problems in the work of the profession" (Vincenti, 1989, p. 92). It seeks to interpret and explain the significance of past experiences, not merely to document them (Edson, 1986). Vaines (1997) asks us to consider three questions as part of reflective practice: What was? What is? and What should be? Knowledge of the "what was"—past history of home economics—is important in order to understand present concerns and contradictions, and future directions, "not to preserve the past but to adapt it so as to enrich and manipulate the present" (Lowenthal, 1985, p. 210).

I focus this inquiry specifically on five primary source texts: the articles written by Althea Harmer describing lessons in the elementary program at the Laboratory School. My purpose is two-fold: to make visible the contribution of the domestic scientist who taught at the Laboratory School; and to explore the ways her reports can inform contemporary thinking about the curriculum and pedagogy of home economics. I provide a synopsis of each article and identify pedagogical themes. I follow this with a discussion of the findings placing them in the realm of Progressive Education and focussing on theorizing the pedagogy of domestic science/home economics.

The Harmer Publications

According to Knoll (n.d.), Althea Harmer published six articles during her time at the Laboratory School:

- Harmer, Althea (1900) Textile Work at the Dewey School. *American Kitchen Magazine*, 12, 137-138.
- Harmer, Althea (1900) Textile Industries. *Elementary School Record*, 1(3), 71-81.
- Harmer, Althea (1903a) Elementary Cooking in the Laboratory School. *Elementary School Teacher*, 3(10), 706-709.
- Harmer, Althea (1903b) Introduction to the Primitive Textile Work in the Laboratory School. *Elementary School Teacher*, 3(10), 710-717.
- Harmer, Althea (1903c) Basketry. *Elementary School Teacher*, 4(2), 116-119.
- Harmer, Althea (1904) Textile Work Connected with American Colonial History. *Elementary School Teacher*, 4(9), 661-672.

I was unable to find the article published in 1900 in the *American Kitchen Magazine*. I was unable to find the original source of Textile Industries published in *Elementary School Record* but it was included in the book published by Mayhew and Edward (1936) so I was able to read it there. The remaining four, published in 1903 and 1904, in *The Elementary School Teacher* were available with three of the publications focussing on textiles building on one another to make a unit of study.

Textile Industries (Harmer, 1900)

The original article in the *Elementary School Record* was reprinted in Mayhew and Edwards (1936) as an example of how industries are used as curricular material.

Synopsis

This article outlines how textile industries can be “studied in the school-room for illustrating the effect they have on social life and history” (Harmer, 1900, as cited in Mayhew & Edwards, 1936, p. 330). It is a very detailed account of how children were led through three stages of development in the textile industries—primitive, domestic, and factory.

Beginning with primitive implements—the distaff, spindle, and loom—each step made is traced out, and the mechanical advantage gained in the application of the force used becomes clear.

The household and domestic stage coincides with the colonial period. Here the educational value is in the broad, historical background furnished, and emphasis is laid on the social side. Attention is directed to the influence of occupation on community life, the growth of trade and trade centers and the manner in which these have shifted and developed, to the concentration of industries as conditioned by environment, and the climate and soils of areas where raw materials are produced. A general view is sought of routes of trade and means of transportation in the development of commerce.

In the factory stage emphasis is laid upon the invention of machines, showing the utilization of the forces in nature which give increased production. A review is made of machines from primitive times to the present. (Harmer, 1900, as cited in Mayhew & Edwards, 1936, p. 331-332)

In each stage, students were encouraged to “make their own deductions from simple experiments” and in the end “they were able to carry out the whole process from the handling of the fiber in its natural condition to the woven cloth” (Harmer, 1900, as cited in Mayhew & Edwards, 1936, p. 332).

Pedagogical Themes

The rationale for teaching textiles in this manner is evident in this excerpt:

...this method involves the *exercise of judgment*. The ability to think and the method of thinking are part and parcel of all the *reinventing* and the *rediscovering*. *Thinking does not occur for its own sake; it is not an end in itself. It arises from the need of meeting some difficulty, in reflecting upon the best way of overcoming it, and thus leads to planning, to projecting mentally the end to be reached, and deciding upon the steps necessary.* The tool and method of going to work are always seen to be dependent upon the material on the one side and the result to be attained on the other. These being given, to find the third term is the problem, surely as logical an exercise as any in geometry. It has the added advantage of *being concrete* and of calling the *constructive imagination* into play. (Harmer, 1900, as cited in Mayhew & Edwards, 1936, p. 335-336, emphasis added).

In sum, Harmer (1900) emphasized a problem-solving approach involving real concrete situations where children were lead through a process of defining problems and seeking creative solutions based on their own practical experiences and constructive imagination.

Dewey (1899) included a very similar description of the potential of the textile lessons saying:

we cannot overlook the importance for educational purposes of the close and intimate acquaintance got with nature at first hand, with real things and materials, with the actual processes of their manipulation, and the knowledge of their social necessities and uses. In all this there was continual training of observation, of ingenuity, constructive imagination, of logical thought, and of the sense of reality acquired through first-hand contact with actualities. (p. 24)

Elementary Cooking in the Laboratory School (Harmer, 1903a)

Synopsis

This article provides an overview of the ways cooking is used as a learning activity throughout the years of elementary education from kindergarten on. At the kindergarten level “foods such as cereals and fruits are selected, since these require the simplest preparation and but little variation in the manipulation of the materials” (p. 706). “Beginning with the simplest preparation of food to be served for luncheon, the children become interested in the materials used and the processes involved in the preparation of these materials” (p. 706). Six-year-olds also focus on cereals and fruits but the topic is broadened to “the occupation of the farmer and the miller,” and the “the various preparations of cereals are examined, the methods of preparation considered, and by means of experiments actually made the children compare difference in time required in cooking the different preparations and the reasons for this difference” (p. 707). Fruits and vegetables are selected in the following year. The approach is one of inquiry, and the material presented offers students possibilities for experimental work.

Pedagogical Themes

Harmer (1903a) describes the learning potential of cooking in the following excerpts:

“the value of the work is in the nice handling and careful use of materials, and in the forming of habits of neatness and order” (p. 706)

“cooking has particular educational value... giving opportunity for individual work, initiative, and independence, and also in calling for group work, which encourages a spirit of helpfulness” (p. 706)

“the children become interested in the materials ...mak(ing) it possible to introduce simple experiments previous to the cooking, which enable them to work out the formula and the steps used in preparation of the food” (p. 706)

[through experimentation] “increased power of observation is the result, and skill is acquired in handling materials and in controlling processes” (p.708).

“The children become acquainted with simple chemical and physical facts in relation to the action of heat and water on the food constituents” (p. 708)

“in connection with the history the children take up primitive modes of cooking out of doors...[that] serves as an occasion for the child to abstract the principle he [sic] has been using in connection with modern methods and apparatus” (p. 709)

In sum, Harmer (1903a) promotes inquiry, experimentation, and collaboration in integrative learning experiences that foster independence. There is also an emphasis on understanding the temporal interrelationships between past, present and future.

Cooking enjoyed a prominent position in the curriculum of Dewey’s school, because it integrated diverse disciplines of knowledge. Dewey frequently used cooking to illustrate his approach to teaching and learning. For example:

For the child simply to desire to cook an egg, and accordingly drop it in water for three minutes, and take it out when he is told, is not educative. But for the child to realize his own impulse by recognizing the facts, materials and conditions involved, and then to regulate his impulse through that recognition, is educative. (Dewey, 1899, p. 57)

The educative value of the cooking lessons continues because he is now studying questions of food values, menus, the cost of food, and the chemistry of food stuffs, and cooking...The kitchen becomes a laboratory for the study of a fundamental factor in human life (Dewey & Dewey, 1915, 296).

According to Mayhew and Edwards (1936), the approach to cooking at the Dewey school was “influenced by Ellen Richards, a contemporary of Dewey and founder of the Home Economics movement, who had written a book, *The Free-Hand Method of Teaching Cooking*” (p. 298). The underlying belief behind this approach was that a knowledge of the constituents of food, of the effect of controlled application of heat, and of the processes of solution and fermentation, would liberate the cook from the use of rigid recipes and foster creative expression in cooking.

Introduction to the Primitive Textile Work in the Laboratory School (Harmer, 1903b)*Synopsis*

This article is very similar to her 1900 article on textile industries. She describes a series of lessons exploring how fibres were used to create textile items for a model of early life in America. “The study of primitive forms of spinning and weaving is given in connection with the primitive history to illustrate further the life of people whose mode of living is simple and in direct contact with nature” (p 710). The task was to make mats, blankets and clothing for the model “using only that which nature supplies” (p. 712). She goes on to explain how the children were led to determine ways to “adapt and invent weaves suitable to flexible and rigid grasses, invent simple looms” (p. 712). They examined four typical kinds of cloth: wool, silk, cotton, and linen beginning with fibers in the natural state, determining through trial and error how to create cloth for blankets for their models. In the process, “the children sorted, teased, carded, and spun. The different processes making up the series were thus brought together, enabling the children to realize as a whole this stage of the industry” (p. 717).

Pedagogical Themes

Harmer (1903b) describes the aim and benefits of this approach in these excerpts:

The aim is so to arrange the work that the problem comes to the child from his actual work, and, if possible, in such a way that he discovers the solution; i.e., each step in the process is so dependent on the nature of the material that the children make the steps logically and of their own initiative. (p. 712)

“The children work out the whole process in detail for themselves by means of a series of experiments.” (p. 713)

When the child has passed through these different periods by means of actual direct work with materials, and observation of historical and economic facts, he can, in visiting the factory, grasp without mental confusion the essential and underlying principles of machines and processes, and the more subtle points in the organization of factory life. In addition to his intelligent insight into industrial life, and into its effect upon social life in history, the child gains experience of a scientific and aesthetic nature (p. 711).

In sum, this article reiterates problem posing and solving and learning from experience in real life settings. Harmer also emphasizes embedding the learning in historical, cultural and ideological context and circumstances, and fostering an understanding of the whole event. Later Dewey uses these examples to explain that rather than teaching students a technical skill like weaving or sewing, these activities are “point(s) of departure from which the child can trace and follow the progress of mankind in history, getting an insight also into the materials used and the mechanical principles involved” (Dewey, 1907, p. 25).

Basketry (Harmer, 1903c)*Synopsis*

This paper describes in detail how basketry was used with 8-year-old students. “The same method was followed in the basketry as in the primitive work” (p. 116) referring to the previous publication. Basketry involved students collecting grasses outdoors and using them to create woven baskets. Harmer explains how selecting the grasses leads to a study of “the rushes, sedges, and grasses gathered, their condition of growth, and their general position in plant life” (p. 116).

The child's finished product is perhaps crude compared with the basket or mat made with prepared material, but what he gets from it is infinitely more worthwhile. This product contributes to an appreciation of nature, and through the control of nature's material he [sic] realizes the pleasure of artistic creation. (p. 118)

Thus on a trip to a museum, the students' attempts at basket making provided “experience to examine intelligently the Indian [sic] basketry” (p. 119) and allows them to “gain a clearer and more adequate conception of what the life of these people means than he could have obtained through any formal study of material transcribed by another” (p. 119).

Pedagogical Themes

For Harmer (1903c), starting with the historical development of topics in domestic arts and sciences provides the foundation for students to develop an understanding of the more complicated processes that follow. Learning as problem solving and experimentation, nature-based learning, and perspective taking are also highlighted.

The grasses are incidental perhaps and the child becomes lost in contemplation of all the living things which the particular region affords. He goes not so much, after all, for the facts, or the new materials discovered, as for the sake of fresh, healthy, and lasting impressions received, and the consequent enlargement of his [sic] point of view (p. 116).

Dewey in 1999 said much the same thing when he stated “these occupations in the school shall not be mere practical devices or modes of routine employment, the gaining of better technical skill as cooks, seamstresses, or carpenters, but active centers of scientific insight into natural materials and processes” (p. 33).

Textile Work Connected with American Colonial History (Harmer, 1904)*Synopsis*

This is the lengthiest of all the articles and includes several images—photographs and examples of student work. It indicates in the opening that it is the culmination of activities discussed in *Basketry* and *Introduction to the Primitive Textile Work in the Laboratory School*. It outlines how domestic activities were used as historical studies. “The child's understanding of the daily life of a people is vivified by reproducing their typical occupations. This realization of their daily struggles is insured by his [sic] use of the actual material and the methods of their time” (p. 661).

She reiterates from the previous articles how students investigating cloth and baskets from raw materials “makes it possible for him [sic] through his own experience to work out the evolution which actually has taken place historically” (p. 662). She argues “No mere observation of the finished product could give the child such an understanding of the structure and properties of these materials” (p. 663). This basis has implications for future learning. “In comprehending the growth of one social occupation, and its effect upon social life and history, he [sic] is better able to take up the more intellectual problems connected with a further study of economics in secondary and college work” (p. 670). In conclusion she states:

The result is that the child in each period of the industry has experience along several distinct lines of work: (1) the history which is the basis of the whole; (2) the inventive and experimental work, including science, physiography, chemistry, and physics; (3) simple problems in mathematics, in planning of implements, and in the technical construction of design; (4) aesthetic expression in color and design; (5) hand-work in wood-work and textile materials (p. 672).

Pedagogical Themes

The main theme of problem solving through practical hands-on learning activities that include experimentation continues. Harmer (1904) notes that “the problems presented here are concrete, in touch with practical life, and have a historical and social background which gives them a living interest” (p. 666). She goes on to state:

Only through his [sic] own actions and experiences can the child realize conditions other than his own; he is not capable of abstraction and theorizing. Names and dates mean nothing unless he can make them center about the activities concerned in history, and through them understand the vital forces which have resulted in social organization (p. 667).

“The scientific method is followed throughout. The child is made conscious of the problem and seeks his own solution” (p. 672). “Pedagogically considered, this is the most important result of the work—this making the children scientific and self-reliant in their attitude of mind” (p. 671).

The notions of agency, independent thinking, and perspective taking were also highlighted in Mayhew and Edwards (1936):

The aim of the study of the period of American colonization was not to cover the ground, but to give children of this age some knowledge of how social processes were used to secure social results, how obstacles were overcome and means contrived to attain these results. The ulterior problem was by this method to bring the child to recognize his own need to secure practical and intellectual control of such methods of work and inquiry as would help him attain desired results in his own life situation (pp. 176-177).

In reviewing the five articles that Althea Harmer authored during her time as head of the domestic arts and science department at what is commonly known as the Dewey School, four overlapping pedagogical themes that form the foundation of her approach to home economics education appear to dominate:

- **learner focussed**—related to students' everyday life, connecting the subject matter to the needs, desires, interest, ability level, of the student, exploring topics that interest students, giving them the opportunity to identify and pose problems, and actively participate in experimentation.
- **experiential-** and **problem based-** learning from experience with real concrete problems. Also referred to as active learning or learning by doing, this pedagogy involves problem posing, experimenting, invention and re-invention.
- **learning to learn**—knowledge or knowing is for the sake of doing something with the knowledge. This pedagogical theme is underpinned by the assumption that knowledge is constructed, contextual, emergent, integrated and created through creative and critical thinking requiring constructive imagination and teaching students how to think rather than what to think.
- developing **civic mindedness** such that students are independent thinkers yet able to collaborate, and be socially responsible. This pedagogical theme is underpinned by the belief that schools should prepare for active citizenship in a democratic society. One of the questions the teachers of the school asked when planning their curriculum was “What can be done to bring the students into closer relationship with their home and community?” (Edwards & Edwards, 1936, p. 26).

Discussion

These themes working together and are commonly connected to Progressive education.

Durst (2010a) suggests that the work of the women at the Dewey school places “their experiences in the historical context of Progressive-era experimentation” (p. 55-56). Home economics was introduced into schools about the same time that the Progressive education movement was a prominent influence. Home economics was “shaped by the hopes and ideals of the Progressive movement” (Apple, 2015, p. 54) such that “early home economists considered the overtly Progressive orientation of their field to be its distinguishing characteristic” (Apple, 2015, p. 58).

Progressive education is described as a “many-sided effort to use the schools to improve the lives of individuals” (Cremin, 1961, p. vii). With its emphasis on improving home life through hands on learning and applying academic knowledge to real-life situations related to students' daily lives and the natural world, home economics is deeply connected to progressive education. The movement was dominated by an educational philosophy that focusses on preparing students to live in a changing world emphasizing democracy and citizenship. The intent was to create independent thinkers acting for the public good (McGregor, 2022). Progressive education advocated active learning through doing, experimenting, and problem solving rather than merely passive absorption of course content.

Progressive education arose in response to industrialization and increased urbanization that characterized the second half of the 1800s. There are those who argue that the same principles are required for the massive changes of the 21st century (Wulandari, 2021). For example, Tanner (1997) in examining the literature on the Dewey School concluded that many of the ideas that Dewey and teachers such as Harmer were putting into practice are prominent today in actions such as “relating the curriculum to children’s life and experience, integrating the curriculum, teaching critical thinking and problem solving, stimulating creative thinking, supporting collaborative decision making by the school staff” (p. xii). Tippet and Lee (2017) identified 20 contemporary pedagogies associated with 21st Century learning, including active learning, cooperative learning, critical pedagogy, problem- and project-based learning, and traced their genesis to progressive education.

While the Dewey school was for elementary students there are those who suggest that the pedagogical themes are appropriate for any level of learning (Manke, 2019; Tanner, 1997). For example, Belliveau (2007) argues that the Dewey school’s use of cooking as pedagogy can be a model for interdisciplinary learning in contemporary higher education. For O’Neil (2015) cooking pedagogy particularly the themes of experiential learning by doing, experimentation, and “cooking to learn while learning to cook” is appropriate for teaching sustainability in higher education food studies. Whereas, Demas (2023) claims it can be used to enhance school curriculum for all ages. According to DeFalco (2016), Dewey’s ideas are “still timely” for vocational education as it “prize(s) freedom more than docility; initiative more than automatic skill; insight and understanding more than capacity to recite lessons or to execute tasks under the direction of others” (p. 59). Similarly, Schmidt and Allsup (2019) contend that Dewey’s theorizing is relevant for teacher education. Khamasi et al. (2021) describe how a culture of learning, identifying themes very similar to Harmer’s, can “inspire” home economics education.

Conclusion

According to Hai et al. (2020), Dewey “edited and published in the Elementary School Record in 1900” (p. 62). Whether the pedagogy reported by Althea Harmer was her method and theorizing or whether she was implementing Dewey’s or whether it is a combination of the two, is not clear. The processes she describes are very similar to her earlier approach with the Maids class at the Pratt Institute which was prior to her association with the Dewey school indicating that she may have influenced how domestic science was taught at the school. What is clear is that she strongly believed in teaching and learning underpinned by the pedagogical values she espoused.

I submit that Harmer’s theorizing is useful for today’s home economics educators, especially those who seek to move beyond transmissive to more transformative forms of pedagogy (Smith, 2017). The themes that run through her publications—active learning; experiential and problem-based learning; learning to learn fostering creative imagination, contextualized and integrative learning; and civic mindedness—are still relevant for home economics education. They align with a number of initiatives that are advocated for current home economics teaching and learning. Initiatives such: responsible living (Thoresen et al., 2015); interthinking (Taar & Palojoki, 2022); contextual learning (Smith, 2012); a culture of learning (Khamasi, et al., 2021); productive pedagogy (Reynolds 2002a, 2002b, 2003); social justice education (Dupuis, 2017), sustainability and environmental education (Maguire & McCloat, 2017; O’Donoghue & Wahlen, 2008, 2010); practical problem based curriculum (Laster, 2008); integrative learning

(Haapaniemi et al., 2019); bringing historical and socio-perspectives into home economics (Smith & de Zwart, 2017; Smith, 2025), and a curriculum of home coming and pedagogy of responsibility (Smith, 2022); to name a few.

Although there are endless accounts of the Laboratory school, its administration, the controversies, and so on (Fallace & Fantozzi, 2017; Knoll, 2015), there are none that specifically focus on the role of the domestic scientist who was part of the staff despite the fact that Dewey in many future publications used examples very similar to Harmer's publications to explain his philosophy. My intent was to bring the work of Althea out of the shadows much like Staring and Aldridge (2014) and Hall (2005) did for Evelyn Dewey and to speculate on the meaning it has for current home economics education programs. The home economics literature has little mention of Althea Harmer and her work at the school. In this paper, I analyzed her publications and teased out the main themes of her pedagogical approach noting that these themes, written over 100 years ago, are still relevant today. A reminder that the past can inform the present.

Epilogue

When the school closed, Althea turned to her textile background for a means to make a living. She opened an interior design business in Chicago. She gave up the business when she married Charles Russell Bardeen in 1905, a professor in anatomy. They moved to Madison Wisconsin where her husband later became the first dean of the University of Wisconsin Medical School. She had four children. Her son, John Bardeen, would go on to be awarded the Noble Prize in Physics twice (Hoddeson & Daitch, 2002; Hoddeson, 2008; Pines, 2013). John Bardeen became "internationally known for solving problems using a cooperative experiment-based approach built on overcoming specific difficulties, setting concrete goals, visualizing their achievement" (Durst, 2010a, p. 126). His biographers used the phrase from Harmer's (1900) publication "calling the constructive imagination into play" crediting his mother's contribution to raising a genius (Hoddeson & Daitch, 2002, p.14).

Althea Harmer Bardeen died in 1920 of breast cancer.

Biography

Mary Gale Smith is a retired home economics teacher and a sessional lecturer at the University of British Columbia. She was worked in the teacher education program and in the Masters of Education Program in Human Ecology and Everyday Life. Her research interests include curriculum and pedagogy in Home Economics, Food Literacy, teacher professional development, and Home Economics history. **Email:** mary.smith@ubc.ca

 <https://orcid.org/0009-0001-1192-9646>

References

- Aldridge, J., Kilgo, J., Jepkemboi, G., & Rutto-Korir, R. (2014). Matriarchs of experimental and progressive education: Ten women who influenced John Dewey. *International Journal of Case Studies*, 3(5), 1-7. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2870367
- Apple, R. (2015). Home economics in the twentieth century a case of lost identity? In S. Y. Nickols & G. Kay (Eds.) *Remaking Home Economics: Resourcefulness and Innovation in Changing Times*. University of Georgia Press. <https://muse.jhu.edu/>
- Belliveau, C. (2007). *A New Look at Dewey's Cooking Lab: A Pedagogical Model for Interdisciplinary Learning in Contemporary Higher Education*. Dissertation. University of Vermont. <https://scholarworks.uvm.edu/graddis/20>
- Benn, J. (2010). Home economics in development through action research. *International Journal of Home Economics*, 3(1), 2-19.
- Cremin, L. (1961). *Transformation of the school: Progressivism in American education 1876-1957*. Knopf.
- DeFalco, A. (2016). Dewey and vocational education: Still timely? *The Journal of School & Society*, 3(1) 54-64. <https://www.johndeweyociety.org/the-journal-of-school-and-society/current-issue/volume-3-issue-1-2016/>
- Demas, A. (2023, May 1). *Celebrating the legacy of John Dewey and progressive food education*. The Food Studies Institute. <https://foodstudies.org/celebrating-the-legacy-of-john-dewey-and-progressive-education/#top>
- Dewey, J. (1897). My pedagogic creed. In S. Flinders & D. Thornton (Eds. 2013) *Curriculum Studies Reader (2nd ed., pp. 29-35)*. Routledge.
- Dewey, J. (1899). *The school and society: Being three lectures*. University of Chicago Press. <https://www.gutenberg.org/ebooks/53910/>
- Dewey, J. (1902). *The child and the curriculum*. University of Chicago Press. <https://www.gutenberg.org/ebooks/29259>
- Dewey, J. (1904a/2003). The relation of theory to practice in education. In L. A. Hickman (Ed.), *John Dewey: The middle works, 1899-1904: Vol. 3, 1903-1906* (pp. 249-272). Southern Illinois University Press.
- Dewey, J., & Dewey, E. (1915). *Schools of To-Morrow*. E.P. Dutton & Co, https://www.gutenberg.org/files/48906/48906-h/48906-h.htm#ip_284b
- Drexel University. (2026). *History*. <https://drexel.edu/about/history>
- Dupuis, J. (2017). How can home economics education promote activism for social and ecological justice? *International Journal of Home Economics*, 10(2), 30-39
- Durst, A. (2005). "The union of intellectual freedom and cooperation": Learning from the University of Chicago's Laboratory School Community, 1896-1904. *Teachers College Record*, 107(5), 958-984. <https://doi.org/10.1111/j.1467-9620.2005.00500.x>
- Durst, A. (2010a). *Women educators in the progressive era: the women behind Dewey's Laboratory School*. New York: Palgrave Macmillan.
- Durst, A. (2010b) 'Venturing in education': teaching at the University of Chicago's Laboratory School, 1896-1904, *History of Education*, 39 (1), 55-73, <https://doi.org/10.1080/00467600802508963>
- Edson, C. H. (1986). Our past and present: Historical inquiry in education. *Journal of Thought*, 21(3), 13-27. <https://www.jstor.org/stable/42589188>
- Fallace, T., & Fantozzi, V. (2017). The Dewey school as triumph, tragedy, and misunderstood: Exploring the myths and historiography of the University of Chicago Laboratory School. *Teachers College Record: The Voice of Scholarship in Education*, 119(2), 1-32. <https://doi.org/10.1177/016146811711900205>
- Haapaniemi, J., Venäläinen, S., Malin, A., & Palojoki, P. (2019). Home economics education: exploring integrative learning. *Educational Research*, 61(1), 87-104. <https://doi.org/10.1080/00131881.2018.1564626>
- Hai, A. A., May, H., Nawrotzki, K., Prochner, L., & Valkanova, Y. (2020). *Reimagining teaching in early 20th century experimental schools*. Springer International Publishing. <https://doi.org/10.1007/978-3-030-50964-4>
- Harmer, A. (1900). Textile industries. *Elementary School Record* 1(3), 71-81. 39. In K. C. Mayhew, & A. C. Edwards, (1936). *The Dewey school: The laboratory school of the University of Chicago, 1896-1903* (pp. 330-336). Transaction Publishers. <https://archive.org/details/deweyschoolthela008095mbp>
- Harmer, A. (1903a). Elementary cooking in the Laboratory School. *The Elementary School Teacher*, 3(10), 706-709. <https://www.journals.uchicago.edu/doi/pdf/10.1086/453274>
- Harmer, A. (1903b). Introduction to the primitive textile work in the Laboratory School. *The Elementary School Teacher*, 3(10), 710-717. <https://www.journals.uchicago.edu/doi/pdf/10.1086/453275>
- Harmer, A. (1903c). Basketry. *The Elementary School Teacher*, 4(2), 116-119. <https://www.journals.uchicago.edu/doi/pdf/10.1086/453292>

- Harmer, A. (1904). Textile work connected with American colonial history. *The Elementary School Teacher*, 4(9), 661-672. <https://www.journals.uchicago.edu/doi/pdf/10.1086/453381>
- Hall, I. (2005). *The Unsung Partner: The Educational Work and Philosophy of Alice Chipman Dewey*. Doctoral Dissertation. Harvard University.
- Hoddeson, L. & Daitch, V. (2002). *True Genius: The Life and Science of John Bardeen: The Only Winner of Two Nobel Prizes in Physics*. Washington, DC: Joseph Henry Press. <https://doi.org/10.17226/10372>
- Hoddeson, L. (2008). John Bardeen: an extraordinary physicist. *Physics World*, 21(04), 22.
- Khamasi, J. W., Mahugu, M., & Mokaya, A. (2021). The home economics education spirit awakens in support of a culture of learning. In *Proceedings of the Canadian Symposium XIII. Issues and Directions for Home Economics/Family Studies Education* (pp. 61-72).
- Knoll, M. (n.d.). *Publications of the Laboratory School Faculty, 1896-1904*. https://www.academia.edu/85081905/Publications_of_the_Laboratory_School_Faculty_1896_1904
- Knoll, M. (2015). John Dewey as administrator: the inglorious end of the Laboratory School in Chicago. *Journal of Curriculum Studies*, 47(2), 203-252. <https://doi.org/10.1080/00220272.2014.936045>
- Laster, J. F. (2008). Nurturing critical literacy through practical problem solving. *Journal of the Japan Association of Home Economics Education*, 50(4), 261-271. https://www.jstage.jst.go.jp/article/jjahee/50/4/50_KJ00006737129/_pdf
- Lowenthal, D. (1985). *The past is a foreign country*. Cambridge University Press <https://archive.org/details/pastisforeigncou000lowe>
- McBreen, E. L. (1984). Historical research in home economics: A model for implementation. *Home Economics Research Journal*, 12(4), 539-549.
- McGregor, S. L. (2022). How educational philosophies shape family and consumer sciences and home economics education: A commentary. *Journal of Family & Consumer Sciences*, 114(2). https://consultmcmgregor.com/documents/research/educational_philosophies_in_home_ec_as_published_2022.pdf
- Manahan, M. G. (1905). The Pratt Institute: An ideal school. *Journal of Education*, 61(13), 342-344. <https://doi.org/10.1177/002205740506101305>
- Manke, K. (2019). *Welcome to the Club: An Archival Inquiry into the Dewey Laboratory School as Rhetorical Education*. Open Access Dissertations. Paper 848. https://digitalcommons.uri.edu/oa_diss/848
- Mayhew, K. C., & Edwards, A. C. (1936). *The Dewey School: The laboratory school of the University of Chicago, 1896-1903*. Transaction Publishers. <https://archive.org/details/deweyschoolthela08095mbp>
- Maguire, H., & McCloat, A. (2017). Home economics education: Preparation for a sustainable and healthy future. In *EarthEd: Rethinking education on a changing planet* (pp. 165-178). Island Press.
- O'Donoghue, M. & Wahlen, S. (2008). *Global Sustainable Development: A Challenge for Consumer Citizens*, Vol. 1. IFHE.
- O'Donoghue, M. & Wahlen, S. (2010). *Global Sustainable Development: A Challenge for Consumer Citizens*, Vol. 2. IFHE.
- O'Neil, J. K. (2015). "Cooking to Learn" while "Learning to Cook": (Be)coming and(re)membering sustainability (Doctoral dissertation). ProQuest LLC (UMI Number3705566).
- Pines, D. (2013). *A biographical memoir: John Bardeen 1908-1991 2013*. National Academy of Sciences. <https://www.nasonline.org/wp-content/uploads/2024/06/bardeen-john.pdf>
- Peterat, L. & Smith, M. G. (2001) (Eds.). *Informing Practice Through Action Research*. Peoria, IL: Glencoe/McGraw-Hill.
- Pratt institute (1897). *Pratt Institute Monthly*, 5(4). https://www.google.ca/books/edition/_/R2Jgrfp5Eu4C?gbpv=0
- Pratt Institute Libraries (n.d.). *Records of the School of Home Economics*. <https://archives.pratt.edu/repositories/2/resources/23>
- Reynolds, J. (2002a). Nutrition education - Making it work. *Journal of the Home Economics Institute of Australia*, 9(2), 52-55.
- Reynolds, J. (2002b). Intellectual rigor in the home economics classroom. *Journal of the Home Economics Institute of Australia*, 9(3), 19-23.
- Reynolds, J. (2003). Connectedness in the home economics classroom. *Journal of the Home Economics Institute of Australia*, 10(1), 25-32.
- Schmidt, M., & Allsup, R. E. (2019). John Dewey and teacher education. In *Oxford research encyclopedia of education*. <https://doi.org/10.1093/acrefore/9780190264093.013.475>
- Smith, B. P., (2010). Instructional strategies in family and consumer sciences: Implementing the contextual teaching and learning pedagogical model. *Journal of Family & Consumer Sciences Education*, 28(1), 23-37.
- Smith, M.G. & de Zwart, M.L. (2017). Eat Your history: Bringing a historical perspective into food studies. *Proceedings of the Canadian Symposium XIII. Issues and Directions for Home Economics/Family Studies Education*, (pp. 187-196). London, ON. <https://www.ca-symposium.com/>

- Smith, M. G., & de Zwart, M. L. (2016). Methodological helps, curriculum inquiry and home economics teacher professional development. *International Journal of Home Economics*, 9(1), 83-99. <https://search.informit.org/doi/10.3316/informit.300026547425133>
- Smith, M. G. (2025). Where is the sociopolitical perspective? Re-visiting global home economics 25 years later. *Proceedings of the Canadian Symposium XIII. Issues and Directions for Home Economics/Family Studies Education*, (pp. 187-196). Hamilton, ON. <https://www.ca-symposium.com/>
- Smith, M. G. (2022). Curriculum of homecoming and pedagogy of responsibility as the future of home economics education. *Journal of Home Economics Education Research*, 12, 107-117. https://www.academia.edu/95423884/Curriculum_of_Homecoming_and_Pedagogy_of_Responsibility_as_the_Future_of_Home_Economics_Education
- Smith, M. G. (2017). Pedagogy for home economics education: Braiding together three perspectives. *International Journal of Home Economics*, 10(2), 1-16.
- Staring, J., & Aldridge, J. (2014). Out of the shadows: Redeeming the contributions of Evelyn Dewey to education and social justice (1909-1919). *Case Studies Journal*, 3(11), 21-33. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3392865
- Tanner, L. (1991). The meaning of curriculum in Dewey's Laboratory School (1896-1904). *Journal of Curriculum Studies*, 23(2), 101-117. <https://doi.org/10.1080/0022027910230201>
- Tanner, L. (1997). *Dewey's laboratory school: Lessons for today*. Teachers College Press.
- Taar, J., & Palojoki, P. (2022). Applying interthinking for learning 21st-century skills in home economics education. *Learning, Culture and Social Interaction*, 33, 100615.
- Thoresen, V. W., Didham, R. J., Klein, J., & Doyle, D. (Eds.). (2015). *Responsible living*. Springer.
- Tippett, T. P., & Lee, J. J. (2019). Looking back to move forward: Understanding Progressive education in the 21st Century. *Journal of Applied Learning in Higher Education*, 8, 79-98. <https://files.eric.ed.gov/fulltext/EJ1285555.pdf>
- Vaines, E. (1997). Re-visiting reflective practice. In E. Vaines, D. Bradir & D. Kieren, (Eds.), *People and Practice: International Issues for Home Economics*, 5(3), pp. 3-17.
- Vincenti, V. B. (1989). History as an interpretive mode of inquiry for home economics, In F. H. Hultgren & D. L. Coomer (Eds.), *Alternative modes of inquiry in Home Economics* (pp. 80-94). Glencoe.
- Wulandari, R. (2021). Characteristics and learning models of the 21st century. In *Social, Humanities, and Educational Studies (SHEs): Conference Series*, 4(3), pp. 8-16.



IFHE
INTERNATIONAL FEDERATION
FOR HOME ECONOMICS

Notes for Contributors

ifhe.org/ejournal/author-information

Frequency of publication

The International Journal of Home Economics is published twice a year. Papers for review will be accepted throughout the year to email: intjournalhomeeconomics@gmail.com

Focus

The International Federation for Home Economics is the only worldwide organisation concerned with Home Economics and Consumer Studies. It was founded in 1908 to serve as a platform for international exchange within the field of Home Economics. IFHE is an International Non-Governmental Organisation (INGO), having consultative status with the United Nations.

This refereed journal brings together emergent and breaking work on all aspects of Home Economics, and, most importantly, how we might improve and renew the everyday work of Home Economists. It features quantitative and qualitative, disciplinary and trans-disciplinary, empirical and theoretical work and will include special editions on key developments. It aims to push the boundaries of theory and research—to seek out new paradigms, models and ways of framing Home Economics.

Contributors

The International Journal of Home Economics welcomes contributions from members and non-members, from a variety of disciplinary and theoretical perspectives.

Submission form

A standard manuscript submission form must be submitted with all manuscripts. It is available from the Journal Website:

<https://www.ifhe.org/ejournal/author-information/manuscript-submission>

Please save the form to your computer with a new name (e.g., Authornames-IJHE.pdf) after entering your details. Unfortunately, closing the PDF without saving to a new file name will lose your data. Papers submitted without a manuscript submission form will be returned to authors.

This form includes room for title, keywords and space for all authors' biographies, which should be no longer than 100 words each. Please include current role or memberships and an email address for correspondence. For example:

Professor Donna Pendergast, PhD, is Dean of the School of Education and Professional Studies at Griffith University, Brisbane, Australia. Donna researches and writes about Home Economics philosophy, education and practice.

Manuscript requirements

Manuscripts should be sent electronically to the editor at intjournalhomeeconomics@gmail.com as a Microsoft Word document (doc, docx). Each document should be double-spaced, with generous margins. Material which requires substantial editing will be returned to the author. Paper length should not exceed 8000 words.

Please spellcheck using a consistent dictionary (i.e., Australian, UK, USA). All pages should be numbered. Contributors should be aware that they are addressing an international audience. Jargon should be avoided and local terminology clarified for an international audience. Authors should use non-discriminatory language. Measurements should be in metric units. Articles should be original work and, where appropriate, should acknowledge any significant contribution by others.

Tables, figures and illustrations

Figures, diagrams and images must be cited in text and captions provided. Figures should be at a professional standard and supplied as separate electronic files (e.g., TIF, JPG, GIF). Tables must be cited in text and captions provided. Include all tables, figures and illustrations in the correct location in the manuscript. All tables should be in text, not provided as an image.

References

References should follow the American Psychological Association system (APA Publications Manual, 7th Edition).

Copyright

Manuscripts submitted for publication must not have been previously submitted or published. Accepted papers become the permanent property of IJHE. By submitting a manuscript, the author(s) agree that copyright for their articles are automatically transferred to the IJHE, if and when articles are accepted for publication. The copyright gives IJHE the exclusive rights to reproduce and distribute the article. The copyright form is contained in the IJHE Manuscript submission form.

Proofs

Proofs will be sent electronically to the corresponding author for return within 72 hours. It is the author's responsibility to ensure the accuracy of these proofs. Correction other than printing errors should be kept to a bare minimum.

If you have any questions, please email Professor Donna Pendergast (Editor) at this email address: intjournalhomeeconomics@gmail.com

IJHE

